FOOD EXPERIENCE: A PHENOMENOLOGICAL STUDY OF YOUTH

by

DEBORAH ELLEN YAWNEY

(B.A.), Laurentian University, 1990, (B.ED.), University of Lethbridge, 2001,
(M.ED.), University of Lethbridge, 2005.

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

in

EDUCATION (SUSTAINABILITY)

NIPISSING UNIVERSITY

January 2023

Certificate of Examination

SCHOOL OF GRADUATE STUDIES
CERTIFICATE OF EXAMINATION

Certificate of Examination

Supervisor(s): **Dr. Nancy Maynes**

Examiner(s): Dr Robin Bright (External);

Dr. Rick Vanderlee (Internal)

Supervisory Committee: **Dr. Carlo Ricci**

Dr. Karey McCullough

The _____Dissertation _____ by

_____Deborah Yawney_____

entitled

Food Experiences: A Phenomenological Study of Youth

is accepted in partial fulfillment of the requirements for the degree of

PhD in Educational Sustainability

[redacted]

___10 Jan 2023_____ ___Blaine E. Hatt___

Date Chair of the Examination Committee Signature

Abstract

In this research, I explored the multidimensional food experiences of 25 young people in southern Alberta between the ages of 14 to18. My theoretical perspective is grounded in existential, post-modern, constructivist theories that are supported by sustainability principles that underlay and weave through this body of work. I used a qualitative phenomenological design with a Photovoice model to elicit rich descriptions (Moustakas, 1994) and provide an instrument for participant reflection and voice (Wang, 2008). In keeping with a phenomenological study, the overall question surrounding food experience was left to be determined by the results of the conversations with each participant. In essence, the themes that arose because of the conversations form the findings of this study and are represented in chapters four and five.

Snowball sampling was used to recruit the participants. Twenty-five co-researchers/participants from selected Southern Alberta high schools were enlisted using selection criteria outlined by Moustakas (1994). All students completed a letter of informed consent and students under 18 had their parents fill out the form on their behalf. One-on-one interviews were conducted with the co-researcher/participants asking them a series of questions to assist them in sharing their individual food experiences. At the close of the first interview, the use of the Photovoice method and the corresponding SHOWED document that is essentially a reflective guide (Wang, 2006) were discussed to ensure they understood the procedure required. Next, participants were asked to take photographs (minimum of five) and respond to each picture using the SHOWED document. The initial interview was followed up with a second interview with me. In this session, co-researcher/participants shared their photographs and commented on their discoveries. The third meeting included a focus group discussion where co-researcher/participants shared one of their pre-selected photographs with their focus group and

discussed the reason for its inclusion. In addition, in this session, arising themes were discussed and co-researcher/participants were asked to comment on and expand upon these findings. Co-researcher/participants were asked to share any final thoughts or feedback at this time.

Using phenomenology in combination with Photovoice, it was discovered that many factors influence food experiences amongst young people today, and there are many overlapping concerns. For instance, there is an overriding acknowledgement amongst the participants in this study that we do not value our food supply, as evidenced by the lack of quality foods available to purchase, lack of knowledge and skills in our young people to prepare food, and a surplus of fast-food establishments present today. Observations from this study point to shortcomings in society's perception of our current food systems and lay a foundation upon which to build more enhanced knowledge of food experience for all. Teachers and curriculum developers will have an interest in the findings and recommendations of this study.

Keywords: Critical Food Literacy, Critical Food Pedagogy, Sustainability, Food Systems, True Cost Accounting, Phenomenology, Photovoice.

Acknowledgements

I am very fortunate and grateful to have a long list of people whom I wish to thank for their contributions to my work. I would like to thank my children, Hana Rain and Camryn Rose, for their patience and encouragement over the past few years when "Mom was working on her PhD". They are both incredible girls and wise beyond their years. I am eternally grateful that I was chosen to be their mom. My husband Kelly helped on the home front, and I am grateful for the many homemade meals he prepared for our family and the way he stepped up in times of need. I appreciate my father-in-law Uichi, who has lived with us these past several years. Most days, he does not have much to say, but he is a very supportive presence in our household, doing what he can to take care of us each day.

Both my maternal and paternal grandparents made rich lives for their families through hard work and determination. Life was to be celebrated and food, story, and laughter, were often the fire that warmed our collective hearts. From the very first, my parents demonstrated a fearless can-do attitude as they uprooted their growing family and trekked from one side of the country to the other and back again. My Mom was an inspiring role model as she seemed to have endless energy and her selflessness knew no bounds. I credit my Dad with teaching us to use strength, wit, and tenacity in times of challenge and adversity. In his younger years, he taught us these lessons through climbing trees, building fires, and trekking through the woods. He continues to teach us so much, as he ages and manages to confront each day with humour and love for family and friends, even as Parkinson's robs him of his once formidable strength.

I am blessed to have three brothers, three sisters and each of their partners whom I count amongst them. Their collective knowledge, empathy, humour, and willingness to be there for me have enriched my life in immeasurable ways. For each member of my large extended family, circle of friends, and my cohort from summer session one at Nipissing University, I am very

appreciative of support, and for making my world so much more abundant and meaningful because you are in it.

I am grateful to my young co-researchers (and their parents who encouraged them to participate) who took the time to reflect on their food experiences and share them with me. I genuinely enjoyed each of our conversations and your stories were key in affirming the importance of the work we undertook together. It is my hope that this research may effectively help change our current food system in positive ways.

I would also like to thank Holy Spirit Catholic School Division, my colleagues, my students [past and present], and specifically Ken Sampson our superintendent who offered encouragement along the way. As I have travelled through history and explored the work of philosophical giants and great thinkers, I am ever aware of the shoulders upon whom I have been allowed to stand and I remain present and aware of that each day. I know I will carry the lessons I learned during my PhD journey with me, and they will forever influence my teaching practice.

Dr. Nancy Maynes I could not have done it without you. I admire your quiet strength, resilience, hard work, and knowledge. You offered careful and attentive guidance with the research process, but probably even more importantly, a willingness to listen, to share, and to laugh. You once said to me you practiced, “empathy in challenge” and I think that simple intention holds so much promise for the world. I am so grateful to have had the opportunity to be the recipient of your mentorship.

To my committee members, Dr. Carlo Ricci, Dr. Karey McCullough, and Dr. Rick Vanderlee, thank you for your guidance and time spent in support of my work. I would also like to acknowledge Dr. Carmen Mombourquette and Dr. Robin Bright from the University of Lethbridge who encouraged me to pursue doctoral studies from the very start.

I know I have been blessed in this life with so much to be grateful for. It is my hope that the work that I am doing proves useful and gives back in some measure for all the many gifts that I have received. I firmly believe that knowledge of food in all its manifestations holds great power; it has so much potential for crossing cultural barriers and becoming a means to communicate measures of empathy, support, and knowledge, and in following the food chain and taking care at each step of the process, we can work together to build a better world.

Table of Contents

Table of Figures

List of Appendices

Chapter One: Introduction and Background

This is Life

While sitting comfortably on the deck of our family cabin back in 2011 and watching the sun go down after a warm summer day, my (then) four-year-old daughter let out a big sigh and loudly proclaimed, "This is life!" to which, everyone who was present responded with hearty laughter. The small but significant shift in the often-used phrase, "This is **the** life" has stuck with us all eleven years later. To this day, when enjoying a poignant moment, a family member will breathe deeply and let out a relaxed, "This is life" and we will all laugh and marvel at the wisdom of a child and this subtle but important shift in perspective. *This is Life* continues to resonate with me as I explore the topics of food and food experiences. I realize that for me, *Food is Life* rings equally true.

Food is sustenance, but in many ways, it is also life intertwined with our relationships and our way of being in this world. I think of my research ~~as~~ trying to capture this essence and vital aspect of life in our food experiences. Our knowledge surrounding food is fundamental to living healthy lives. I believe we must articulate our food philosophies to take control of our destinies and reset the control of exterior forces (such as big agriculture and commercial corporations) to achieve autonomy in our food choices and lives. Petrini (2005) says, "Food, and a careful study of how it is produced, sold, and consumed, is, in fact, a form of evidence that can open our eyes to what we have become and where we are headed" (p. 28). There are many factors affecting our diet and lifestyle today. That is why I wanted to connect with a segment of our contemporary youth population in Southern Alberta and ask them to co-research this topic with me. I wanted to know how they interpret present-day communication surrounding food and asked them, "How do

you experience food?" In this chapter, I discuss the purpose of the study and why I feel that I am uniquely positioned to do this work.

Purpose of the Study

For the past few years, I have witnessed many students coming to school hungry, stressed, and anxious. There is a notable decrease in food preparation skills, interest, and knowledge (Coveney, Begley, & Gallegos, 2012). Students are often tired and consuming more highly processed foods, sugar/caffeine-rich sodas, and energy drinks (Reissig, Strain, & Griffiths, 2009). They are also less physically and socially active than students have been in the past (Abdolalipour & Mirghafourvand, 2021; Hyman, 2021; Pollan, 2008).

The food we consume is changing drastically from its earliest rendition to something that has been reconstructed and branded as food (Bittman, 2013; Brett, 2011; Moss, 2021). The change that food has undergone has had a significant cost to our health and wellness and the question arises as to whether youth are paying attention. Wilson (2019) says, "Our free and comfortable lifestyles are undermined by the fact that our food is killing us, not through lack of it but through its abundance—a hollow kind of abundance" (para. 6). The change in our food habits is affecting us as a society and consequently, we may be losing our collective food knowledge. Where once it held a position of reverence in the kitchens and stories of our grandparents and elders (Pollan, 2008), it has become a form of pop art with multitudes of food celebrities and YouTubers vying for our collective attention (Coates, Hardman, Halford, Christiansen, & Boyland, 2019).

> Where humans used to live in fear of plague or tuberculosis, now the leading cause of mortality worldwide is diet. Most of our problems with eating come down to the fact that we have not yet adapted to the new realities of plenty, either biologically or

> psychologically. Many of the old ways of thinking about diet no longer apply, but it isn't clear yet what it would mean to adapt our appetites and routines to the new rhythms of life. (Wilson, 2019, para. 9)

Hegel says, "Sometimes we need to go back in time and rescue things that have gone missing" (as cited by The School of Life, 2015, 1:27). Acknowledging this lesson from Hegel and observing the rapid changes we are seeing with technology use in schools and the world around us, provides an opportunity to converse with some members of the youth population of today to try and determine what motivates them to make the food and nutrition choices they do and how they feel about the choices they make. Present-day research indicates that youth voice has been overlooked and often ignored in shaping our current philosophy about food (Glover & Sumberg, 2020).

Truly listening to the voice of youth has become even more imperative during the current Covid crisis that has further marginalized our most vulnerable people in the world.

> Young adults (ages 15–24) around the world are experiencing their second major global crisis within a decade: they entered youth in the throes of the financial crisis and are now exiting at the outset of a pandemic not seen in generations. They will face serious challenges to their education, economic prospects, and mental health. (Global Risks Report, 2021)

A critical oversight exists today, and we are not listening to the voice of our youth. Understanding contemporary youth ideas and insights regarding food experiences lends itself to a phenomenological approach to this research while combining a modified Photovoice methodology to elucidate youth experiences with food.

Personal Context of the Study: Who/where am I in this Process of Discovery?

I was born in Sudbury, Ontario, to two parents who were the eldest on both sides of their families. My father was the eldest of 15 children and my mother was the eldest of six. Both of my grandmothers were renowned for their cooking and hospitality. They also both overcame great adversity to provide for their families. My grandmother on my mother's side (Grandma P) raised six girls in the Northern Ontario bush country until high school. She was a teacher from a very social community in Prince Edward Island (P.E.I.), and she taught each of her children until they reached high school age (at which time they boarded with a family in town); she met my grandfather during World War Two when he was stationed in P.E.I. They married and moved out to the woods to live in a one-room cabin they built themselves, when there wasn't even a road out to the property. Between my grandparents and their children (my mother being the oldest), they hunted, fished, picked berries, and gardened for sustenance only going to town occasionally for basic supplies such as sugar, flour, and powdered milk. Grandma P brought many of her early social traditions from Prince Edward Island with her out to the Northern Ontario bush and I recall fine China teacups lining the walls high up on shelves my grandfather had built for her in the log structure that was their home.

My grandparents ran a hunting and fishing camp and often catered to regular guests, mainly from Canada and the Eastern United States. My siblings and I spent summers with my grandparents at the camp as children. It is unusual for my generation, but I have had the experience of living without running water and electricity and relying on coal oil lanterns for light and wood for warmth. I have vivid memories of running to the cellar for a can of milk and trying to read by the light of day because come evening it would be difficult to do so by the light of an oil lantern. Life at the camp was hard and everything required a great deal of physical work. For example, washing required pumping water, heating it on the stove in large aluminum

kettles, and carrying it to the sink before use. In addition, the family was physically isolated from the rest of the world and Grandma P would have to wait months to send and receive letters from her beloved family back in P.E.I.

As a child, I have fond memories of Rusty Blakey, one of the pioneer bush pilots of Northern Ontario (Bush Pilot History, 2021). When we heard the distant sound of his floatplane, everyone would stop what they were doing and run down to the dock. He brought the mail from town and often brought treats for the children, and I can tell you that ice cream on a hot summer day never tasted so good. I loved these summers at camp, and I have fond memories of sleeping under the stars and connecting with the sounds of the wilderness and the vastness of the sky. I have captured some of these memories, as they inform my study choices; they are presented in italics to indicate my journal entries.

> *As I wander the paths of my childhood, I reflect on the log structure that was once "home" to my grandparents and the rock gardens where my grandmother constructed beauty out of available dirt and stone. I sense the echo of voices from days gone by; the laughter of my grandmother, the gruff yet loving chides of my grandfather as he admonished us for sleeping in and missing him "milking the moose" (by which he meant adding water to evaporated milk for oatmeal); the smell of simmering stew and warm bread sifting from the old McClary wood stove permeating through the camp, sending messages of love and nourishment. (Yawney, 2020)*

On my father's side, my grandmother (Baba) had her own challenges. She raised fifteen children on an INCO miner's salary, which was nominal at the time. Baba grew an extensive garden and fed her family, largely on foods from her Ukrainian cultural heritage; perogies, cabbage rolls, and her prize-winning borscht; foods that were nutritious and economical because

they consisted of root vegetables in various configurations. However, it was the preparation time that exacted the actual toll.

The kitchens of my grandmothers (and my mother) had an element of mystery, warmth, and welcome. Food was a gift to be shared and it was customary to welcome people to the home with delicious food. I recall helping at family members' weddings, anniversaries, and funerals. We did not hire caterers for these occasions, but pooled resources and prepared and served food ourselves. It was the economical choice to be certain, but as a family, we also understood that outside sources would not likely duplicate the quality of homemade food.

We would have perogy-making parties in advance of parties. As many people as possible would gather around a large kitchen table and take turns pinching perogy (or pedaheh as Baba used to call them) while Baba would stand at the head of the table rolling and cutting dough and tossing it gently to each of us as we completed each perogy. She would wander around the table inspect our work, and critique and praise our finished product. I recall the day with a certain sense of pride and sadness when I realized I had inherited the role of "Baba." The Baba needs to be quick, strong, and decisive, and as one family member ages, it falls to the next generation to do these tasks. Even now, when my students make perogy in their groups, I ask, "Who wants to be the Baba?" and outline the requirements.

In pre-Covid times the tradition of an open-door policy and shared meals continued at my parents' house. It was termed "Wednesday Night" [emphasis added] and my mother prepared multiple dishes, and my parents opened the doors to their home for dinner. There was always plenty to eat, and it was not uncommon to have 30 to 40 people stop by.

As a family, we moved throughout Canada during my early years. Not wanting to work for the mines in Sudbury, Ontario, my father moved our family (then with four children) to Thunder

Bay. During our four years in Thunder Bay my brother Patrick was born, and my mother attended Lakehead University and attained her Bachelor of Social Work degree. She managed to do this while remodeling a one-hundred-year-old home and taking care of five children and two foster children. My mom persevered with her studies despite the counselor (reflecting the wisdom of the time) who tried to warn her that achieving a degree might be a threat to her marriage.

My father got a job working for a paper mill on the West Coast of Canada and we moved to Nanaimo, B.C. in 1979. We were to remain there for seven years. As the eldest daughter of seven children, I began cooking complete meals and multiple baked goods for the family when I was around ten. In a busy family with numerous children, cooking became a way for me to stand out and provided a source of recognition and pride.

My parents were early and avid environmentalists and as a family, we practised recycling, collecting litter, foraging for food, and regularly shopping at second-hand stores. Lily Creek Wetlands Park in Sudbury, Ontario, is a direct beneficiary of my father's perseverance and dedication to opposing the development of these lands back in 1973 (Ulrichsen, 2006). Today, Lily Creek is home to soccer fields, tennis courts, and swampland creating a habitat for many birds and wildlife and contributing so much to the community's health. Even closer to home, my father, and my maternal grandfather (Grandpa P) fought against INCO and the acid rain produced by their mining process that effectively ruined hundreds of lakes in the surrounding area and devastated my grandfather's livelihood. The year that I was born (1969) the lake my grandparents had built their camp on was declared dead due to pollution (Kirbyson et al. 1983). I recall my grandfather saying, "Not in my lifetime, but in yours, there will be fish in the lake again." Unfortunately, my grandfather died in 1990. Today the waters of the lake are once again

sustaining a healthy habitat for bass, lake trout, and other aquatic life. I know that these experiences will be with me always and they constitute my worldview, and I cannot live, teach, or research without awareness of them.

When I graduated from high school, in Nanaimo, B.C., I moved with my family to Ontario where I attended university to pursue a Bachelor of Arts (B.A) degree in 1990. During and after this, I did work in the food industry for nearly 13 years. After that, I moved throughout Canada, living and working as a professional chef in Nanaimo, British Columbia, Northern Ontario, and Yukon Territory, before settling in Alberta for the past twenty years.

In Yukon, I spent seven years living and working on the Alaska Highway, cooking for road construction workers. Initially, I began as a breakfast cook/baker. As I gained experience, I eventually took over as head cook. I was responsible for all aspects of preparing meals for groups (consisting of 50 to 200 people) from grocery ordering, budgeting, preparation, kitchen maintenance, and staff management responsibilities. Working as a cook (particularly in this environment) is physically demanding and challenging. However, I was young and strong, and I enjoyed it immensely.

I appreciated and respected the dedication of the hardworking men and women for whom I cooked. They each performed labour-intensive jobs such as driving heavy machinery, flagging, and surveying in extreme temperatures for ten-hour shifts, for weeks at a time without a day off. The one thing they had to look forward to was their food throughout the day and a warm and nourishing meal at suppertime. I did my best to ensure that they were not disappointed. In my family's traditions, I prepared as much as possible from scratch using traditional home cooking practices such as preparing my stocks and sauces from scratch and using processed foods that are often served in commercial settings as little as possible. This cooking is typically more work, but

it is far tastier and more nutritious (Slater, 2013). I did not know it then, but the experiences I had as a cook working in the field became invaluable to me in terms of the context in later years as I sought to relate to my high school students and their families.

After several years as a commercial cook, I longed for the mental stimulation and challenge I knew was inherent in higher learning. I completed a few university courses to achieve teachable subject credits (required for admission) through distance learning before being admitted to the University of Lethbridge in 1999 and graduating with a Bachelor of Education degree only two years later. In my first job as a teacher, I worked on a First Nations reserve for four years teaching Physical Education to grades one through four. During this time, I recognized that there were no Blackfoot books available that were representative of the culture and language of the students I was teaching. I returned to school for my Master of Education Degree two years into my teaching career. After taking such a long hiatus after my first degree, I discovered I was hungry to continue my studies. I devoted my project to cross-cultural learning and focused on building bridges between what I had learned working on the reserve and how these lessons consequently affected and enhanced my teaching. I framed my study around the work of the *Circle of Courage* philosophy (Brendtro, Brokenleg, & VanBockern, 1990).

After completing my Master of Education Degree, I wrote a series of children's stories about a brother and sister who went to live with their grandparents on the reserve when their parents were killed in a car accident (Yawney, 2011, 2012, 2013), a tragedy I bore witness to far too often in my four short years on the reserve. Significant portions of these stories were translated into Blackfoot by Leo Fox (a Native Blackfoot speaker) and the images were painted by Annette Nieukerk (a local Lethbridge artist) to reflect the peoples and places that Blackfoot children of Southern Alberta could identify with and recognize (Yawney, 2011, 2012, 2013).

In the summer of 2005, my path was to shift yet again. As it happened, I got married that July, and was hired to teach foods and knowledge and employability classes at a nearby local high school. That is where I have been teaching for the past seventeen years.

Food has been a constant thread throughout my life. It has become inextricably bound with how I interact in the world. I prepared and continue to prepare food for all occasions; food can serve to enliven a birthday party, communicate love and celebration, and it can help to nourish and support at a memorial service and express empathy and compassion. In hearing about a difficult experience in the life of someone I know, I prepare something warm and nourishing to eat. In preparation for birthdays or celebrations, it might be sweet and beautiful.

I believe knowledge of food has guided me in making healthy choices for myself, and others. For example, when I was experiencing arthritis-like symptoms in my hands and body four years ago, I looked to my diet for a solution. This exploration led me to realize that inflammation was occurring, likely due to the processed foods I was eating (and a lifetime of using my hands as tools). As a result, I have created a 'food habit' of starting each day with apple cider vinegar, a green drink, eliminating alcohol from my diet, eating primarily plant-based foods, and supplementing as is recommended on a plant-based diet (Greger, 2015). In this way, I have been able to reverse the arthritic-like conditions that I was experiencing.

I have also been a distance runner throughout my life. I am a keen advocate for the notion that if you are out there, going through the motions, you are 'winning' because I recognize how important it is to be active every day (Greger, 2015). I often tell my students, "Move it or lose it" and go on to explain how important it is for young people to build muscle mass now for their future (Greger, 2015). I have recently surpassed the half-century mark. I know that continued

attention to my diet, combined with exercise and body awareness practices, have allowed me to feel strong and flexible today.

Asking myself, "What is your food philosophy?" has guided me in my classroom and throughout my life and teaching career. I understand cooking principles, nutritional requirements, and have become adept at many food preparation techniques. I believe that 'we' as a society are losing our collective food knowledge, such as understanding where our food comes from, how it is best prepared, and the potential for food to keep us healthy in body, mind, and spirit throughout our lives. Notably, Petrini (2005) supports this concern about the disappearing food culture.

> This traditional knowledge constitutes a heritage that urgently needs to be catalogued and preserved, as it is on the verge of being permanently erased. It must be made alive and present again—not in a manner antagonistic to modern, "official" science, to the new trends developing in the globalized world of the new technologies, or to all the elements whose supremacy is causing its demise (industry for example)— but in order to establish a dialogue between different kinds of knowledge from different realms, to amalgamate and accord them all equal dignity and authority. (p. 181)

I believe that society has experienced enormous changes in our food systems and what is available for consumption in the past one hundred years. The inequities in our system have become particularly evident in the current Covid climate, where people worldwide are experiencing food insecurity and uncertainty in their lives, prompting much discussion about food and the notion that food must be regarded as a fundamental right (Pera, 2021).

How are youth experiencing food? Why is it important?

There are several forces seemingly beyond our control at work in dictating our current diets. Significant resources are required to prepare healthy foods, such as food availability, time, skills, equipment, and finances. As individuals and family units, we must make choices and prioritize resources in choosing the foods that make up our daily diet. What is influencing these choices? The essence of this paper is to determine how a select group of youth are making choices and experiencing food currently in history and add their voices and concerns to the growing body of literature surrounding food experience to advocate for a more just and equitable world. It is only through developing an appreciation and understanding of food systems that individuals can make conscious choices that will affect their health and the environment around them. Research indicates that youth voice is missing in the current dialogue, yet they have so much at stake and potentially so much to offer (Pera, 2021). Essentially, the intent was to focus on a small cross-section of the youth population in Southern Alberta and ask them to share and define their food experiences by asking them a series of food-related questions and allowing them to take the lead in response. For example, the first question asked after a brief introductory conversation was, "What comes to your mind when I ask you to tell me about your food experiences?" Acknowledging that "food experience" can be very broadly defined, the intent was to take direction from the participants in the study to elaborate upon their individual experiences. Therefore, a phenomenological study was undertaken to hear the participants' voices and focus on their lived experience as it relates to food. As outlined by van Manen (2015),

> The point of phenomenological research is to "borrow" other people's experiences and their reflections on their experiences in order to better be able to come to an

> understanding of the deeper meaning or significance of an aspect of human experience in the context of the whole human experience. (p. 62)

In asking participants to respond to questions such as what influences their choice of food and how they feel about these choices, the goal was to clarify the possible ways that young people are experiencing food today.

Acknowledging Privilege

At this point, I refer to my opening paragraph, where I sat comfortably on the porch of our family camp and watched the sun go down. I acknowledge the privilege I experience as a Caucasian individual, in a developed country, with a two-parent family amongst a large extended family, with various occupations and life experiences. I know having the opportunity to travel to different parts of Canada and to be supported in my educational endeavours has allowed me to be the beneficiary of jobs and educational opportunities that other minority groups may not be afforded (Shor, 1992). My mother's 'gentle nudge' to attend university spoke volumes about the future I could expect and envision for myself. My parent's willingness and ability to move freely across the country instilled in each of their children a certain fearlessness when travelling and seeking out new experiences.

Even as I acknowledge privilege, I also recognize intellectual empathy and appreciation for sharing food as a means of connection. Through their selflessness in providing a home for additional foster children throughout our childhood, my parents bestowed their children with empathy, and we learned early to put our needs aside in favour of the collective good. We learned to welcome whoever sat down to share a meal at our table and aimed to make them feel at home. My mother was a social worker for thirty years. The following excerpt from a short story I wrote for a Bachelor of Education assignment in 1999 demonstrates a capacity for

empathy and understanding that I draw upon in conducting interviews with participants throughout this study.

> *The girl shifts in her seat and hopes she won't have to wait too long today. A half hour passes, and she knows she is running out of time. The baby will need to be fed and changed. She walks up to the window and tentatively asks the woman, "How long do you think I will have to wait?". "Until you're called", the woman briskly states. Not knowing what else to do, the girl lowers her eyes and returns to her seat. A second girl enters the office and walks up to the window. "Can I see Mary Baker please?" she asks. "Do you have an appointment?" the lady curtly responds. "No, but perhaps you can tell my mother that I am in the waiting room," the girl says bluntly. "Oh", the woman appears startled and attempts a smile. "Just a minute, I'll see if she's free", she blurts out and rushes off.*
>
> *The second young girl looks around the room. She takes in the worn brown carpet and the peeling yellow wallpaper. Her eyes gloss over the old man with the long grey hair, the heavy-set woman with the kind dark eyes, and come to rest on the young girl about her age. She notices the infant in her arms and offers the mother a warm smile. The woman has returned and opens the door. "Your mom can see you now," she says. Briefly, the second girl considers what it would mean to sit on the other side of the door. She thinks of the woman behind the window and how she had tried to make her feel small. Her heart is heavy as she walks through the door and goes to meet her mother for lunch.* (Yawney, 1999)

Life experience has taught me to be present and aware of the needs of others in our community, and I see the disparity between social groups and individuals daily. I recognize

racism and cultural bias in our education and in our societal systems that we are only now beginning to address through such programs as Reconciliation Canada (Reconciliation Canada, 2021). As I write this, the country is reeling from the news that 215 children's bodies have been discovered in unmarked graves at a residential school in Kamloops, B.C. (Pruden & Kirkup, 2021).

I worked on a Southern Alberta reserve for four years and bore witness to illness, poverty, and death. I know many teachers in Southern Alberta who have spent their working lives in the same school and witnessed varying degrees of trauma and despair that are not present in other schools with different socio-economic realities. These teachers are strong and compassionate individuals, but ongoing trauma does not come without a cost to personal wellbeing, and many experience compassion fatigue (Kamkar, 2019, Ormiston et al., 2022).

In recognizing privilege, I know I want to be an advocate and speak for those who may not have the opportunity to speak for themselves (Glover & Sumberg, 2020). That is why I am drawn to my research question to better understand how young people define their experience of food. For example, are they aware of the process our food supply undergoes? What do they think is influencing their dietary choices? Do they identify an association between food quality and academic achievement? Are they familiar with the current dialogue and issues surrounding the influence of agri-business and the hidden costs of food systems? Do they connect emotionally with their food knowledge and experiences?

Purpose Statement

This study addressed the need to hear the voices of a select group of today's youth (aged 14 to 18) in Southern Alberta high schools at a critical period in history to help illuminate the multidimensional ways that youth are experiencing food today. I took a phenomenological

approach to gather and analyze responses and attempted to bracket myself from the research and highlight the contribution of each of the participants. In addition, I used a modified Photovoice method (Wang, 2008) to provide an additional means for students to communicate their discoveries to me (and each other) and as talking points for further discussion. I discussed the concept of co-researcher/participant and how their individual experiences would make up the summation of my work. I asked them a series of questions and left them with the task of taking a minimum of five photographs (and filling out a corresponding SHOWED form for each of them) in preparation for our following interview. The acronym SHOWED is described here: S – What is **S**een here? (Describe what the eye sees), H – "What is really Happening?" (The unseen "story" behind the image), O – "How does this relate to **O**ur lives? (Or MY life personally), W – **W**hy are things this way?, E – How could this image **E**ducate people?, D – What can I **D**o about it? (What would I like to see happen in the future?)

Following the initial individual interviews, I conducted a second individual interview with co-researcher/participants. I asked them to share the significance of the (five) photographs they submitted to me (and the SHOWED rationale) and choose one that they would like to share in our third meeting/focus group discussion. In the final meeting, I brought the group together to conduct a focus group discussion and share photographs and the rationale for choosing them. In addition, resulting themes were presented, and participants were asked to share their impressions on the findings' validity and if additional information should be included. The rationale for this approach was that the rich description provided by the co-researcher, in combination with the use of Photovoice to support their theory would add to enhanced insight into youth perspectives on the various factors that constitute food experiences for youth in the present.

Chapter Two: Situating the Study in Literature

Introduction

In the early 1900s most people farmed in some capacity (Pollan, 2008). Today, we have moved away from farming and an understanding and appreciation of agriculture to a lifestyle in which most of our food is produced by corporations (Hyman, 2021; Kingsolver, 2007; Nestle, 2002; Pollan, 2008). There is growing evidence to suggest that humans are becoming sick as a result. Pollan (2008) says,

> All of our uncertainties about nutrition should not obscure the plain fact that the chronic diseases that now kill most of us can be traced directly to the industrialization of our food: the rise of highly processed foods and refined grains; the use of chemicals to raise plants and animals in huge monocultures; the superabundance of cheap calories of sugar and fat produced by modern agriculture; and the narrowing of biological diversity of the human diet to a handful of staple crops, notably wheat, corn, and soy. These changes have given us the Western diet that we take for granted: lots of processed foods and meat, lots of added fat and sugar, lots of everything—except vegetables, fruits, and whole grains. (p. 10)

It seems the rise of processed food has become so ubiquitous on grocery store shelves that we no longer question the source from which it is derived.

Food as Commodity

Food itself has shifted from a source of nutrition to a commodity to buy and sell. Society has put misplaced faith in our government and food systems to protect us and provide us with healthy and nutritious food (Hyman, 2021; Kingsolver, 2007; Pera, 2018-present). Berry (2009) believes that we are passive consumers and there is a disconnection between the production of food and our knowledge of it. With regards to consumers, he says,

> They buy what they want or what they have been persuaded to want-within the limits of what they can get. They pay mostly without protest, what they are charged. And they mostly ignore certain critical questions about the quality and cost of what they are sold: How fresh is it? How pure or clean is it, how free of dangerous chemicals? (p. 211)

There are many factors that influence our food choices, such as family influence, cultural background, budget, and availability (Kingsolver, 2007; Slater, 2013). Added to these considerations, are the many ways industry has manufactured to appeal to our instinct for survival (Kingsolver, 2007; Moss, 2021). In recent years, society has been waking up to the realization that corporations have hijacked the food supply. This point has been brought home recently because during Covid it became apparent just how vulnerable our food supply is and consequently our population as a result (Hyman, 2021; Pera, 2018-present). We realized that the time has never been more imperative to focus on a strong, viable, and sustainable Canadian food supply. The rest of the world is on the path to follow a similar quest because the issues we are seeing in Canada have been felt and experienced in North America and around the world (The World Bank, 2021). The present-day Canadian Food Studies curriculum does not represent the contemporary challenges we are facing in the world today (Anderson & Falkenberg, 2016; Classens & Systma, 2020). Due to the nature of our changing food environment, it is pertinent to ask how youth today are experiencing food.

These multi-directional influences on Canadian food systems, point to the need to consider a variety of theoretical perspectives when research is undertaken into food choices. As I have explored my own ontology, axiology, and epistemology, I have come to see that for me, this work originates in sustainability ideologies but branches out to intersect with constructivist, post-modern, and existential theories. This research will help explain how today's youth is

experiencing food in various capacities with the potential to add their voices to the much-needed discussion surrounding present-day food systems. The resulting perspective will be based on a multi-dimensional theoretical framework that addresses intersections among interview questions, prompts, and data interpreted throughout the process (See Figures 2.1 & 2.2).

Research Focus

The intent of this research study was to focus on the evolution/devolution of food as it relates to young people today. As a society, we are interconnected with our environment, and we must recognize that in our thoughts and actions for the benefit of humanity going forward. To create a more equitable world we must question what each of us can do individually. Berry (1999) says,

> We must feel that we are supported by that same power that brought the Earth into being, that power that spun the galaxies into space that lit the sun and brought the moon into its orbit. That is the power by which living forms grew up out of the Earth and came to a special mode of reflexive consciousness in the human. This is the force that brought us through more than a million years of wandering as hunters and gatherers; this is that vitality that led to the establishment of our cities and inspired thinkers, artists, and poets of all ages. (p. 174)

It is with this sense of mystery and beauty that the interviews and explorations in this study were undertaken.

As a teacher, I understand how important it is to acknowledge the unique personalities of each of my students and be prepared to address them on an individual basis. Therein lies the challenge of teaching. I appreciate the teachings of Creswell and Creswell (2018) in their guidance to constructivist researchers to "focus on the specific contexts in which people live and

work in order to understand the historical and cultural settings of the participants" (p. 8). This "process of interaction" (Creswell & Creswell, 2018, p. 8) is a key part of the foundation of theoretical frameworks that will illuminate my work. In acknowledging young people as individuals with unique personalities, I understand that they will read the world in their unique way and, as a researcher, I am to try to see the world as they do and represent that understanding in my writing. Creswell and Creswell (2018) say,

> Individuals develop subjective meanings of their experiences—meanings directed towards certain objects or things. These meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrowing meaning into a few categories or ideas. (p. 8)

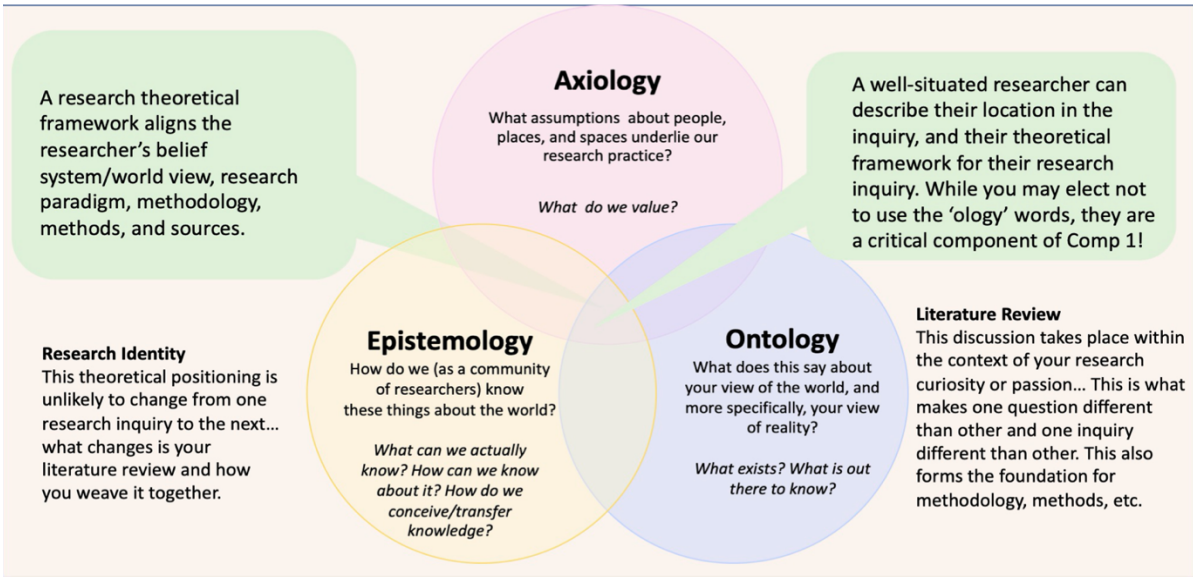
It seems reasonable to seek participants' worldviews as I "look for the complexity of views" in the probe responses of participants and interpret data in this study.

Theoretical Framework

To do this research, I must acknowledge my worldview that will guide my work. Each of us as individuals is shaped by life experiences and influences and we must reflect on what these are, to perceive a broader understanding of the world around us (Glesne, 2016). I know I will adhere to a theoretical framework that includes educational sustainability (with particular emphasis on food security and sustainability), constructivism, post-modernism, and existentialism. I will also seek to discuss the intersection of each of these theoretical frameworks as I address the axiological, epistemological, and ontological aspects of my work (See Figure 2.1).

Figure 2. 1

Aligning Axiological, Ontological, and Epistemological Approaches at the Intersection of Theoretical Constructs



Created by M.Parr as course materials for EDUC 6126; Used with Permission. See Appendix C.

Axiology

I value wellness in body, mind, and spirit. These values in part, have led to the complex relationship I have maintained with food throughout my life. I also value our environment and try to practise sustainability in all areas of my life. I appreciate diversity and that each of us is unique with our own personalities, characteristics, and ambitions. I believe that as human beings we must work together towards a sustainable world in which to live.

> Axiology considers what value we shall attribute to the different aspects of our research, the participants, the data, and the audience to which we shall report the results of our research. It addresses the question: What is the nature of ethics or ethical behaviour? (Kivunja & Kuyini, 2017)

I think this is why I am particularly drawn to my main research question: What are the multidimensional ways that young people are experiencing food today? For example, I believe

we must give our young people an opportunity to speak to their contemporary understanding with regard to what motivates their food choices and their emotional response to these choices.

Epistemology

Epistemology addresses the question, "How do you know that what you know is true?" (Ellerton, 2017, para. 1). I believe that as an individual and a researcher, it is important for me to maintain an open mind and be prepared to listen to others and then assess these observations to determine themes that may arise while putting aside my pre-judgements.

> Epistemology is concerned with the very basis of knowledge – its nature, and forms and how it can be acquired, and how it can be communicated to other human beings. It focuses on the nature of human knowledge and comprehension that you, as the researcher or knower, can possibly acquire so as to be able to extend, broaden and deepen understanding in your field of research. (Kivunja & Kuyini, 2017, p. 27)

As a longtime teacher and lifelong people watcher, I am aware of the actions and behaviours of others and the requirement for keen observation and interpretation speaks to my sensibilities and passion for writing descriptively. Creswell and Creswell (2018) say, "Researchers recognize that their own backgrounds shape their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural and historical experiences" (p. 8). As I acknowledge the intersection of theoretical perspectives, I practised reflexivity to be aware of my own judgements throughout the study, as guided by Bloor and Wood (2006), who acknowledges, "Reflexivity is an awareness of the self in the situation of action and of the role of the self in constructing that situation" (p. 145). By maintaining a focus on the intersections of the four theoretical frameworks that informed my approach to this work, I took guidance from Glesne (2016), who also reminds researchers to

sustain awareness of personal perspectives, as we engage with the perspectives of study participants.

> When you track your emotions, you learn more about your own values, attitudes, beliefs, interests and needs. You learn that your history and experiences are the basis for your behaviors and interpretations and thus for the story that you are able to tell. They are the strengths upon which you build. (p. 150)

I acknowledge my rich and varied history with food that includes preparation, education, nutrition, and the art of presentation. Taken together, my experience provides an insider perspective that allows me to relate on a deep and meaningful level with the young people who will be co-researching with me (Glesne, 2016). I acknowledge my inner workings, in choosing the methodology and method that will best apply to my study. Glesne (2016) says, "What you believe knowledge to be, in turn, shapes and serves to justify your methodology, your theoretical perspectives about how to go about knowing" (p. 5).

Ontology

In examining my belief system, I find myself reflecting upon my life practices and the choices that I make as a mother, an educator, and a human being each day. In this regard, I hear an ongoing and persistent internal refrain, "We teach by every word and action". Therefore, it is up to me to live my best life and to self-analyze my choices. I know that I may not always make the 'right ones' but if I act according to my moral compass, that is the best (and most realistic) that I can do.

Kivunja and Kuyini (2017) say,

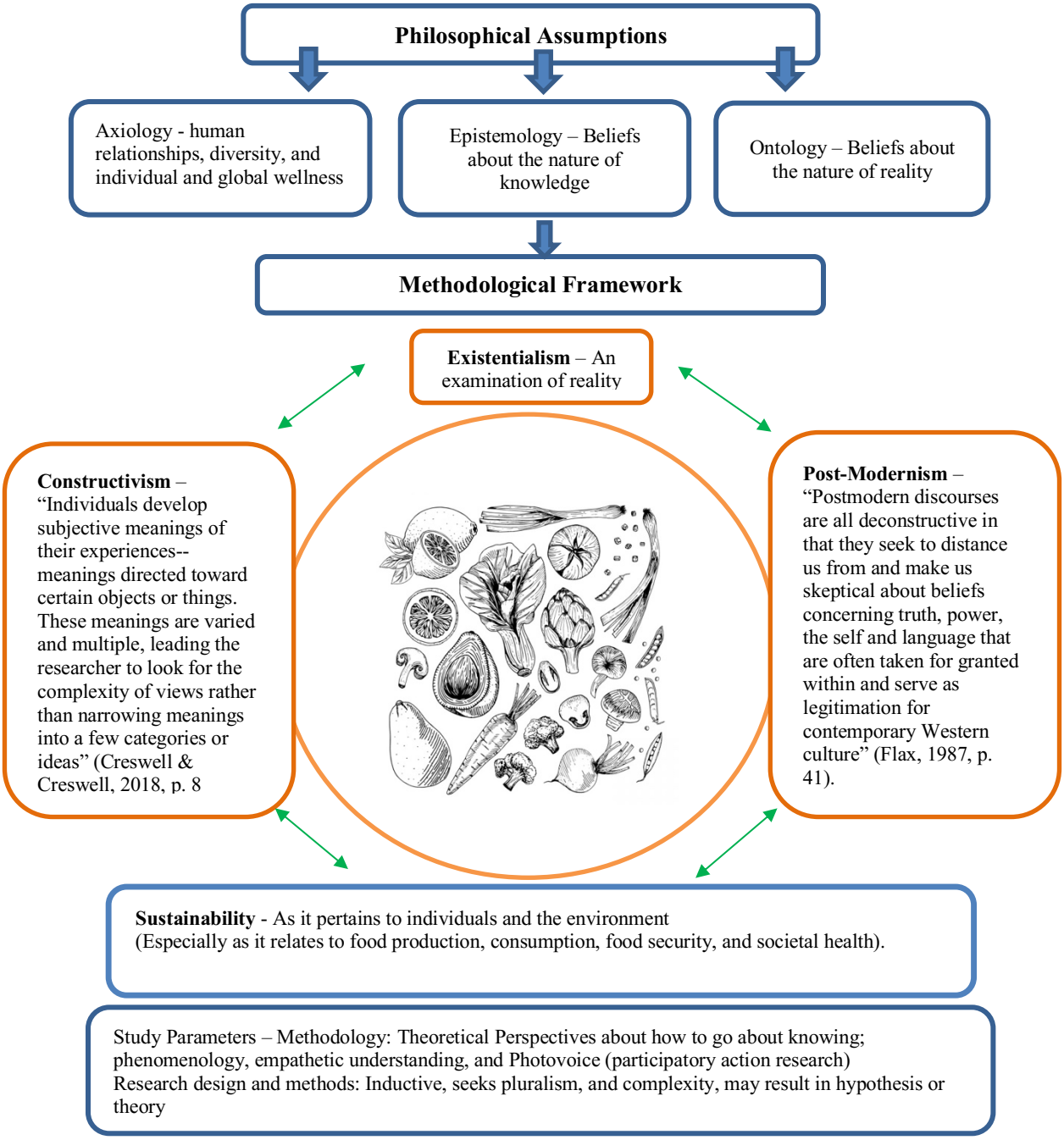
> Ontology is the philosophical study of the nature of existence or reality, of being or becoming, as well as the basic categories of things that exist and their relations. It

> examines your underlying belief system as the researcher, about the nature of being and existence. It is concerned with the assumptions we make in order to believe that something makes sense or is real, or the very nature or essence of the social phenomenon we are investigating...[to] make meaning of the data you gather. (p. 27)

This guidance from Kivunja and Kuyini (2017) reminded me to sustain constant awareness of my own "underlying belief system as a researcher" in all aspects of my study. In Figure 2.2, I have conceptualized the necessary alignment of my theoretical framework at all stages of my research.

Figure 2. 2

Aligning Theoretical/Philosophophical Assumptions, with Suitable Methodology and Study Parameters



Developed by D. Yawney

"The Strengths on Which I Build" (Glesne, 2016, p. 150)

To ensure that I acknowledge the influence of my own "history and experiences…the strengths on which [I will] build" (Glesne, 2016, p. 150), my personal history with food assisted me to interpret the experiences of others. This approach aligns with cautions about interpretive approaches to studies that note that the researcher must be open to the participants' experiences and prepared to "generate or inductively develop a pattern of meaning" (Creswell & Creswell, 2018, p. 8).

Sustainability

In terms of the foundational lens of sustainability, we cannot continue to live in the same destructive way that we have for the last 100 years. These beliefs align with Berry (1999) who says, "The proposal has been made that no effective restoration of a viable mode of human presence on the planet will take place until such intimate rapport with the Earth community and the entire functioning of the universe is re-established on an extensive scale" (p. 19). As a society, many people feel overwhelmed by the enormity of the current situation in terms of sustainability and end up feeling powerless (Hyman, 2021). However, focusing on a holistic approach to living sustainable lives and practising sustainable methods in our agriculture may offer opportunities to lead to health and wellness on an individual level and globally on an environmental level.

Constructivism

In asking a group of youth to share their food experiences the intent was to illuminate contemporary "cultural patterns" that are present in their thinking today. Glesne (2016) says,

> What is of importance to know is how people interpret and make meaning of some object, event, action, perception, and so on. These constructed realities are viewed as

> existing, however, not only in the mind of the individual, but also as social constructions, in that individualistic perspectives interact with the thought and language of the wider society. Thus, accessing the perspectives of several members of the same social group about some phenomenon can suggest some cultural patterns of thought and action for that group as a whole. (p. 9)

Glesne's comments speak directly to the intersection of the four theoretical frameworks that informed this study.

As Bryman (2004) notes, constructivism "implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision" (p. 17). That is why it is key that youth contribute their voices to the contemporary conversation surrounding food. Historically, due to their youth and lack of power, young people have not been consulted on decisions that impact their education and lives (Cunningham & Rious, 2015; Slater, 2013). It becomes important to ask what young people would say if given the opportunity to voice their opinions. Bryman (2004) says, "Instead of seeing culture as an external reality that acts on and constrains people, it can be taken to be an emergent reality in a continuous state of construction and reconstruction" (p. 17), which is indicative of existentialist and post-modern thought. This became particularly important in this research in terms of interpreting the way that a sample North American culture is defining their food choices, which creates another intersection with sustainability paradigms.

As a food's teacher, I note that Dewey (2018) appreciates the complex nature of food work. He says,

> To cook is to utilize heat and moisture to change the chemical relations of food materials; it has a bearing upon the assimilation of food and growth in the body. The

> utmost that the most learned men of science know in physics, chemistry, physiology is not enough to make all these consequences and connections perceptible. (p. 223)

It seems I share with Dewey this pragmatic understanding of the complex nature of a seemingly straightforward skill and the inherent value and opportunity for learning contained therein.

The zone of proximal development outlined by Vygotsky supports the understandings I adhere to as well. "The zone of proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state" (Vygotsky, 1978, p. 33). In this way, I witness a disconnection between education as a system and education as a process. As a classroom foods teacher, I am called to teach students at multiple levels of cognitive and physical ability, and I reflect on how best to meet these needs daily. Vygotsky's notion of proximal development reminds me that my students are in the process of learning, and it is incumbent upon me to find ways to connect with them and create constructive opportunities for growth to occur.

In this respect, Dewey (2018) says

> It is not the business of the school to transport youth from an environment of activity into one of cramped study of the record of other men's learning; but to transport them from an environment of relatively chance activities (accidental in the relation they bear to insight and thought) into one of activities selected with reference to guidance and learning. (p. 292)

In recognizing that society is socially constructed, it follows that we may use our gifts and talents to help to interpret and to construct a more equitable world. Food systems have changed dramatically over the years. These changes have been evident in terms of how food is prepared and how food is purchased privately and commercially. The education surrounding food should

change as well. There is significant evidence to suggest that big business is ruling our collective diet and thereby our personal health and the health of the planet as a result (Hyman, 2021; Moss, 2021; Nestle, 2002; Pera, 2018-present; Polan, 2007, 2008, 2013; Sumner, 2015).

Existentialism

From a personal perspective, I believe our lives are not preordained and that we have freedom, and it is contingent upon each of us to find our purpose to make our lives meaningful and worthwhile. For me, this means we should try to live according to one's values and that those values should be guided by a sense of what is right and just; that we must treat others as we would like to be treated and to teach others to do the same by acknowledging that morals and ways of being can and must be taught. In this way, I find myself identifying with an existentialist tradition and the notion that we are not born with a purpose but that individually we must determine our purpose for ourselves (The South African College, 2020).

> The existentialist worldview proposes that our life has no predefined purpose; we merely exist. The upside of this take is that we have free will to determine not only our fates, but our personality, values, and worldview. Nothing is decided for us. (para. 3)

This notion is at once empowering and oppressing. My stance on mitigating the dichotomy is to embrace justice and the willingness to search within for truth and guidance and to try to empower others to do the same. van Manen (2014) says,

> Writing a phenomenological text is a reflective process of attempting to recover and express the ways we experience our lives as we live it—and ultimately to be able to act practically in our lives with greater thoughtfulness and tact. (p. 20)

I appreciate that phenomenology asks that I take a step back, look at the experiences of young people from a distance, and tell their story in their voice(s) to contribute to an ongoing contemporary conversation surrounding food experience.

Due to the propensity to live according to one's values, I have developed a more in-depth appreciation of praxis and the notion of affecting change. For instance, I have my students democratically choose one community service project to contribute to each quarter. As I have come to understand and appreciate the notion of praxis, I have made an even more concerted effort to make direct contributions to my community in some fashion; this understanding compels me to be fully alive in the world each day. Heidegger referred to a form of 'being-in-the-world' as Dasien (Dodson, 2014, 2:41).

> Being in the world means that what we are and what the world is are mutually interdependent. So that there is no such thing as a world apart from our experience of it, any more than our experience is separate from the social and natural world context in which we live. (Dodson, 2014, 3:06)

I identify with the emphasis Heidegger places on time and the notion that time is very subjective depending on what one is doing and how it is being interpreted (Heidegger, 2010). I know that I have experienced this myself first-hand. When I am lost in the art of cooking, hours will pass, and I will lose track of time. Yet, when I recall a month, I spent working as a flag person on the highway, I remember the minutes ticking by at an agonizing rate. Heidegger asks us to live aware of the presence of death; in this way, we will be able to appreciate life (School of Life, 2014). As such, I strive to appreciate life each day, while being fully aware of how quickly it passes. I also try to maintain and share this enthusiasm with others. Heidegger (2010) asks, "Why do we say that time passes away when we do not emphasize just as much how it

comes into being?" (p. 404). I maintain that each day we have a choice as to how we will see and interact within the world; not always, but I do try to advocate that we choose to value and appreciate the beauty every day and search for beauty in the people and the world around us.

Postmodernism

I also acknowledge that my research is partially motivated by my understanding of post-modernism because I believe that we have allowed those with political and economic power to make choices and define our society, a pattern very much prevalent today. Glesne (2016) says, "Postmodernity is marked by globalization, the spread of information technologies, and the fragmentation of nation-states" (p. 13). Flax (1987) says, "postmodern discourses are all deconstructive in that they seek to distance us from and make us skeptical about beliefs concerning truth, knowledge, power, the self, and language that are often taken for granted within and serve as legitimization for contemporary western culture" (p. 41).

Familial Influences

I think that postmodern theory has played a large role in my final analysis due to early familial influences in my life, such as witnessing my father's struggle to support a growing family while trying to align his recognition of the importance of sustainable practices with those of a capitalist world he was born into, and my grandfather's livelihood as a hunting and fishing guide decimated by the mining industry in their quest for financial gain.

I have also witnessed significant changes in the world of food in my lifetime in terms of how it is grown, prepared, and what is available to purchase. I have the benefit of fifty-plus years of observation and a foundation in a family with deep connections to food production, preparation, social significance, and celebration. Therefore, I am skeptical of what we are seeing as our contemporary food source en masse and I think it is important to remain vigilant and

practise critical thinking skills in all areas of our lives, especially as it pertains to something so vital as the food we eat.

Changing Methods of Food Production

In terms of postmodernism, there is much in the production of food over the past 100 years that has occurred that raises questions as to its impact on the health of humanity and is directly related to this research question. For instance, Berry (2009) questions the wisdom of our current agricultural system and says, "if agriculture is to remain productive, it must preserve the land, and the fertility and the ecological health of the land" (p. 16). Berry acknowledges that with the advent of industrial agriculture this knowledge has been essentially lost (Berry, 2009). The question arises as to whether society is paying attention and this reasoning circles back to concerns with our environment and the notion of sustainability.

Aligning Methodology with Theoretical Frameworks

While Chapter Three addresses details of the methodology that was used in this study, it is important to note that methodology follows, and should flow, directly from the nature of the research question(s) and the theoretical perspectives that will guide the interpretations of data. Phenomenology was chosen as the methodology for this study because it supports the four theoretical frameworks that substantiate this work (See Figure 2.2). van Manen (2015) says, "What the phenomenological attitude gives to education is a certain style of knowing, a kind of theorizing of the unique that sponsors a form of pedagogic practice that is virtually absent in the increasingly bureaucratized and technological spheres of pedagogic life" (p. 154). It is this "pedagogic thoughtfulness" (van Manen, 2015, p. 154) that is encapsulated in this research.

As the data collection and analysis phases of the study proceeded, it became apparent that the four frameworks that informed the research may conflict as data were presented; therefore, it

was important to be mindful of maintaining continuous awareness of the four theoretical frameworks (and how they diverge and intersect) during the interpretation phase of the process. As research proceeded, it was important to maintain awareness of personal concerns with the way that we are currently living in terms of sustainability. In many ways, the research, based on a sustainability platform with acknowledgement of premises from constructionism, existentialism, and postmodernism, supported clear interpretations of the contemporary viewpoints of a group of young people at this particular juncture in our human existence. This research has the potential to shed light on some of the ways in which youth currently view the world (and their roles within it) and the knowledge they possess as future leaders of our world has implications for future curriculum development and discourse surrounding a sustainable food supply.

Literature Review: A Patchwork Quilt

In exploring the literature surrounding food, one need not look far to discover that much work has been done around food-related studies. Due to its very all-inclusive nature, it is difficult to narrow the topic of food down. For some people, food represents sustenance, nourishment, comfort, culture, employment, and education, and yet for others who may struggle with a lack of food or too much food or eating disorders it may be painful or cause great distress. In seeking a metaphor to address the strategy employed in this literature review, a patchwork quilt is used. Each of the categories covered stand-alone and yet come together to form an elaborate final product, rich in character and beauty to be enjoyed for generations. Kaplan (2012) says,

> Food is vexing. It is not even clear what it is. It belongs simultaneously to the worlds of economics, ecology, and culture. It involves vegetables, chemists, and wholesalers; livestock, refrigerators, and cooks; fertilizer, fish, and grocers. The subject quickly

> becomes tied up in countless empirical and practical matters that frustrate attempts to think about its essential properties. It is very difficult to disentangle food from its web of production, distribution, and consumption. (p. 2)

Therefore, in seeking to ask about the multi-dimensional aspects of food experience, it was important to explore some of the current issues that surround food today. For example, not only is food relevant to the individual but, by its very nature, it has relevance to society. Every aspect of food research asks that we look at it holistically. For this research, a comprehensive sustainable, constructive, postmodern, and existential framework was used.

While recognizing the necessity to understand food holistically, the literature surrounding this topic is addressed in a somewhat systematic fashion (describing the patches that come together to form the quilt) as represented in the diagram that follows (See Figure. 2.3). This structure is provided to support this multifaceted topic and is intended to connect ideas and provide necessary flow for the reader.

Figure 2. 3

From Critical Food Literacy to Slow Food; A Patchwork Quilt

<table>
<tr><td colspan="4">Food Experience: A Phenomenological Study of Youth

Critical Food Literacy/ Critical Food Pedagogy and Transformative Learning</td></tr>
<tr><td>Setting the Stage; From Food Literacy to Critical Food Pedagogy</td><td>Food Experiences in Youth</td><td>Agri-business/ Industry</td><td>Sustainability</td></tr>
<tr><td rowspan="2">Food Systems</td><td>Family and Culture</td><td>Marketing</td><td rowspan="2">Food as a Fundamental Right</td></tr>
<tr><td>Comfort Food and Eating Disorders</td><td>Environmental Levy</td></tr>
<tr><td rowspan="2">True Cost Accounting</td><td colspan="2">Food and Nutrition and Food Security</td><td rowspan="2">Sustainability and Slow Food</td></tr>
<tr><td colspan="2">School and Community
Freire on Education
Foods Curriculum
School Gardens
Online Learning</td></tr>
</table>

Note: Prepared by D. Yawney

Critical Food Literacy/Pedagogy

To begin the discussion of food experiences, it is important to explore the literature surrounding the topic of food literacy and note that the language and understanding of this topic have evolved tremendously. Even in the last few years, terminology has shifted from food literacy to critical food pedagogy. Critical food literacy, critical food pedagogy, and the philosophy of food are all-encompassing topics and the overarching point of analysis for much of this literature review. Critical food literacy and critical food pedagogy also inherently embrace the notion of transformative learning because it is in learning to think critically that potential change is possible, and this is an important undercurrent to this work.

The original term *food literacy* was coined relatively recently by Vidgen and Gallegos (2014).

> Food literacy is the scaffolding that empowers individuals, households, communities, or nations to protect diet quality through change and strengthen dietary resilience over time. It is composed of a collection of interrelated knowledge, skills, and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine intake. (p. 54)

In addition, Gartaula et al., (2020) say,

> Food literacy consists of the knowledge associated with food, including agro-ecological knowledge (where and what type of food is produced), cultivation and production knowledge (how food is produced), and processing and consumption knowledge (how food is prepared and distributed. (Para. 1)

In the short time frame since its inception, the term food literacy has come to be used extensively in the literature surrounding food and the definition continues to undergo change and

clarification (Anderson & Falkenberg, 2016; Pennell, 2015; Renwick, 2017; Sumner, 2013; Truman & Elliot, 2019; Velardo, 2015).

Block et al. (2011) acknowledge that society as a whole suffers when its population is not literate in the language of food.

> The cost of food illiteracy—a deficiency in food knowledge and inadequate ability, motivation, and opportunity to acquire and apply that knowledge—has consequences for the individual and for society in terms of an absence of Food Well Being, which could result in detrimental individual and societal health outcomes. (p. 8)

Recognizing the critical nature of food literacy to society has allowed the term to evolve to include the notion of critically evaluating food. Classens and Systma (2020) argue, "that food literacy must be incorporated into and supported by critical food systems pedagogy in order for the field to be truly transformative" (p. 9). This acknowledgement is part of the evolution in the understanding of food language and demonstrates how society is beginning to appreciate the multidimensional world of food and its significance and value on an individual and a global level. For instance, Yamashita and Robinson (2015) articulate the following definition for their view of critical food literacy.

> Our notion of critical food literacy is explicitly rooted in the importance of making visible the people who tend to be less visible; recognizing their experiences, knowledge, and skills; and considering and grappling with multiple perspectives and values that underlie food systems. (p. 273)

Critical food literacy continues to take on different dimensions as Sumner (2011) suggests that we cannot simply consider food in a linear manner, from farm to table, but rather we need to consider it in a more interconnected and sustainable way. Sumner (2011) acknowledges that we

must argue for a broad conceptualization of food literacy, because of the significance of food in all areas of our lives. From a postmodern perspective, if we do not, we leave it at the hands of multinationals to interpret our food reality as they see fit. Sumner (2011) says,

> As food has morphed from a means of life to a blunt instrument of corporate control, it has lost any association it may have had with social justice, leaving in its wake hunger and obesity in equal measure around the world. Both forms of malnutrition, in combination with a wide range of problems associated with industrial agriculture and an export-based economy, are the inevitable outcomes of a corporate food system that eschews life values and pursues money values at the cost of environmental, social, and economic sustainability. (p. 64)

It is key that we come to appreciate the breadth and corresponding ideology associated with critical food literacy to ensure that it is not simply diminished to the ability to read a recipe. Sumner (2015) articulates the danger of construing food literacy in one-dimensional ways when she says,

> While seemingly straightforward and professional, the definition of food literacy highlighted in the report is as important for what it omits as for what it includes… In essence, the definition restricts the understanding of food literacy to household attitudes, skills, and knowledge about food, thus constraining a broader understanding of food and food issues that might lead to criticism of the report's corporate sponsors (which include Pepsico and Nestlé) and the global food system they support and profit from. (p. 129)

When thinking critically about food, one needs to consider the ethical implications of the choices we make and how those choices affect the quality of the food available to us, the environment, and the livelihood of the people who are producing our food (Low & Davenport,

2008). One more step along the transformational timeline of our collective understanding of food literacy is the conceptualization of *critical food pedagogy* as a means of teaching toward transformative outcomes in our current food system. Sumner and Weaver (2016) say, "Both food and pedagogy have long been recognized as catalysts for personal and social change. For example, learning about the plight of farmers from the global south has prompted many people to forgo conventional coffee and drink fair trade products" (p. 322). Sumner and Weaver (2016) acknowledge critical food pedagogy and transformative learning as two key concepts that will help us "to understand the relationship between pedagogical process and change" (p. 322). They point to critical food pedagogy as a "pedagogical approach that discourages acceptance of the status quo and encourages critique of our unsustainable food system and the creation of alternatives that are more environmentally, socially and economically sustainable" (p. 322).

It is this same approach to teaching surrounding food that I witness and practice within my classroom when I ask my students to consider their philosophies of food and ask them to think critically about the impact of their choices. With the parameters of these definitions, some overarching themes evolve when discussing critical food literacy. Sumner (2015) expresses concern that, "Given that food literacy is a fairly new term, its meaning remains fluid as various stakeholders manoeuvre to control its meaning and thus mould policy that will serve their interests" (para. 1).

From a philosophical perspective, Kaplan (2012) acknowledges the complex nature of food and suggests that how we perceive food can have "real consequences for our health, the environment, and the economy" (p. 3). In addition, Kaplan (2012) suggests the following categories to consider when discussing the philosophy of food and specifically, the metaphysics of food: food as nutrition, food as nature, food as culture, food as a social good, food as

spirituality, food as a desideratum, food as aesthetic object, and multiple other possibilities as well.

As we have seen with the emergence of the term food literacy and its subsequent evolution to include critical food pedagogy, which has taken place in the last eight years, it is a very fluid time for our collective wisdom concerning our world food supply (Kaplan, 2012). Kaplan (2012) says, "More philosophical work has been done on food and agriculture in the last five years than the previous thirty" (p. 2). We have only begun to explore this vital and growing area of research. It is not possible to cover all of the literature surrounding food literacy and critical food pedagogy for the purposes of this dissertation. However, the intent is to call to light contemporary thinking on some key topics that guided discussion in interviews with young people as outlined by a literature review patchwork quilt map created to overlay a structure to support some key current topics surrounding food (See Figure 2.3).

Food Systems

As critical food literacy continues to evolve, we see new language develop to address these concerns thereby demonstrating the fluid and evolving ideology surrounding food work. For example, a term that is now becoming quite commonly used in discussion is *food systems* (Global Alliance, n.d.; Pera, 2018-present; Yamashita & Robinson, 2015). Food systems embody every aspect of the food web as evidenced by the following definition.

> The food system is a complex web of activities involving the production, processing, transport, and consumption. Issues concerning the food system include the governance and economics of food production, its sustainability, the degree to which we waste food, how food production affects the natural environment and the impact of food on individual and population health. (What is the Food System, 2021)

In the process of navigating 'patches' that make up the literature map, some of the national and international organizations that are working towards critical food systems goals are highlighted. The inclusion of some of the mandates of a few key national and international organizations demonstrates the depth of critical work being done around food systems and how vital this work is deemed the world over. One such international organization representing the issue of food on a global level is the Global Alliance for the Future of Food (GA) and they have established seven calls to action that encompass the following seven principles to aspire to as they pertain to food. Their mandates state that food should be renewable, resilient, equitable, diverse, healthy, inclusive, and interconnected (Global Alliance, 2021). The GA for the Future of Food acknowledges,

> We have the privilege and the responsibility to use our resources and networks to get sustainable food systems on the political, economic, and social agenda. By combining our knowledge and expertise, we believe that we can have a greater impact together than our individual organizations can have alone. (Global Alliance, 2021)

The seventh principle established by the GA, "interconnected", speaks to the very essence of the GA approach to the work that they do.

> Our food systems must be interconnected. We must understand the interdependencies within the system, recognizing the complex web of dynamics and interactions between parts of the system. It means watching for, making sense of, and interpreting the implications of things that are interconnected in the global system. We must think beyond nation-states, sector siloes, and narrowly identified issues and see the interconnections between the global and local, the macro and the micro, and the

> relationships between worldwide patterns and area-specific challenges. (Global Alliance, 2021)

Similar to the GA call to action, I acknowledge and incorporate current literature pertaining to food-related knowledge using a system's thinking, holistic approach with the intention that transformative learning takes place (Global Alliance, 2021; Hyman, 2021).

True Cost Accounting

As a result of the ongoing debate surrounding critical food literacy, another term that has become prominent in discussion is *true cost accounting*. True cost accounting refers to the actual costs incurred in producing seemingly cheap foods such as costs to the environment, human health, and the farm workers producing it (Holden, 2016). Holden says,

> This evolving way of thinking seeks to assess the costs and benefits of different food production systems. In doing so, those using production methods that are detrimental to the environment and society would have to pay for the damage they do, while those that are sustainable and deliver a wide range of benefits would be rewarded. (para. 6)

According to Holden (2016), the first conference surrounding this theme was held in Louisville, Kentucky in 2013. Since that initial meeting, true-cost accounting has become ubiquitous in discussions of food production, and the once polite call to acknowledge the true cost of production has become a very public roar (Baker, 2020; Pera, 2018-present).

Food Experiences in Youth

Herein lies the focus of this research project. Recognizing that situations and life circumstances may play out differently for some individuals, most youths reside with family members and as a result, many of their food experiences take place within their own homes (Romero & Francis, 2020). By their very nature, young people are seeking independence at this

stage of their lives and their peers become more important and also constitute a significant influence (Utter, Fay, & Denny, 2017). In addition, various forms of media have evolved and become more (think smartphone) or less (think traditional newspapers, and radio) pronounced in the lives of youth (Harris, 2014). All the while, messaging surrounding food has changed considerably in the last one hundred years and even more pointedly in the past twenty (Utter, Fay, & Denny, 2017). Essentially, the question becomes, "Where are the youth amid the current food climate?" "What are the many ways that youth are experiencing food today?" For instance, are they rocked by new news or developments on the sustainability front? Has it become 'white noise' to which they attribute little significance, or have they simply stopped listening? Perhaps, they are deeply moved and concerned and looking for their own way to put a stamp on the world food scene and in effect make the world a better place.

Families

Societal notions of family are changing significantly in a world that is becoming increasingly globalized (Glover & Sumberg, 2020; Utter, Fay, & Denny, 2017). Globalization and technology have introduced new challenges to the family unit in the form of changing family dynamics, a heightened sense of busyness, and less time spent together as a family. For many, the pace of life has sped up exponentially and families find themselves rushing from one activity to the next. In an era of the smartphone and a constant barrage of messaging from every direction, simply sitting around a dinner table and conversing as a family is happening less and less. Slater (2013) says,

> Teachers reported many students coming from homes with dual-income parents, one-parent or blended families, and many were in extracurricular activities and had jobs. This contributed to family food norms, which centre on greater use of convenience and

> fast foods; decreased time spent preparing foods; fewer family meals; and decreased mentoring of children in food skills. (p. 618)

Current evidence suggests that time spent cooking is going down and that our collective health is being negatively affected as a result (Utter, Fay, & Denny, 2017). Research shows that young people who engage in meal preparation activities are healthier and more knowledgeable about food and nutrition (Utter, Fay, & Denny, 2017). Romero and Francis (2020) say, "that aside from filling the immediate need for food, some youth ascribe value to the process of food preparation for family relationships (e.g., spending time with a parent), and for future development (e.g., learning useful skills)" (p. 9). Romero and Francis (2020), also acknowledge that youth have a significant role to play in many families "as potential health change agents, through which positive health behaviors may be transferred and modeled to other family members, including adults" (p. 9).

Family Literacy

In addition, preparing and sharing food is an important means of developing family literacy. Zygouris-Coe (2007) says, "Family literacy refers to the members' ability to read, write, communicate, view, and take the perspective of another" (p. 59). Reciprocally learning about the food and culture of communities is an opportunity to use family literacy to enhance collective knowledge.

> Families help children construct meaning about life, culture, language, learning, and literacy. Families provide an intergenerational transfer of language, culture, thought, values, and attitudes throughout the formative years of their children's lives (Zygouris-Coe, p. 59).

Culture

Each culture has foods specific to its traditional regions of the world. These foods then are a form of history and story and become a form of expression and communication that have the potential to go far beyond the walls of any one culture (Kaplan, 2012). In Canada, we say that we are proudly multi-cultural and celebrate many cultures within our Canadian borders from all over the world (Dib, Donaldson, & Turcotte, 2008).

As well as telling the story of cultures from around the world, these same foods can connect families and people on an intergenerational level. This is apparent in the way that recipes are coveted and passed down from one generation to the next (Çakır, 2014; Sharif, Zahari, Nor, & Muhammad, 2013). Many cultural foods represent inexpensive and widely available ingredients and require a certain skill set and often long hours of preparation. These are the foods that we have come to identify by their sumptuous odours that waft from neighbourhoods and various ethnic restaurants throughout the country. To many, these same odours can be reminiscent of family, distant homelands, and love, and these become the comfort foods for generations (Çakır, 2014; Sharif, Zahari, Nor, & Muhammad, 2013).

Comfort Food

Contemporary eating styles call into question the many roles that food may play in our lives, such as its ability to provide comfort. Food can be a way to signify empathy, kindness, and compassion.

> No one sits down to eat a plate of nutrients. Rather, when people sit down for a meal, they are seeking physical in addition to emotional and psychological nourishment—comfort, pleasure, love, and community. (Block et al. 2011)

For many people, certain foods conjure up warm memories of past experiences (Slater, 2013). These memories may stick with you several years later. At times, when sidelined by illness or by life, you look to your early comfort foods for reprieve and renewal (Glover & Sumberg, 2020; Shepherd, 2012). In this current Covid climate, comfort foods are experiencing resurgence (Murphy, 2020) as people seek to find solace in an uncertain world. Store shelves have unexpectedly sold out of traditional baking products like yeast and flour (Mull, 2020).

At home, I seek to take a little more time to ensure that we have the comfort of food available at each meal as I reflect in the following diary entry.

> *In my own family, we have experienced many of the uncertainties associated with Covid throughout the past year. For instance, when my daughters attend school, they must uphold a strict regimen of hand washing at each stage of the day; teachers come to their classrooms, rather than the students moving to other classes, and they are not allowed to play with children from the other cohorts and they must wear masks and social distance each day. My eldest is isolated at home for the second time in as many months due to a Covid case in her classroom. Both girls find themselves sitting far too long in front of computers and traditional activities such as rock climbing, and soccer have been shut down completely. The current situation is compounded by uncertainty and the shifting news from day to day; one day it is considered safe to go to school and the next, you are not allowed to visit with others even outside. I am more aware than ever of the importance of meal planning and preparing homemade meals. I make an effort to think ahead and pre-soak beans and freeze cabbage to ensure I will have the ingredients on hand to prepare food that greets my family with the warmth of good smells and hearty nutritious food at mealtimes.*

Eating Disorders

Eating disorders (ED) are becoming a growing concern among youth with connections to changing food environments (Treasure, Duarte, & Schmidt, 2020).

> Eating disorders are disabling, deadly, and costly mental disorders that considerably impair physical health and disrupt psychosocial functioning. Disturbed attitudes toward weight, body shape, and eating play a key role in the origin and maintenance of eating disorders. Eating disorders have been increasing over the past 50 years and changes in the food environment have been implicated. All health-care providers should routinely enquire about eating habits as a component of overall health assessment. Six main feeding and eating disorders are now recognised in diagnostic systems: anorexia nervosa, bulimia nervosa, binge eating disorder, avoidant-restrictive food intake disorder, pica, and rumination disorder. The presentation form of eating disorders might vary for men versus women, for example. As eating disorders are under-researched, there is a great deal of uncertainty as to their pathophysiology, treatment, and management. (Treasure, Duarte, & Schmidt, 2020)

The topic of Eating-Disorders (ED), and specifically Anorexia Nervosa (AN) and bulimia (B) was explored in part here because they are the most prominent eating disorders and the peak period for the occurrence of AN is between the ages of 14 to18 and B between the ages of 14 to16 (Pinhas, Morris, Crosby, & Katzman, 2011).

As of yet, there are several theories as to why EDs occur, and this topic is still in the process of being widely explored. Ranahan and Kutcher (2020) say,

> Eating disorders--like all mental disorders—likely arise from a complex interaction between genetic and environmental factors. Why a particular type of eating disorder

> will emerge in adolescence in a particular individual (and not in others) is at this time beyond our capacity to explain. (p. 238)

Pinhas et al. (2011) add, that as ED are often considered concealed (and not visible in the earlier stages), it may be a difficult condition to study, and therefore, many cases may go undetected. Block et al. (2011) advocate for a paradigm shift in the way we think about food from food = health to food = wellbeing. In this regard, they define the concept of food wellbeing (FWB), "as a positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels" (p. 6). This distinction is key, especially in terms of young people and the need to advocate for a healthy body image in an online environment where so much of their lives is tied up with the way they appear to the world and the serious consequences when related eating disorders develop as a result (Klassen-Bolding, 2018).

Food Nutrition/Food Security (or lack of)

Food nutrition and food security are presented together in this section as they seemingly go hand-in-hand. Much of present-day food is devoid of nutrition and people (and families) who experience food insecurity are particularly susceptible to being nutritionally deprived and are suffering a wide range of diseases and disorders as a result (Ayton & Ibrahim, 2020; Glover & Sumberg, 2020). There have been changes in student diets over the years and it has become more common for them to come to class bearing empty-calorie foods, and beverages high in sugar and caffeine (Barber, 2014; Nestle, 2002; Pollan, 2008; Singer & Mason, 2006).

Lack of Nutrition

The lack of nutrition in present-day food is a result of the way that it is grown and the processing that it undergoes. It is then presented as seemingly cheap and widely available. This disconnect has great implications for the health of society, but the consequences are especially

visible for those who are food insecure. The sentiment that it is the most impoverished in society who are at once the most nutritionally deprived and obese at the same time is far too common in the literature surrounding food today (Anderson & Falkenberg, 2016; Moss, 2021; Rojas et al., 2018; Sumner, 2011).

There are many reasons for this dichotomy. For example, Widome et al., (2009), suggest that two possible reasons are that high calorie, low nutrition foods are cheaper and therefore more often purchased by those who are food insecure and secondly, that individuals who are no strangers to hunger may be more likely to overeat when presented with food. Food-insecure youth were less likely to eat family meals together and research has shown that "eating family meals has been shown to correlate with eating healthy foods" (Widome et al., 2009, p. 827). In addition, Fulkerson et al., (2006), found that there are, "inverse relationships between family meal frequency and disordered eating, substance use, and depressive symptomatology/suicide risk" (p. 344). Also, Goldman-Hasbun et al., (2019) found a correlation between food insecurity in youth and depression.

Food can represent many things to people and one of the most significant is the nutrition that food provides for our bodies. Human bodies are growing in size along with the changes that are occurring in our food supply. Pollan (2008) says,

> Early in the twentieth century, an intrepid group of doctors and medical workers stationed overseas observed that wherever in the world that people gave up their traditional way of eating and adopted the Western diet, there soon followed a predictable series of Western diseases, including obesity, diabetes, cardiovascular diseases, and cancer. (pp. 10-11)

The associated problems are extremely complex and directly impact the wellbeing of people all around the world. They must be addressed now for individual health and the health of the planet. Rojas et al., (2018) add, "Each year, roughly two billion people are overfed and two billion are underfed by a global food system that is making measurable impacts upon our planet's atmospheric and oceanic chemistry (p. 61)".

Nutrient Dense Versus Empty Calorie Foods

Ample evidence suggests that eating nutrient-dense foods is the best way to provide for a healthy body (Greger, 2015). If we listen to our bodies, they will tell us what they need (Greger, 2015). Many of these messages have been lost in the steady hum of messaging we receive daily. Much of present-day food is heavily laden with salt, fat, and sugar (SFS) and we as a society are developing a pallet for these flavours, so much so, that food with limited SFS tastes bland (Smith, 2011).

Greger (2015) says,

> Compared to eating habits in the 1970s, every day, children are consuming the calorie equivalent of an extra can of soda and small fries, and adults are eating a Big Mac's worth of calories. Just to make up for the extra calories Americans are taking in compared to a few decades ago, as a nation, we'd need to walk an extra two hours a day, every day of the week. (p. 393)

It seems society is experiencing information overload, has become complacent, and opted for what seems to be the most economical and convenient 'choice' at the time. Wilson (2019) says,

> We are often told in a slightly hectoring way that we should make "better" or "smarter" food choices, yet the way we eat now is the product of vast impersonal forces that none

> of us asked for. The choices we make about food are largely predetermined by what's available and by the limitations of our busy lives. (para. 20)

Consequently, we are seeing obesity and diet-related diseases on the rise the world over. Diet and fitness-related industries have blossomed along with growth in these conditions. Amid it all lays much confusion and real people (and their health and wellness) are being affected.

Confusion Surrounding Food Choices

My concern with food security is exacerbated by the fact that I have lived and worked in the area of food most of my life and yet I still have a hard time making well-considered and conscious choices in our current consumer climate. I question how families without a similar foods background are managing to navigate the current state of our significantly diminished processed 'food' offerings complicated by the rising costs of groceries, and manage to feed their families (Greger, 2015; Hyman, 2021). As someone with considerable experience, I weigh the pros and cons of each item that I put in my cart every time I go shopping and often before and after. I contemplate a range of considerations regularly such as whether to buy butter versus margarine, organic versus nonorganic, from scratch versus homemade, the best choice of flour to use, gluten intolerance, lactose intolerance, specific allergies, and sulphite/sulphate content. What preservatives are used? Is the product free range? These are only a small sample of some of the considerations required every time I head to the grocery store. These same considerations are also reflected in the research of Wilson (2019) who connected our food choices to the busy realities of our lifestyles.

> It might be possible to eat in a more balanced way, if only we didn't have to work, or go to school, or save money, or travel by car, bus or train, or shop at a supermarket, or live in a city, or share a meal with children, or look at a screen, or get up early, or stay up

> late, or walk past a vending machine, or feel depressed, or be on medication, or have a food intolerance, or own an imperfectly stocked fridge. Who knows what wonders we might then eat for breakfast? (para. 21)

This passage captures some of the competing challenges today's consumers face in securing food for themselves and their families.

School and Community

On Freire and the Politics of Education

In Canada, schools are supposed to reflect society and education is a political expression of societal values. For example, in discussing Freire's theory of learning, Shor (1992) elaborates

> All forms of education are political, whether or not teachers and students acknowledge the politics in their work. Politics is in the teacher-student relationship, whether authoritarian or democratic. Politics is in the subjects chosen for the syllabus and in those left out. It is also in the method of choosing course content, whether it is a shared decision or only the teacher's prerogative, whether there is a negotiated curriculum in the classroom, or one imposed unilaterally. Politics also resides in the discourse of the classroom, in the way teachers and students talk to each other, in the questions and statements from teachers about the themes being studied, in the freedom students feel when questioning the curriculum, in the silences typically surrounding unorthodox questions and issues in traditional classrooms. (p. 26)

Essentially, politics resides in everything. What we value and what we aspire to are represented in our curriculum (and in our school buildings) (Rowe & Rocha, 2015). Paulo Freire argued that education is a form of social control, and that teachers and students need to work together to question everything at all stages of development. This speaks to a similar need to advocate for a

more all-encompassing perspective when it comes to Foods in our schools and our curriculum. Famously Freire (1970) refers to a 'banking system' of education and he states,

> Education thus becomes an act of depositing, in which the students are the depositories, and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits, which the students patiently receive, memorize, and repeat.... In the banking concept of education, knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing.... The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world. (p. 72)

It is incumbent upon teachers to ask students to question everything (including themselves) and work together to find the answers.

The School Food Scene: What does it say?

Keeping Freire's theory of learning in mind, the way that food is treated in a school communicates a lot. For instance, is time allotted to a reasonable lunch break or is it a necessary 'add on' to the school day? Is the food that is available delicious and nutritious? Or is it simply a provision to fill a requirement and an income opportunity for the school? It becomes quickly apparent that the school's philosophy of food will be directly translated to the school community. Rowe and Rocha (2015) espouse that schools do not ask that we think critically about what we eat and that cafeterias generally provide items that are not recognizable as their original ingredients. For instance, they provide animals as meat in unrecognizable packages such as chicken nuggets. In addition, Rowe and Rocha (2015) make a distinction between eating a meal

and eating lunch and comment on the similarities between schools and other institutions when it comes to mealtime.

> Always pressed for time, with only 20 to 30 min. to eat, everyone eats the same way, more or less. This is a cafeteria: the one thing that unifies hospitals, prisons, and schools. In these places, folks are left with *lunch*, not a meal. A meal brings persons together in an intentional and intimate way, whereas lunch—squeezed between classes, timed out by buzzing bells—attempts to fill students up in the most efficient, cost-effective way so they can move on to their next class. (p. 486)

Spencer, McIsaak, Stewart, Brushett, and Kirk (2019) found that youth wanted quiet, comfortable, and reflective spaces to eat, rather than the noise and busyness usually associated with a school cafeteria. In addition, He et al., (2012) found that there is a direct connection between the amount of fast food eaten by youth and the distance they had to walk to attain it. Many schools put fast food literally within arm's reach. Schools are not modeling healthy, sustainable behaviours within their buildings. Many schools still maintain vending machines that sell products high in fats, salts, and sugars (Classens & Systma, 2020; Spencer et al., 2019). They accept funding from corporations and offer advertising opportunities within the school buildings providing just one more opportunity for students to receive mixed messages about the value of food in our lives (i.e., our health is a commodity, and it is up for sale) (Battiste, 2013).

Students are beginning to voice concerns about cafeteria offerings, and they are starting to expect and demand that food be sustainably sourced and provided (Spencer et al., 2019). Spencer et al., (2019) quote one student as saying, "Some participants thought there was a perception by adults that youths only wanted to eat unhealthy foods and that speed, convenience, and profit were prioritized over quality and taste" (p. 1017). Another student in the same study recognized

that there was a conflict between what students were being told (eat healthily) and what was being provided in the cafeteria (fast/unhealthy food) (Spencer et al., 2019). In addition, Nicklaus and Remy (2013) found that habits established in youth extended into adulthood.

Food as Curriculum

Home Economics

The topic of food provides such a rich opportunity to discuss nutrition, values, culture, intergenerational connections, and production pathways. In essence, society attempts to build and legislate a curriculum for education. The impetus behind this construction is varied and changed with society over the years. For instance, in the late 1980s, Canadian food-related education used to be termed Home Economics and taught in junior and senior high schools (Slater, 2013). It was generally focused on preparing women for taking care of the family (Slater, 2013).

Cooking as a Trade

As society has evolved to accommodate less gender-specific occupations and roles, concurrently, in the province of Alberta, the approach to foods became focused on a trades-based approach and preparing for a career in industry (Alberta Education, 2021). The Alberta Program of Study's (Alberta Education, 2021) philosophy for the Career and Technology Studies (CTS) Foods program states,

> The CTS program is designed to develop skills that senior high school students can apply in their daily lives when preparing for entry into the workplace or for further learning opportunities. Through the CTS program, students are provided with opportunities to personalize their learning, identify, and explore their interests, manage transitions, and build partnerships, while developing basic competencies, that is, the

> attitudes and behaviours that people need to participate and progress in today's dynamic world of work. (para. 2)

Outdated Curriculum

The current CTS Foods program was released in 2010. On one hand that is not that long ago. Yet, there have been significant developments in better understanding our food systems that have come about in the last few years that are not reflected in the current curriculum. For instance, the curriculum itself takes a linear approach with a series of courses at each level, including introductory, intermediate, and advanced levels focusing on such topics as Food Basics, Creative Baking, and Soups and Sauces (Alberta Education, 2010). While these courses acknowledge content-specific concepts, the curriculum does not include attention to current thinking or discussion about present-day food systems. The curriculum does provide space for additional project work (i.e., Project A, Project B) that teachers may use at their discretion to get creative and implement programs that reflect a sustainability component, but there are a few key pieces that are noticeably absent. Namely, the current curriculum does not address the specific cooking methods required to prepare various foods, the holistic notion that the topic of food carries great potential to connect human beings and provide key life lessons about sustainability and our environment, and thirdly, foods related courses are important to our lives and should be held on par with other core courses as a result.

According to Slater (2013), this lack of attention to current concerns is apparent in the Manitoba curriculum as well. Slater (2013) points out that some of the challenges to Manitoba's Home Economics Food and Nutrition Education (HEFN) are that,

> HEFN is seen as less important than subjects such as math and science, which are considered essential for future career options….Secondly, the Manitoba HEFN

> curriculum has not been updated in over 20 years and does not reflect current nutrition knowledge. Thirdly, the wider food and nutrition landscape is inundated with nutritionally poor fast and convenience foods, which support busy family lifestyles, yet diminish[es] interest in and valuing of home food preparation skills that are core to HEFN education. (p. 622)

Essentially, if education is politics as Freire suggested (Shor,1992), then what we are communicating is that food is not a priority in our lives.

Internal Conflict with Curriculum

I add that these concerns represent my reality teaching Career and Technology Study (Foods) for the past 17 years in Alberta. For example, my understanding of a healthy vegetarian diet (Barber, 2014, Greger, 2015) conflicted with the Canada Food Guide (CFG) (which recommended a diet high in dairy and red meat (Government of Canada, 2007-2018). I remain appreciative of the revised Canada Food Guide and its recommendations to simply fill half your plate with fruits and vegetables, one quarter with whole grains, and the final quarter with proteins (Canada Food Guide, 2021). The new guide does not specifically recommend dairy or red meats and it acknowledges that it used an evidence-based approach in designing the new food guide, rather than allowing big business into the planning room (Canada Food Guide, 2021).

Canada Food Guide is a Useful Reference Tool

Although, the Canada Food Guide can be a useful reference tool for the provinces and territories, Anderson and Falkenberg (2016) note that it does not take into consideration many factors that limit food availability to different parts of Canada such as the geographic availability of fruits and vegetables and their consequent cost.

In a nationwide study of the Canadian curriculum, Anderson and Falkenberg (2016), explored four conceptual areas of understanding represented in provincial and territorial curricula as follows:

- A1 - being able to read and understand food labels and to act accordingly (focus on domain-specific language literacy);
- A2 - understanding findings from the nutritional sciences and how those link to one's health (focus on the link between nutrition and health);
- A3 - having agency in one's engagement with food (focus on planning, managing, selecting, preparing. and eating food); and
- A4 - having critical literacy concerning the role of food, food production, food consumption, etc. for one's own well-being, and the well-being of communities and other living beings more generally (focus on food as part of people's and communities' well-being and as issues of social justice and sustainability). (p. 94)

Anderson and Falkenberg (2016) argue that there is a significant need for growth in this area in all provinces and territories. They say,

> By keeping the primary focus of food/nutrition literacy mostly on reading labels and calorie consumption consequences, Canadian schools all but ensure that Canadian students will likely be unaware of the significant impact their food choices, their food availability, and their nutritional knowledge can play in their community, in Canada, and around the world. (p. 100)

In addition, Anderson and Falkenberg (2016) have concerns that food literacy is not being adequately addressed due to the fragmented nature of the curricular approach.

> Considering other literacies that the Canadian school system educates for, like language literacy, mathematical literacy, and science literacy, it is noticeable that each of these literacies is primarily educated for in one specific subject area, while food/nutrition literacy is spread across a number of subject areas that are quite different in nature. (p. 101)

Shifting Terminology Represents Shifting Society

The shift in focus in the Canada Food Guide and Foods' curriculum over the past thirty years demonstrates how schools can interpret food literacy for their schools and society. In the past seven years, we have witnessed a shift in terminology from food literacy to a notion of critical food pedagogy and there has been significant growth in understanding in terms of what it means to be literate surrounding the topic of food. It has grown to include a much broader and all-encompassing appreciation of production methods and preparation techniques to include a concern for equity, fairness, and sustainability at each level of the food system. This shift is recognized in a statement by the Food and Agriculture Organization of the United Nations.

> A sustainable food system (SFS) is a food system that delivers food security and nutrition for all in such a way that the economic, social, and environmental bases to generate food security and nutrition for future generations are not compromised. This means that: – It is profitable throughout (economic sustainability); – It has broad-based benefits for society (social sustainability); and – It has a positive or neutral impact on the natural environment (environmental sustainability). (Nguyen, 2018, para. 3)

A New Way of Thinking

Rockström (2015) says that this is not enough and that we need a new way of thinking that considers all activities and how they affect the planet. He argues,

> First, the framework has led to a fragmented approach to the development process, where economic growth trumps natural and human capital. Second, it has failed to recognize that human-environmental interactions transcend their immediate scale of influence. Despite progress in reducing environmental impacts at local levels, cumulative global effects have increased in an uncontrolled way (e.g., relative improvements in fuel efficiency and catalytic cleaning in cars, but exponential rise in greenhouse gas concentration from overall global transport). (p. 2)

The Importance of Teaching Sustainable Thinking

Our education system needs to recognize, value, and teach a sustainable approach in all areas of the curriculum (Sterling, 2016). It is incumbent upon society to think globally and embrace the lessons to be learned in using a system thinking approach and re-emphasize the importance of food knowledge in our schools and communities by teaching systems learning and critical thinking that lead to transformative practices since much of our current food-related curriculum being taught in schools is not accomplishing this. Sumner (2015) says,

> Food literacy is a contested topic that involves questions of power. What people learn, and do not learn, by becoming food literate will have long-term repercussions in an era marked by an interlocking series of crises in the food system. These crises include not only increasing obesity and hunger around the world but also climate change, water shortages, desertification, pollution, and price spikes associated with industrial food production, distribution and consumption. (p. 129)

In short, there is much work to be done in developing our critical food literacy to recognize inequities and establish a sense of empowerment in our global community.

Online Education

To discuss education in terms of our formal school education system as a societal construct, we would be remiss if we did not acknowledge the growing opportunities for everyone in society to self-educate through online content. Whether you hope to learn a new language, or musical instrument, how to fillet a fish, construct a playhouse, or prepare choux pastry, there is an excellent online tutorial for how to do so. There is little need for teachers to provide in-class demonstrations as they may carefully select videos of any number of online personalities doing so. They provide excellent visuals, can save time in preparation, and set up, and are often very educational and entertaining. There are a growing number of people achieving celebrity status online and making a living by garnering subscribers while creating content and doing something that they love. There are both individual content creators and those working for companies (Stasik & Vrbat, 2022).

Online education opportunities are growing, as are interests in social media platforms like Snapchat, Tik Tok and its subsidiary Food Tok (WixBlog, 2020). Many of these formats are very trendy and appeal to a growing audience and provide opportunities to build creativity and community (WixBlog, 2020). Society is beginning to accept and embrace opportunities for learning to take place outside of traditional classrooms. The Covid pandemic and the requisite that students stay home, fostered an incredible surge in technology development as companies scrambled to meet the needs of online programming (Torchia, 2022). Many of these technologies are still in use and growing as they continue to be used in traditional schools and in-home schooling (Torchia, 2022).

Although there is a growing amount of digital content available, not all of it is reputable and it remains important to teach digital citizenship skills to impressionable young people. Unfortunately, young people need to be taught that everything is not what it seems and that there

are individuals online who seek to prey on their innocence (Frost, 2022). In addition, young people need to learn how to discern between reputable sources and "facts" created solely to engage and entertain (Frost, 2022).

School Gardens: A 'Hands-On' Approach

The nature of food and food production, whether in the kitchen or the garden, allows for a visceral, hands-on experience that enables a higher level of learning and understanding to take place than is possible by simply reading literature (Shilling, 2017). In a phenomenological study exploring food growing in a school foodscape, Surman and Hamilton (2019) acknowledge, "it is play, exploring 'mess' and interacting with creatures and natural substances that links perception, knowledge of food and bodily activities (such as digging, touching, tasting)" (p. 472).

We are beginning to recognize the importance of having natural spaces available in (and outside) schools, changing the environment and conversation from an institutional approach evoking limitation and confinement to a place of acceptance eschewing components of growth and exploration. Foster (2007) says not only can plants in classrooms teach us to celebrate and appreciate diversity, but,

> Plants can serve as living specimens for measurements, science experiments, and demonstrations. They provide raw material and inspiration for art and photography projects. Because they originate from all over the world and have rich histories tightly bound to human societies, plants provide valuable links to geography, history and social studies. Because they are living and depend on the natural resources of sunlight, water and soil nutrients, plants grown in the classroom teach valuable lessons about the environmental imperative and provide opportunities for students to develop a connection with the natural environment. Plants grown in the classroom can also be

> bridges to folklore, poems, plays, stories, novels and current events in which plants play decisive roles. (p. 24)

The school garden seems a perfect space to embody the message of the holistic nature of gardening. Both in the classroom and in the schoolyard, plants have potential to teach us about so many topics.

Outdoor Gardens for Well-Being

Added to the realization that indoor greenery is beneficial, are the many ways that outside gardens and gardening can offer benefits in schools in terms of mental wellbeing, appreciating diversity, and learning about much-needed sustainable living practices (Foster, 2007). Vancouver, B.C, appears to have joined the gardening in schools' movement in a big way and can boast that 75% of their public schools have food gardens that provide opportunities for hands-on learning (Lam, Romses, & Renwick, 2019, p. 8). The motivation behind the rise of outside garden spaces is a growing realization that as well as cross-curricular learning opportunities, plants (and gardening) provide so much more. Researchers have found that participating in outdoor gardening allows an outlet for stress in an increasingly anxious youth population and that gardening can improve both physical and mental wellness capacities (Gardening Organic et al, 2014; Matsumura, 2016).

Ecotherapy

In another study demonstrating the effectiveness of ecotherapy (submerging oneself in a natural setting), Matsumura (2016) found while such experiences can be very beneficial, they are also elitist in that only a small portion of the population could afford to travel to locations where they could experience ecotherapy. She says, "Ecotherapy often falls beyond insurance benefits, making it all but impossible for the majority of health care recipients to afford" (p. 105).

However, her research showed how simply putting flowering houseplants in high-traffic areas of colleges provided benefits such as alleviating stress, depression, and anxiety.

Learning about Other Cultures and Story

Other benefits of outdoor garden areas involve learning about cultures from around the world in a holistic manner and making connections across the continents. Foster (2007) acknowledges that some students who may not want to understand plants from a botanical perspective may simply value their story. He comments,

> Somehow the facts that a marigold has fibrous roots and is a member of the Composite family are not so engaging as the fact that the plant traveled 400 years ago from Brazil to India on sailing ships with Portuguese sailors who barely escaped pirates lurking on the high seas. (p. 24)

Gardening in and out of schools is just an extension of the food narrative and another opportunity to show the way in which society is socially constructed and how the topic of food needs to be approached in an all-encompassing and holistic manner.

Going Forward

Discussions surrounding food (with youth in particular) are potential jumping-off points through which to discuss a way forward for a sustainable future. Rojas, Kemshaw, Mansfield, and Orrego (2018) say, “Supporting student understanding of large and complex food systems will require changes to the existing ways Canadian students learn about food” (p. 62). Referring once again to critical food literacy/pedagogy (Figure 2.3), it is not enough to change the curriculum; the literature is showing that we must provide opportunities for transformational learning, empowerment, and behavioural changes to take place. Rojas et al., (2018) say,

> In an integrative, holistic view, the school food system becomes a microcosm of the globalized food system. By actively living the food cycle together, we all experience ourselves as actors imbedded in this system, each with our own strengths and dependencies upon one-another. (p. 63)

There is much research to suggest that a sustainable and holistic approach to teaching food topics has the potential to benefit society in countless ways. It seems that, like sound, working with critical food pedagogy has the potential to reverberate outward and transform ideology and the world.

Agri-business/Industry

Agriculture's Impact

To produce vast quantities of food for cheap prices the land is being large-scale farmed, resulting in less nutritious products and the remaining soil being stripped of nutrients (Dearden, Mitchell, & O'Connell, 2016). Deardon et al., (2016) say,

> The origins of agriculture date back 9,000 - 11,000 years to a few regions where societies domesticated both plant and animal species…the increased availability of food, feed, and fibre, provided the impetus for societies to prosper and support a larger non-farming population (p. 347).

In effect, agriculture allowed for a sedentary lifestyle, permanent settlements, and increased trade, which led to road and later rail connections (Deardon et al., 2016). Consequently, it also led to increased conflict as people fought for control over land and pollution as people settled areas and all of the waste that entails (Deardon et al., 2016). "The domestication of plants and animals thousands of years ago led to profound changes to the global land base" (Standage, 2009).

Barber (2014) illustrates how the original native grasses of the prairies had deep root systems that allowed them to survive and thrive through centuries. He says,

> The root system's ability to store energy and nutrients ensured that the prairie grass could always grow back quickly. And the grass, in turn, kept the rich soil in place as millions of bison fertilized it over thousands of years, depositing more nutrients into the soil's natural fertility bank. (p. 44)

Barber (2014) discusses the destruction of the prairie and the folly of replacing these traditional grasses with annual varieties of wheat. He (2014) says, "the more you learn about the destruction of the prairie, the more difficult it becomes to see a modern wheat field as a thing of beauty, in the same way, it is hard to see beauty in a clear-cut forest" (p. 45). The changes in farming practice involved shifting from using the sun and the energy derived from it through photosynthesis, and the working energy of animals and humans to using coal and later oil (Deardon, et al., 2016; Hyman, 2021; Standage, 2009).

The Shift in Energy Usage

This significant shift in energy usage led to a loss of organic carbon in the soil and an increase in greenhouse gasses and global warming (Deardon, et al., 2016; Hyman, 2021). When ammonia was discovered, in 1909 Standage (2009) says it, "marked the technological breakthrough that was to have arguably the greatest impact on mankind during the twentieth century" (p. 199). Standage (2009) says,

> The link between ammonia and human nutrition is nitrogen. A vital building block of all plant and animal tissue, it is the nutrient responsible for all vegetative growth and for the protein content of cereal grains, the staple crops on which humanity depends. (p. 199)

Ammonia provided a much-needed source of fertilizer and therefore allowed for great expansion in farming practices (Standage, 2009).

Move to Large Scale Farming

As wide-scale farming practices took off in earnest there was a massive shift in agricultural practices from small farming operations to mega-corporations that buy up vast quantities of land, and equipment, and operate on a bottom-line model where the cost per serving and market share dominate decision-making (Brett, 2011; Moss, 2021; Standage, 2009). Consumer health is rarely considered in this model. Sumner (2011) says,

> The global corporate food system is just the current conveyance on a long road of social injustice with respect to food. Hunger, undernutrition, undernourishment, chronic hunger, malnutrition and food insecurity have been the hallmarks of most food systems from the beginnings of agriculture to the present day. (p. 70)

As a result of the penchant to treat land chemically for its perceived shortcomings, the land itself is turning into unproductive dirt and there is much discussion about the inability of the earth to sustain current practices. With regard to the impact that industrialized agriculture has had on society and the environment, Barber (2014) says, “Healthy soil brings vigorous plants, stronger and smarter people, cultural empowerment, and the wealth of the nation. Bad soil, in short, threatens civilization. We cannot have good food—healthy, sustainable, or delicious--food without soil filled with life” (p. 77). The contemporary food industry is not motivated by ‘healthy, sustainable or delicious’ food outcomes.

Resulting Loss of Biodiversity and Quality of Food

Not only has the soil been depleted as a result of current agricultural practices, but the process that seeds have undergone has been altered, resulting in a lesser quality product with

immense implications the world over. There is a loss of biodiversity occurring throughout the world as a few mega-corporations wrestle control from independent farmers (Kingsolver, 2007). In addition, unnecessarily growing food to be available year-round has resulted in enormous ecological expense in the oil it takes to ship foods all around the world so that we may enjoy certain foods year-round. The problem with this expectation is that the quality and diversity of products suffer as a result. For example, apples in Canada may be available for purchase year-round but the flavour and texture of an apple bought in March are incomparable to an apple picked fresh off a tree in the fall (Mallet, 2004). In addition, Mallet (2004) speaks to the homogenization that our food is being subjected to in the comment, "Today, only a handful of chains sell most of the food, and they've closed down almost all competition" (p. 252). Therefore, they dictate the acceptable varieties that can be grown and consequently, the diversity is affected as a result (Kingsolver, 2007; Mallet, 2004). Nutrition is lost in the process as well.

Regenerative Farming Practices

In making an argument towards regenerative agricultural practices and in support of a diet he calls Pegan (a play on combining the Paleo diet with Veganism), Hyman (2021) claims,

> The food system is the number one cause of climate change, depletion of soil (we have 60 harvests left according to the UN) and fresh water, and the loss of biodiversity of plants, animals, pollinators, insects, and even the microbiology of the soil. Our food system, which involves deforestation, soil erosion, factory farming of animals, agrochemical damage to the land, transport, refrigeration, and food waste, contributes about 50 percent of all greenhouse gas emissions. (p. 12)

Additionally, Hyman (2021) suggests that big business is controlling the industry by fear and spreading the notion that we cannot survive without large-scale production methods.

Industry has fought successfully to control all aspects of food production from seed to plant, to processing and reconstruction, to marketing and rebranding, to the placement of these products within arm's reach in the grocery store.

Hyman (2021) argues that the solution to the current food system crisis is regenerative agriculture practised by small-scale farmers.

> Regenerative agriculture raises food in a way that restores the soil, conserves water, increases biodiversity, reverses climate change, and produces more nutrient-dense, phytonutrient-rich quality food, all while making farmers far more money and making their farms resistant to drought, floods, and climate impacts. In short, it stops the cycle of destruction. (p. 13)

Standage (2009) adds, "to ensure an adequate supply of food as the world population heads toward its peak and climate change shifts long-established patterns of agriculture, it will be necessary to assemble the largest possible toolbox of agricultural techniques" (p. 237). Circling back to earlier comments about the need to consider food systems in their entirety, it is important to note that there is developing recognition of the importance of a regionalized food supply for food security and wellness in a community.

Contemporary Agricultural Practices and the Future of Food

Contemporary agricultural practices do have implications for the future of food. Kingsolver (2007), points out that we ask our youth to shoulder the weight of concerns about the future but we do not allow them a voice in how it is constructed.

> Human manners are wildly inconsistent; plenty of people before me have said so. But this one takes the cake: the manner in which we're allowed to steal from future generations, while commanding them not to do that to us, and rolling our eyes at anyone

> who is tediously politically correct enough to point this out. The conspicuous consumption of limited resources has yet to be accepted widely as a spiritual error, or even bad manners. (p. 67)

This is in part, a conversation that arose with co-researcher/participants when we discussed their fears and concerns surrounding their food experience.

Similarities between Medical Health Care Systems and Food Systems

There are direct connections between our medical healthcare system and our food system in that both have allowed industry to dictate best practices and they have had tremendous negative consequences for the health and wellbeing of the general public as a result. For example, Maté (2021) in the Film, The Wisdom of Trauma (Benazzo & Benazzo (2021), argues that we are seeing a disconnect occurring in the healthcare system. He proposes that physicians are not allotted enough time to do in-depth diagnoses to get to the root of the issue and that it is not in the interest of big pharmacy that they do so (Benazzo & Benazzo, (2021). Maté (2021) also notes that we are seeing an incredible growth in anxiety related disorders, especially in our young people.

Targeted Marketing

While mass agricultural production does not consider the health of consumers in its production methods, marketing does consider the consumers' every thought and action in an aim to target and contrive consumer need to sell their products. Pollan (2013) suggests that the food industry is purposeful in keeping consumers confused about food choices. He says, "It is very much in the interest of the food industry to exacerbate our anxieties about what to eat, the better to then assuage them with new products" (p. 5). Moss (2021) talks about how companies use our penchant for surprise, excitement, and speed to entice us to purchase and consume products we

wouldn't normally if listening to our rational brains. Moss (2021) suggests we have a 'stop' and 'go' function in our brain that advertisers are aware of and seek to overrule and that they will go to great lengths to do so; further he outlines how industry uses science to appeal to our taste buds and discusses evolution and how humans have evolved to seek high-calorie foods that are as easy to attain as possible, thereby explaining consumer penchant for purchasing cheap foods, that use poor quality ingredients, are less expensive, and contain chemicals produced in flavour factories to replicate the authentic food. Flavour factories have discovered the mass appeal of salt, fats, and sugars; consequently, most processed foods on supermarket shelves are laden with these ingredients (Coates et al, 2019). For example, Moss (2021) says, "research has found that when sugar gets combined with fat, the brain gets more aroused than it does by either of these two ingredients alone" (p. 61). Knowledge of the impact of fats, salts, and sugars, and the way that they enhance our food cravings has driven the development of most processed foods lining supermarket shelves.

Youth are Particularly Susceptible to Marketing

Our habits become more fully ingrained as we get older and although we think that we are making choices, our choices are limited by our experiences; something that industry has control over, not the consumer (Block et al., 2011). Block et al. say, "Marketing practitioners use the traditional marketing mix (the four Ps: product, promotion, place, and price) to influence consumers' attitudes and behaviors toward foods" (p. 8). There is a growing awareness of the power of the Internet as a marketing tool and significant evidence suggests that online 'influencers' (individuals with a large social media following) are greatly impacting youth food and beverage choices (Coates et al., 2019). A key point in relation to this work and the

understanding that society is socially constructed is how susceptible to marketing youth are, simply by nature of being at a particular stage in their lives. Moss (2021) points out,

> Youth plays a key role in memory and food. When we're young, we're actively learning and changing, and that spurs the creation of memories. More memories, and memories that are more durable, are formed in our adolescent years than at any other time in our life, and as we age these memories tend to be easier to recall than those from other times. This has been called the reminiscence bump. (p. 64)

This observation is reflected in this research question as youth are asked to share their experience(s) of food. Glover and Sumberg, (2020) say,

> The youth phase of life unfolds between childhood and adulthood. It is typically framed as a period of particularly rapid and fundamental transition, characterized by physical and cognitive growth and transformation, a great deal of learning, a substantial expansion of social networks, and the building of social capital. In many if not all societies, marriage and child-rearing are normal expectations of youth, or key signifiers of a transition between youth and adulthood. (p. 3)

These observations illuminate the need for a more thorough understanding of youth food experiences to combat the influx of programming they are receiving.

Sustainable Food Systems

Due to concerns about climate change and now a worldwide global pandemic, the topics of sustainability, food security, food waste, and food quality, have gained momentum and are being recognized as critical issues the world over (World Bank, 2021). Nestle (2002) says,

> Folly in the getting of our food is nothing new. And yet the new follies we are perpetrating in our industrial food chain today are of a different order. By replacing

> solar energy with fossil fuel, by raising millions of food animals in close confinement, by feeding those animals foods they never evolved to eat, and by feeding ourselves foods far more novel than we even realize, we are taking risks with our health and the health of the natural world that are unprecedented. (p. 10)

There is a growing awareness that society needs to be discerning in the methods used to produce food and not look for cheap solutions because there is an incalculable cost involved in this way of thinking.

Evolution of Sustainability

At this time, sustainability as a concept seems to be experiencing an identity crisis and there are many working definitions that are unveiled when you start exploring this area of research (Little, 2014). Edwards (2005) elucidates the transformation that our contemporary understanding of sustainability has undergone in the last 150 years beginning with the early works of Emerson and Thoreau. He discusses how the focus on sustainability shifted through the years from a transcendental approach (nature as teacher) to one in which society becomes more concerned with preserving the environment. Edwards (2005) also notes the contributions of Muir (and his work in establishing national parks), Leopold (land ethics and how human beings are profoundly tied to the environment for survival), and Rachel Carson who drew awareness to the degradation experienced by nature as a result of use and abuse of toxins. One of the early contributors to the contemporary definition of sustainability was first coined by the United Nations World Commission on Environment and Development (WCED) and was known as the Brundtland Report (1987). The Brundtland Report first established the following widely used definition to describe sustainable development as "development that meets the needs of the

present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. 37).

Jamieson (1998) argues,

> In this century we have lost confidence in the idea that the world is self-sustaining or under divine protection. At the same time, we see that the threat to nature comes primarily from ourselves. Ironically, since there are no other applicants for the job, we who are nature's greatest enemy have appointed ourselves as its savior. (p. 187)

Similar to how we have seen an evolution in the understanding of food literacy to critical food pedagogy, the notion of sustainability has evolved through the years as well.

Sustainability Now

The current definition of sustainability resides in how (and by whom) it is interpreted (Sumner, 2018). Sterling (2011) says, "most education daily reinforces unsustainable values and practices in society. We are educated by and large to 'compete and consume' rather than 'care and conserve'" (p. 21). After a long period of economic growth and using the environment to our own ends, a collective rethink and re-visioning must occur (Orr, 2006), comparing the current thinking on sustainability to the way that thinking eventually changed with regard to slavery. Orr (2006) adds,

> The issues of sustainability are primarily ones of fairness and intergenerational rights, not ones of technology or economics, as important as these may be. Lincoln regarded slavery as wrong because no human had the right to hold property in the form of another human being, period, not because it was economically inefficient. This was the magnetic north by which he oriented his politics. By a similar logic, ours is in the

> principle that no human has the right to diminish the life and well-being of another and no generation has the right to inflict harm on generations to come. (p. 4)

The notion that humans have inflicted gross harm upon our environment and each other is recognized in the scientific evolution of the word Anthropocene. This term denotes an era where human impact on the world began to be measured (Dearden et al., 2020). The results of human impact on our world are far-reaching. Little (2014) says, "Sustainability seeks to address many issues on a global scale. In truth, no one human being could understand sustainability in all its facets, as the issue and its subjects are much too vast" (para. 4).

Food Security

In Canada, several national organizations seek to address the issue of food security on both national and international levels. Food Secure Canada (FSC) is one such agency that was first incorporated in 2006. FSC has evolved to become a powerful agency working to ensure that healthy sustainable food takes a front-row seat in high-level government discussions (Food Secure, 2021). FSC (2021) is committed to zero hunger, a sustainable food system, and healthy and safe food. They try to attain these goals by participating in global discussions surrounding food policy, serving as a communication hub for information, and formulating and providing information and resources. On an international level, the United Nations is a worldwide advocate for fairness and equity, and they outline seventeen Sustainable Development Goals (SDGs) summarized in the image below (See Figure 2.4).

Figure 2. 4

United Nation's Sustainable Development Goals

Source: Food and Agriculture Organization of the United Nations. Reproduced with permission.

(United Nations, n.d.)

FSC (2021) recognizes that their goals align with SDGs 1 and 2 and include the following mandates in their mission statement:

- Establish a universal liveable income floor beneath which no one can fall. This can and should build on increasing existing diverse government income supports and tax credits; mandated liveable minimum wage; and other subsidies for necessities of life (e.g., rent), complemented by well-designed basic income schemes (with social safeguards and public review);
- Strengthen food security by increasing access to healthy, ideally local, and sustainably produced food for low-income households through government-funded, non-profit

managed programs (such as good food boxes, good food markets, farmers' market-vouchers, food and vegetable prescriptions and subsidies, and school food programs);

- Uphold the Healthy Eating Strategy, including using the Canada Food Guide to promote healthy eating, and measure all policy and programme interventions against how well they move Canada towards ensuring everyone can afford and access healthy, sustainably produced food; and
- Ensure that those disproportionately experiencing food insecurity, including Indigenous Peoples, Black and racialized communities, lead and coordinate appropriate and distinct responses. (p. 8)

Food Insecurity Leads to Problems in all Areas of Life

The key focus areas of FSC and the United Nation's SDG highlight the realization that food security is a problem in Canada and around the world and that this problem will only become more critical in the years ahead (Deardon et al., 2016). Currently, a substantial portion of our Canadian population is dealing with food security issues and health issues as a result. "In Canada, a country of considerable wealth and abundant farmland, over 4.4 million people struggle to access the food that they need" (Feed Opportunity, n.d, par. 3). These issues are being compounded by the current Covid pandemic and we are seeing a significant increase in all food prices as a result (Expect to Pay, 2020; Food Secure, 2020; Yasmeen & Field, 2020).

According to Feed Opportunity (n.d.), "people who are food insecure can't rely on this basic of life. They worry about running out of food, compromise on food quality in order to eat enough or go hungry, often missing meals, because of lack of money for food" (para 1). Food insecurity leads to problems in all areas of societal wellbeing, such as chronic diseases, rising health care costs, mental health and learning abilities (Feed Opportunity, n.d., para. 9).

According to Yasmeen and Field (2020) food insecurity, "disproportionately affects Black and Indigenous households, a reflection of systemic racism, and the ongoing impacts of colonialism" (para. 9).

Global Alliance

Organizations such as The Global Alliance for the Future of Food (GA) are conducting ongoing conversations with world leaders, farmers, academics, and community members, throughout the world to try to address these concerns (Global Alliance, 2021). In preparation for the United Nations discussion in Rome in July 2021, there was a series of podcasts taking place in which academics from around the world met online with Dani Nierenberg of Food Tank, to discuss each of the calls to action. A key theme that ran throughout these conversations was the breadth of the topic of food as it relates to sustainability and how imperative it is that, as a society, we take tangible steps to remedy great disparity in our food systems (Pera, 2018-present). Another key theme that is directly related to my work is the oft-repeated notion that we should be consulting with our most vulnerable people and our youth. It is only through involving everyone in this discussion that potential for change is possible (Pera, 2018-present).

Food as a Fundamental Right

There is a progressing movement to recognize food as a fundamental right. Quality food is reserved for those who can afford to pay the price (Guthman, 2008). Food Secure Canada (2021) acknowledges that

> We all have the right to feed ourselves, our families, and our communities with dignity. The federal government has an international legal obligation to ensure the full realization of the right to food for all those living in Canada, in light of its engagement to *respect* (to not infringe upon), *protect* (prevent third parties from infringing upon),

> and *realize* (put in place programs) this right when it ratified the International Covenant on Economic, Social and Cultural Rights in 1976. (p. 8)

Even though food security, in essence, is a right, many people must resort to eating what they can afford, and for a growing percentage of the human population, this means poor-quality food high in fat, sugar, and salt (Brett, 2011).

The Slow Food Movement

Arguably, the changes we are seeing in the North American food supply are happening at a much quicker rate than they are in Europe, where they have a rich history of producing foods that are tied to the story and the geography of the land (Petrini, 2001). Kingsolver (2007) says, "Respecting the dignity of spectacular food, means enjoying it at its best" (p. 30). However, even in Europe, the foodie appreciation stronghold of the world, changes are taking place as is evidenced by the need for a growing slow food movement that has been taking place over the past thirty years. The slow food movement (SFM) has the potential to address many of the concerns with regard to sustainability and food security. Petrini (2001) says,

> Slow food was born in Italy, but it does not speak for food and wine "made in Italy". On the contrary, the spread of the movement means receiving input, mingling countless voices, discovering allies while respecting one another at a distance. (p. 18)

SFM started in Italy during the eighties as an effort to limit fast food from infiltrating an historic Italian meeting space but has since then grown to include chapters all over the world (Petrini, 2001).

Slow Food is Important for Everyone

The slow food movement is important for everyone. It recognizes the power of multinationals and draws attention to historic traditions and ways of life as meaningful and

worthy of being celebrated and carried into the future. Proponents of the SFM argue that we are not paying attention to what is on our plates and that monotonous eating "is actually a recent and invasive phenomenon, related to consumerism, higher disposable incomes, and the devaluation of food as pleasure" (Petrini, 2001, p. 23). SFM also accentuates the loss of culture that we are seeing in our youth. They argue that the propensity to let kids be kids and enjoy hot dogs has longer-term consequences in their food and wellness choices. Petrini says, "Bad habits contracted in youth—the target age for fast food—rapidly becomes ingrained, and the upshot is a loss of identity, of the heritage of individuals and societies" (2001, p. 34). Further, he notes that

> We have to undertake a campaign of permanent education of the taste buds; if the places in which fast food is eaten are aseptic and nondescript, let's rediscover the warmth of a traditional oisteria, the fascination of a historic cafe, the liveliness of places where making food is still a craft; if the handing down of knowledge about material culture from generation to generation seems about to cease as lifestyles and eating habits become industrialized, then let a new international movement keep the knowledge alive and tell people where to go and find it. If deranged habits of nutrition and fraudulently labeled foodstuffs threaten our health, then let's rediscover the well-being that comes from healthy food; if the invasion of agriculture by the chemical industry and senseless management of the land are menacing the environment, Slow Food supports growing methods that respect nature; if consolidation of the media is wiping out alternatives, the construction of an international movement fosters the exchange of information, analysis, historical research, and techniques of production. (2001, p. 18)

Slow Food is long established and has many sustainable ideas about how we should educate society in terms of its food systems.

Good, Clean, and Fair

The SFM advocates for an appreciation of food and (re)instills a love and passion for food and the people who produce it. SFM puts forth three main proponents contained in their slow food manifesto. They are specifically that food must be good, clean, and fair (Petrini, 2005). It seems a simple statement but addressing each of these components speaks to the holistic and complex nature of food and the importance of evaluating food systems in this manner. If these principles were embraced in our collective decision-making, everyone would benefit. For instance, Petrini (2005) explains what is meant by the term fair.

> In food production, the word "fair" connotes social justice, respect for workers and their know-how, rurality, and the country life, pay adequate to work, gratification in producing well, and the definitive revaluation of the small farmer whose historical position in society has always been last. (p. 125)

Petrini compares present-day farm workers to slaves and says, "The global food system should be engaged in finding out what is fair for everybody, in accordance with the characteristics of the various geographical areas of the world, but at present it is only creating unfairness and hardship" (Petrini, 2005, p. 135). Similarly, Sumner (2011) says,

> A sustainable food system must reside in the public domain—a public system in public hands for the public good. Like the Canadian healthcare system, a made-in-Canada sustainable food system would be supported by four pillars: universality, accessibility, portability and public administration. (p. 69)

Such a system would elevate all aspects of our food system and naturally lead to better quality and more sustainable food for all.

Personal Reflection on the Impact of Globalization and Food

I am reminded of the importance of regional control over food when I recall a visit to Mexico many years ago as I reflect on the diary entry that follows.

> *I was travelling extensively in Mexico in the early 1990s and fell in love with Mexican culture and food. I loved listening to the fluidness of Spanish spoken and I never tired of the variety of salsas, tacos, and the incomparable taste of homemade corn tortillas. It was during this same period that I observed the first McDonalds arrive in Puerto Vallarta visible from the zocalo [public square]. I was deeply saddened at the long line of Mexican people in line to try out the products. I felt very disheartened and wanted to scream, "Your food is so much better! Don't do it". It has been several years since I have been back in Mexico, and I am not sure I want to go today. I think I prefer the Mexico of my memories and the succulent flavours of fresh foods eaten after multiple miles of biking through the desert heat. (Yawney, 2021)*

On Preparing Slow Food and the Requirement of Time

Time is a huge factor when it comes to producing food. For the most part, good, healthy, and affordable food takes time. Much of current food programming and contests represented by the media are limited by time. For example, you do not see recipes for preparing homemade stocks and soups, on these programs, because they require an hour or more of simmering time. Slow foods are typically far more nutritious, economical, and delicious, but they do require time and planning ahead. These are the products that create succulent smells, and flavours, and invite you to sit down and spend quality time with family and friends.

Producing Slow Food is Tastier and More Economical

At home and in the Foods class, I strive to produce food from scratch using slow food principles as much as possible. I have a limited budget to work with and I try to provide my students with as many cooking opportunities as possible while teaching them how to utilize basic ingredients to make tasty, economical dishes. Slow foods are an ideal way to meet these requirements. For example, I often choose recipes that use homemade stocks derived from a mirepoix of onions, carrots, celery, and bones, and cooking methods that take less expensive cuts of meat and make them tender and palatable, such as braising and marinating.

Seasonal Foods

Another concept that is important to consider when menu planning slow food in a sustainable way is eating seasonally. This entails buying foods when they are naturally ripened and available and not purchasing out-of-season products that need to travel from other areas of the world. In-season foods tend to be the most economical and superior in quality.

Apples in Season

The following diary entry is included to demonstrate the significance of purchasing foods seasonally when they are at their peak.

> *When the fall rolls around, I always make a point of celebrating apple season in my classroom. At the beginning of class, I enthusiastically walk around the class with a big bowl of apples and ask the students to savour the smell, calling attention to the difference in the scent of apples at this time of year. I leave the apples out and invite students to freely snack on them when they would like. I ask students if anyone has access to apple trees and encourage them to bring some to the school (often-times preventing food waste of apples that may be left to rot and opening their eyes to see the*

trees in our community). If needed, I also purchase large quantities from the bins that are typically available at the entrance to my local grocery store at this time of year. I ask the students to bring in any recipes from home they may have, and we set about making a menu plan for apple-forward products to enjoy. In this way, I hope to develop a deeper and more meaningful appreciation for the apple. (Yawney, 2021)

From this perspective, the class begins to feel empowered about making choices and we discuss how these choices make a difference to our health and the environment.

Steps Towards a Better World: Whole Food Plant-Based Eating

There is a growing movement to look within for solutions to present-day problems and recognize that each of us can take steps toward a better world by educating ourselves and making conscious choices each day (Pera, 2018-present). Vegetarianism, veganism, and now Plant-Based Eating (PBE) and Whole Food Plant-Based Eating (WFPBE) have been lauded as potential ways to eat a healthy diet and ease the ecological footprint of humankind.

Eating Plant Based: A Personal Reflection

As the granddaughter of a trapper, I was not squeamish about the treatment of animals as a child. Meat was very much the protein of choice for my family, and I remember seeing bear and beaver skins stretched out on boards at the camp. To my younger self, this is the role that animals had in human lives; they were to provide sustenance. As I taught myself to cook for vegetarians in my early cooking career and learned about different cultural foods, I began to experiment with vegetarian meals for myself. I came to appreciate the taste, variety, and resulting health benefits of a vegetarian diet. I now recognize my thinking has changed significantly and garnered more strength, clarity,

and resolve, particularly as I learn about the widespread abuse of animals that takes place in industrial settings. (Yawney, 2021)

Lessening our Environmental Impact in the Classroom

In considering sustainability through my constructivist and sustainability lens, I try to teach my classes in ways that will enable us to lessen our ecological footprint; therefore, we practise recycling and composting daily. We try to conserve energy by only using as much water as needed for dishes and sharing oven space if that is an option for our product of the day. I offer a Vegetarian or a Grains, Legumes, Pulses, Nuts, and Seeds (GLPNS) course to my intermediate and advanced foods students in conjunction with course offerings. I include vegetarian options in our menu with my introductory students and look for ways to prepare recipes that are lower in fat, salt, and sugar, and higher in fibre and nutrients. Living in Southern Alberta cattle country, I find it is a bit of a balancing act getting the students to buy in without turning them off completely, so I try to give them some ownership of the recipe choices and ask them to comment on whether or not I should add that recipe to my rotating repertoire. More often than not, students respond very positively to this approach and affirm that they enjoyed the recipe, and it should be included for future use. I regularly make decisions "out loud" such as explaining why I chose one product over another, for example, margarine over butter, and I often have to say it was a matter of economy and it becomes a case of 'do what I say rather than do what I do'. In this way, I justify my choices with them and with myself (and open their eyes to many critical questions surrounding food).

Summary

Food is a topic rich with opportunity. It is an undervalued and underutilized subject that has the potential to improve both our health and wellness, and the state of our environment and

the world. However, much change needs to take place in our understanding of food systems, and it has to do with respect and a holistic model of sustainability where all aspects of the food system are taken into consideration when decisions are being made. Petrini (2005) encourages us to consider the bigger food picture when he says,

> Under the frenetic impulse of technocratic and reductionist thought, we have fallen into the temptation of neglecting the totality of the processes and interrelations that enable us to eat every day, considering only the result, the food that we swallow. Yet these 'roots' are crucial and must become a major subject of discussion again. (p. 37)

The research done here aims to highlight the food experience of youth so that they may contribute their voices to the holistic conversation surrounding food and work towards a sustainable food system. Maintaining my focus on constructivism and the notion that knowledge is built, allowed me to recognize and incorporate a post-modern and existential framework into my study as I sought to question literature and conduct interviews with young people. Acknowledging my theoretical constructs referred to at the beginning of the chapter including my axiology, epistemology, and ontology, made evident where they stand alone and merge together to form a holistic and multi-dimensional study of food experience in youth. I have chosen phenomenology as my methodology because I believe it will best demonstrate this living and breathing relationship.

Chapter Three: Introduction to Methodology

Everyone Needs to Speak the Language of Food

As a society, we need to prioritize, value, and understand our food systems. "*If the future of delicious food is in the hands of farmers who grow nature and abide by its instructions, we ought to become more literate about what that means*" (Barber, 2014, p. 19).

In review, I have been teaching foods for 17 years and working as a professional chef for many years before that. I have witnessed many changes in food knowledge and philosophy throughout my life in terms of who is preparing the food and what is being prepared. For instance, there has been a grand shift towards convenience-style processed foods that are reheated at home with very little cooking required. I have seen products evolve on grocery store shelves from one cereal to multiple variations of that same cereal with added sugar, flavouring, and colouring. At the same time, we are seeing a decline in food and nutrition programming and cooking classes across the country (Anderson & Falkenberg, 2016; Slater, 2013). In schools that still offer foods classes, students may have limited options. Foods classes may not be considered viable options for students in an 'academic stream.' Slater (2013) shares this sentiment when she acknowledges that

> Home Economics Food and Nutrition Education face significant challenges to its future viability. These include: many school administrators, non-home economics teachers, and some parents do not value Home Economics Food and Nutrition Education; Home Economics Food and Nutrition education is seen as less valuable than math and science for future career planning; outdated curriculum and teaching infrastructure; reduced numbers of new home economics teachers; decreasing student food knowledge and skills; and changing social norms regarding food and eating (increased use of convenience foods across population groups, a youth 'fast food culture' and fewer family meals). (p. 617)

It should be noted that today, there are many opportunities to learn about food, nutrition, and cooking, outside of traditional schools, such as through social media sites like Snapchat, Instagram, and Food Tok (Hui, 2022). In addition, there are sponsored websites, television

programming, documentaries, and a growing base of Massive Open Online Courses (MOOCS) available (Impey, 2020). There are many excellent resources available, but as a society, we are being challenged to filter through all the messages to discern where the truth lies when we are being inundated with mixed messages (Asamoah, 2020).

Our Canadian education system is at odds with the urgent messaging we are hearing worldwide because of mixed messaging surrounding food and critical food pedagogy. There is a heightened awareness of the life-threatening effects of climate change and an understanding that the world has to move in a sustainable direction at once. In addition, the enhanced pressures applied to our food systems brought on by Covid 19 have exposed many holes in our current practice and illuminated just how fragile the system is, especially for the most vulnerable beings in our society (Hyman, 2021; Pera, 2018-present).

In this context, this study sought to query youth experience; such an exploratory form of discovery led to the selection of phenomenology supported by Photovoice as research methodology.

Phenomenology

van Manen (2015) says, "What the phenomenological attitude gives to education is a certain style of knowing, a kind of theorizing of the unique that sponsors a form of pedagogic practice that is virtually absent in the increasingly bureaucratized and technological spheres of pedagogic life" (p. 154). It is this "pedagogic thoughtfulness" (van Manen, 2015, p. 154) that was emulated and practised in this study. As outlined by van Manen (2015), the point of phenomenological research is to "borrow" (p. 62) other people's experiences and their reflections on their experiences to come to an understanding of the deeper meaning or significance of an aspect of human experience in the context of the whole human experience.

The phenomenological approach was chosen to explore food experiences because it may best represent the finely textured world of food and the diverse ways in which it gathers meaning for each of us throughout our lives. Phenomenology requires the researcher to delve into the related experiences and ask why? And how? in connection with those experiences, while looking for commonalities and themes across the group. The field of food is rich and multifaceted. Barber (2014) says,

> Science teaches us that the answer to understanding the complexity of something is to break it into its parts. Like classical cooking, it insists that things need to be precisely measured and weighed. But interactions and relationships—what Muir called hitching, we call ecology—cannot be measured and weighed. (p. 20)

Similarly, qualitative phenomenological research cannot be "measured and weighed" and relies on intuition and attention to detail to interpret results.

Transcendental Phenomenology

Transcendental phenomenology had its early roots in the work of Husserl (Moustakas, 1994). Neubauer et al., (2019) say,

> Phenomenology can be defined as an approach to research that seeks to describe the essence of a phenomenon by exploring it from the perspective of those who have experienced it. The goal of phenomenology is to describe the meaning of this experience—both in terms of *what* was experienced and *how* it was experienced. (p. 91)

There are various means of conducting a phenomenological study. Neubauer, et al. (2019) say "the Encyclopedia of Phenomenology, published in 1997, features articles on seven different types of phenomenology" (p. 91). For this paper, we will refer to the work of Moustakas and his

emphasis on heuristic inquiry and the work of van Manen who takes more of a hermeneutic approach.

Moustakas (1994) says,

> In heuristics, the focus is exclusively and continually aimed at understanding human experience. The research participants remain close to depictions of their experience, telling their individual stories with increasing understanding and insight. The depictions themselves achieve layers of depth and meaning through the interactions, explorations, and elucidations that occur between the primary researcher and the other research participants. Only the co-researcher's experiences with the phenomenon are considered, not how history, art, politics, or other human enterprises account for and explain the meanings of the experience. The life experience of the heuristic researcher and the research participants is not a text to be read or interpreted, but a comprehensive story that is portrayed in vivid, alive, accurate, and meaningful language and that is further elucidated through poems, songs, artwork, and other personal documents and creations. (p. 19)

Intentionality. A key concept when discussing transcendental phenomenology is the notion of intentionality. Moustakas (1994) says, "Intentionality refers to consciousness, to the internal experience of being conscious of something; thus the act of consciousness and the object of consciousness are related" (p. 28). This awareness of intentionality aligns with my existential appreciation for trying to remain present and aware each day. Moustakas further elucidates that, "Every intentionality is comprised of a noema and a noesis" (p. 29).

Noema and Noesis. Moustakas (1994) points out that the noema refers not to the object itself, but to the appearance of the object (p. 29). For example, to explain what he means by this, Moustakas (1994) differentiates between a tree and a perception of a tree.

> From whatever angle as one views an object, from front, side, or back, the synthesis of perceptions, for example, means that the tree will continue to present itself as the same real tree. The tree is out there present in time and space while the perception of the tree is in consciousness. Regardless of when or how, regardless of which components or what perception, memory, wish, or judgement, the synthesis of noemata (perceived meanings) enables the experiencing person to continue to see the tree as just this tree and not other. (p. 29)

Additionally, Moustakas (1994) says that every experience is also noetic, which means that it holds meaning (p. 29) and that everything is a combination of noema and noesis.

> The "perceived as such" is the noema; the "perfect self-evidence" is the noesis. Their relationship constitutes the intentionality of consciousness. For every noema there is a noesis; for every noesis there is a noema. On the noematic side is the uncovering and explication, the unfolding and becoming distinct, the clearing of what is actually presented in consciousness. On the noetic side is an explication of the intentional processes themselves (Husserl, 1977, p. 46 as cited in Moustakas, 1994).

Moustakas (1994) shares an example of what he means by this dualism by referring to his noematic response to a doctor prescribing drugs as a way of resolving bodily tension as suspicious and doubtful. Moustakas acknowledges that the noetic factors that account for his noematic response can be attributed to the deleterious effects he experienced, such as being unable to speak for a prolonged period, unable to focus, and unable to drive after physicians had

administered drugs to assist him with symptoms he was experiencing (p. 30). Moustakas (1994) says, "the working out of the noema-noesis relationship, the textural (noematic) and structural (noetic) dimensions of phenomena, and the derivation of meanings is an essential function of intentionality" (p. 31).

The Epoche. Additional considerations in practising phenomenology include the Epoche or the ability to set aside judgements. Moustakas (1994) says "In the Epoche, the everyday understandings, judgements, and knowings, are set aside, and phenomena are revisited, freshly, naively, in a wide-open sense, from the vantage point of a pure or transcendental ego" (p. 33).

Transcendental Phenomenological Reduction. Once Epoche has been considered, the next step is to apply Transcendental-Phenomenological Reduction (TPR). In the TPR,

> Each experience is considered in its singularity, in and for itself. The phenomenon is perceived and described in its totality, in a fresh and open way. A complete description is given of its essential constituents, variations of perceptions, thoughts, feelings, sounds, colours, and shapes. (Moustakas, 1994, p. 33)

The Imaginative Variation. At this stage, each of the interviews was transcribed, listened to, and read repeatedly. Detailed notes were taken, and underlying themes were established. The Imaginative Variation was the next consideration. The role of the Imaginative Variation is to formulate a "structural differentiation among the infinite multiplicities of actual and possible cognitiones, that relate to the object in question and thus can somehow go together to make up the unity of an identifying synthesis" (Husserl, 1977, p. 63, as cited in Moustakas, 1994, p. 35).

Overriding Themes. At this stage, individual observations in notes taken during the TPR reductions were cross-referenced with the structural essences of the Imaginative Variations to arrive at overriding themes that served to synthesize the "meanings and essences of the

phenomenon or experience being investigated" (Moustakas, 1994, p. 36). Moustakas also talks about the importance of intersubjectivity and shares the notion that everything we know about someone else is based on referencing our knowledge and experiences (p. 38).

The Power and Importance of Perception to Form Horizons. Moustakas (1994) refers to the power and importance of perception as the primary source of knowledge when conducting phenomenological research, saying

> The perceptions that emerge from the various angles of looking Husserl calls horizons. In the horizontalization of perceptions, every perception counts; every perception adds something important to the experience. The entity or object is never exhausted in properties and meanings. The features of a whole are the horizons, but as with all horizons the moment we single out one meaning the horizon extends again and opens up many other perspectives. Further, along with perceptual acts, as we look and reflect there are acts of memory relevant to a phenomenon that reawaken feelings and images and bring past meanings and qualities into the present. (Moustakas, 1994. p. 53)

Procedure for Phenomenological Research Methods as Outlined by Moustakas

At each of the three stages of research, the Procedure for Phenomenological Research Outlined by Moustakas was employed. For instance, co-researchers were invited to share their experiences in the first interview, revisit and extend those ideas in the second interview, and share their big ideas with their fellow co-researchers and comment on the validity of findings in the third interview/focus group discussion. The process began with discovering the research question and led to organizing and analyzing the data relying on guidance from the Modified Version of the van Kaam Method of Analysis of Phenomenological Data that incorporates each of the components referenced here provided by Moustakas (See Figure 3.4).

Hermeneutic Phenomenology

A second manifestation of phenomenology is termed hermeneutic phenomenology and it has its roots in the work of Martin Heidegger (Neubauer et al., 2019). In many ways, transcendental and hermeneutic phenomenology share similar foundations. van Manen (2015) says,

> Phenomenology asks, "What is this or that kind of experience like?" It differs from almost every science in that it attempts to gain insightful descriptions of the way we experience the world pre-reflectively, without taxonomizing, classifying, or abstracting it. So, phenomenology does not offer us the possibility of effective theory with which we can now explain and/or control the world, but rather it offers us the possibility of plausible insights that bring us in more direct contact with the world. (p. 9)

In addition, van Manen (2015) states,

> Phenomenology is a human science (rather than a natural science) since the subject matter of phenomenological research is always the structures of the meaning of the lived human world (in contrast, natural objects do not have experiences which are consciously and meaningfully lived through by these objects. (p. 11)

Transcendental Phenomenology Versus Hermeneutic Phenomenology. Transcendental phenomenology is focused on description and hermeneutic phenomenology is focused on interpretation. Neubauer et al., (2019) suggest, "Hermeneutic tradition pushes beyond a descriptive understanding. Hermeneutic phenomenology is rooted in interpretation—interpreting experiences and phenomena via the individual's *lifeworld*" (p. 94). van Manen (2015) argues that it is not possible to stop at describing the lifeworld because, in the act of describing, one is necessarily interpreting.

> Phenomenological research does not start or proceed in a disembodied fashion. It is always a project of someone: a real person, who, in the context of particular individual, social, and historical life circumstances, sets out to make sense of a certain aspect of human existence. But while this recognition does not negate the plausibility of the insights gained from a specific piece of phenomenological work, it does reveal the scope and nature of the phenomenological project itself. A phenomenological description is always *one* interpretation, and no single interpretation of human experience will ever exhaust the possibility of yet another complementary, or ever potentially richer or deeper description. (p. 31)

Neubauer et al., (2019) add,

> Instead of bracketing off the researcher's subjective perspective, hermeneutic phenomenology recognizes that the researcher, like the research subject, cannot be rid of his/her *lifeworld.* Instead, the researcher's past experiences and knowledge are valuable guides to the inquiry. It is the researcher's education and knowledge base that lead him/her to consider a phenomenon or experience worthy of investigation. (p. 95)

Moustakas (1994) supports a more structured approach to analysis such as the Modified van Kaam Method of Analysis of Phenomenological Data (see Figure 3.4), while the hermeneutic tradition promotes more of a circular approach whereby the researcher gains a clearer understanding by revisiting the text and engaging within on a deeper level with each visit. "In cycles of reading and writing, of attending to the whole of the text and the parts, the hermeneutic researcher constructs an understanding of the lived experience" (Neubauer et al., 2019, p. 95).

A Blended Approach. As a person new to phenomenological study, I found the structured guidance provided by Moustakas with the Modified van Kaam method of Analysis helpful. However, I also acknowledge the work of van Manen and embraced his assertion that phenomenology is not intended to be clear cut to be understood and that there are necessary elements that may be both interpretive and descriptive required to depict vivid and detailed description necessary to articulate phenomenological findings and that sometimes it is necessary to use this terminology interchangeably (2015, p. 26).

van Manen (2015) also cautions that phenomenology is not and is not intended to be an empirical science. He provides the example of querying the nature of talk in terms of "real talk" and senseless chatter. He says,

> A phenomenologist would not likely send around questionnaires, or place individuals in experimental situations to see under what controlled conditions real talk happens; and he or she would not simply start to "philosophize" about the nature of real talk either. A phenomenologist would treat the topic of "talk" not as a problem to be solved, but as a question of meaning to be inquired into. (p. 24)

This is the approach considered to question the meaning of food experience in this research.

Co-Researchers

Phenomenology adheres to a practice of treating the participants as co-researchers, and throughout this paper, they are referred to alternately as students, young people, and co-researcher and/or participants. The title of co-researcher participants acknowledges that it is their experiences studied and they are invested in the work, and it is up to the researcher to interpret and portray those experiences accurately (van Manen, 2015).

As an educator, scholar, and human being, I wanted to learn about the multidimensional influences on the individual food experiences of young people today. For instance, to ask, “To what degree does food influence their life and choices?” van Manen (2015) says,

> A human science researcher is a scholar: a sensitive observer of the subtleties of everyday life, and an avid reader of relevant texts in the human science tradition of the humanities, history, philosophy, anthropology, and the social sciences as they pertain to his or her domain of interest. (p. 29)

I feel like I have been living this experience my entire life. Furthermore, I am an empathetic and intuitive person. I believe this is a skill I learned out of necessity as an elder sister to six siblings, a professional chef, an elementary and high school teacher, and a wife and mother. In each capacity, I have been called to think about the needs of others on an ongoing basis. In addition, I have an inquisitive nature and have always been interested in 'reading' the world around me. I think this is why I am drawn to phenomenology, because it asks us to find meaning in everyday experiences.

Photovoice

A modified version of Photovoice is a second methodology that has been blended with phenomenology. Photovoice was first identified as a methodology by Caroline Wang and Mary Ann Burris in the early 1990s (Sutton-Brown, 2014). Wang and Burriss (1997) identify the following goals of Photovoice:

> 1) to enable people to record and reflect on their community's strengths and concerns; (2) to promote critical dialogue and knowledge about important community issues through large and small group discussions of photographs; and (3) to reach policymakers. In line with these goals, people can use Photovoice as a tool for

> participatory research. Photovoice is highly flexible and can adapt to specific participatory goals, different groups and communities, and distinct public health issues. (p. 370)

Photovoice is recognized as a way to enlist community action and serves as a means to provide a voice for marginalized groups (Sutton-Brown, 2014). Photovoice may also be used as a political action tool and has early roots in the work of Freire, who encouraged the impoverished in his community to use their collective voices (Sutton-Brown, 2014). Similarly, youth voices are sometimes overlooked and underutilized in constructing our vision of society, as outlined by Spencer et al., (2019).

> Although youths are the primary recipients of school food interventions and the literature highlights the importance of youth engagement, gaps remain regarding the extent to which youths' experiences and perspectives are invited in discussions about school food policy and program development. (p. 1011)

The goal was to ensure that the voices of the students were heard. Allowing them to take photographs and reflect on them (with guided questions) assisted them in the process of clarifying their thoughts and articulating their message (Photovoice, 2007). In addition, writing and reflecting on the pictures in advance allowed them to come to the interviews and focus group discussion with more confidence and willingness to share their ideas.

Sutton-Brown (2014) says,

> Photovoice interrogates contextually based meanings from an insider perspective as a means to generate new insights into our socially constructed realities and cultures. It oscillates between the private and public worlds in its attempt to publicize and politicize personal struggle via photography, narratives, critical dialogue, and social action. Thus,

> photovoice broadens the nature of photography from being a fine art form to being central to socially and politically engaged praxis. (p. 169)

Once students had a chance to share their initial ideas through the first interview, they were asked to take a minimum of five photos and share the most significant of these photographs (as determined by the individual photographers) in a second interview. These became part of a foundation upon which to build additional insights and subsequent theories. The photographs became a thought-provoking reference tool for further discussion. In addition, the photographs were referenced throughout the research as themes were developed and codes established (Moustakas, 1994; Wang & Burriss, 1997).

A modified version of Photovoice was used because in its original form, the Photovoice method typically follows a process of collecting and analyzing photographs combined with discussion over a more extended period. For this research project, Photovoice was used in a different manner, whereby individuals collected photographs after the first interview to share in the second interview and later in the final focus group discussion. Phenomenology was also used to elicit the story of individual food experiences, as further described below.

Phenomenology/Photovoice: Welcome to my Heritage Garden

In this research, a heritage garden metaphor is used to envision the amalgamation of how phenomenology and Photovoice work together. van Manen (2014) says,

> A metaphor is a figure of speech that creates an analogy between two objects, by using one word or image to clarify another. Creative use of metaphor may help to discover new meanings about something. In philosophy, too, metaphor helps us to perceive one idea in terms of something else and thus may create new insights or meaning about the original idea. (p. 149)

The metaphor of a heritage garden can incorporate the theoretical lenses of sustainability, constructivism, postmodernism, and existential worldviews (Yawney, 2020). For example, in a heritage garden, heirloom seeds are planted, each carrying its unique biological message from the past to the present (Wincott, 2018). Kingsolver (2007) says,

> Heirloom vegetables are irresistible, not just for the poetry in their names but because these titles stand for real stories. Vegetables acquire histories when they are saved as seeds for many generations, carefully maintained, and passed by hand from one gardener to another. Heirlooms are open-pollinated—as opposed to hybrids, which are the one-time product of a forced cross between dissimilar varieties of a plant…Because of their unnatural parentage they offer special vigor, but the next generation from these crosses will be of unpredictable and undesirable character. Thus, hybrid seeds have to be purchased again each year from the companies that create them. (p. 47)

Hybridization and Modification Leads to Elimination of Story

Essentially, this hybridization and modification of seeds has eliminated countless seed stories, and as a result, "modern US consumers get to taste less than 1% of the vegetable varieties that were grown here a century ago" (Kingsolver, 2007, p. 49). The individual heritage seeds represent the co-researcher participants and their stories. Each of these ‘seeds’ maintains its genetic makeup and individual characteristics; they may vary in size, shape, and colour, but they will maintain their original biological message. An ideal heritage garden has many plants co-existing, lending their various properties and nutrients to each other and carrying their unique messages forward.

The Metaphor of the Heritage Garden

In this metaphor, the Researcher becomes the sun and provides the light and warmth to illuminate and shed light on the experiences of each seed/growing plant. Being mindful of researcher reflexivity allows light to shine on the individual stories. As the rain, Photovoice is a means of nourishing the plants and providing a voice for each of the plants to communicate an outward expression of themselves; a means for praxis if you will, in that what may come of the phenomenological realizations has a means of expression in one beautiful, multidimensional garden of stories (food experiences).

The root system and strength of the plant is the researcher's theoretical worldview supporting growing knowledge that each of the paradigms (sustainability, constructivism, postmodernism, and existentialism) came together at the root and inter-twined to support each of the plants. Fittingly, the heritage garden produces a variety of foods that have been passed down through several generations. In essence, this is the focus of the research.

The metaphor of the heritage garden does capture the essence of many components of the research in a rather poetic and meaningful fashion. However, we must also acknowledge the danger in trying to say too much through metaphor, as is evident in the following quotation by van Manen (2014) who says,

> Both Nietzsche and Arendt point out that all language, all words, originate in metaphor, but that original creative act tends to be converted into deceptive illusions when we think that we understand something more deeply by covering it with a metaphor. We need to recall Nietzsche's profound reflections on the danger of using metaphors and believing that we now understand a phenomenon better because we have traded one metaphor for another. And it is even more dangerous when we continue to exploit a

> metaphor by extending its meaning and applications. These are important concerns to keep in mind when using metaphor as a methodological phenomenological device. (p. 150)

Through Understanding Change is Possible. Revisiting the worldview, that the world is socially constructed, allows that through a clearer understanding of the world as it exists, transformative change can occur. In this regard, Photovoice has been used as a social construction tool to elicit data and experiences and give voice to individuals and groups who may not otherwise be heard (Sutton-Brown, 2014).

In addition, the research question incorporates components of critical food pedagogy, and postmodernism, and existential lenses come into play. It suggests that as individuals, community members, and young people, we must question the establishment, and food choices, and act upon this knowledge to create a better, more equitable food system and the world going forward. As a group, we must ask, "What are the implications for our understanding?" “What can we know and do as a result of the work we accomplish together?” Through the use of Photovoice as a means to give voice to young people (in an era of big business persuasion), we have a valuable tool to empower participants on an existential level and allow an opportunity for praxis to take place.

Photovoice for Praxis. Sutton-Brown (2014) says, “Photovoice was born out of three distinct theoretical frameworks: empowerment education for critical consciousness, feminist theory, and documentary photography. The overall aims of these frameworks support an action-oriented, participant-directed method" (p. 170). This seemed adept and well suited for the research intended in this study, especially when considering the role of women concerning food experiences the world over. Photovoice is described as "Using photography to help people share their ideas, improve our communities, and give voice to those not heard” (Photovoice, 2007).

Photovoice and Phenomenology Support Each Other. The nature of Photovoice and phenomenology may at first appear to be at odds in that phenomenology asks one to simply account for individual experiences while the use of Photovoice suggests more of a participatory action approach. However, I suggest that phenomenology can be strengthened by the use of Photovoice and embraces the phenomenological requisite of treating participants as co-researcher participants. Photovoice then becomes a valuable tool for individuals to share their experiences. Acknowledging the theoretical worldviews referenced in this paper and applying a phenomenological lens to the stories of each of the participants illuminates important insights that can support contemporary knowledge and discussion (or lack of) about our current food systems and provide the co-researcher participants a means of voicing their concerns, thereby making the time spent in interviews more meaningful to them on an individual basis (Glesne, 2016).

I believe that many of the goals of Photovoice align with the objectives of phenomenology, and I envisioned a seamless blending of these two methodologies and that it would be a case of two parts creating a richer and more holistic whole. I was excited by the prospect of blending these methodologies, and I was hopeful that this means of exploration would speak to young people and that they would be excited by the prospect of using their phones as tools to share their experiences. If an individual did not have a phone, a camera would be provided (although, this provision was not necessary because all participants had their own phones).

Seeds of Knowledge are Important for Survival. The research intended to explore a breadth of understanding of our universal relationship to food. There are concerns that genetic messages ingrained in heritage foods are in danger of being lost as multinationals are vying to control them and create a monoculture of modified crops (Kingsolver, 2007). It can be argued

that we, as humans, are in danger of losing the significance of our story and becoming modified by consuming genetically modified and highly processed foods (Zimmern, 2017). There is growing evidence to suggest that saving individual seeds for our communal wellbeing is essential for our survival as a species (Standage, 2009). It is important to identify seeds of knowledge in our youth and hear their collective voice as we make decisions that shape our collective future.

The Co-researcher/Participant

As stated earlier, phenomenology asks that the participant become a co-researcher, and Photovoice enlists the participant to capture images through photographs to share their experience and story and accentuate their understanding (van Manen, 2015; Photovoice, 2007). The use of Photovoice may prove to be more beneficial for some participants than others but it could provide another means of expression for those it served (Wang & Burriss, 1997). For this research, blending phenomenological and Photovoice methodologies allowed us to draw upon the strengths of each of them and they were well suited for this project.

Covid Implications

This research project took place during Covid times. This meant lives and expectations about what was permissible were changing daily in direct correspondence with fluctuations in Covid cases being experienced in Canada and around the world at that time. Naturally, this had a bearing on the choices made and how the research was conducted at the time. Covid protocols mandated that it was not permissible to approach participants in person and conduct research using traditional interview methods. Therefore, interviews were conducted online via Google meeting rooms, as required by Nipissing University Research Ethics Board (NUREB) and participating schools.

Qualitative Methods

As mentioned earlier, the research was guided by the following structure (Figure 3.1) provided by Moustakas (1994, p. 103). The bolded parts indicated in the chart represent how the researcher responded to each of Moustakas' directions.

Figure 3. 1

Procedure for Phenomenological Research Methods as Outlined by Moustakas and Researcher Response

Discovering a topic and question rooted in autobiographical meanings and values as well as involving social meanings and significance; **Research Question: "What are the multidimensional ways that youth are experiencing food? To what degree is it impacting their lives?"**
Conducting a comprehensive review of the professional and research literature; **As outlined in Figure 2.3 [Patchwork Quilt]**
Constructing a set of criteria to locate appropriate co-researchers; **The snowball technique was used to recruit 25 youths from different Southern Alberta High Schools. Each participant was invited to participate in two separate interviews, and one focus group discussion utilizing a blend of Photovoice and Phenomenology. Each participant was between the age of 14 to 18 and attended high school (or recently graduated).**
Providing co-researchers with instructions on the nature and purpose of the investigation, and developing an agreement that includes obtaining informed consent, ensuring confidentiality, and

delineating the responsibilities of the primary researcher and research participant, consistent with ethical principles of research; **Each participant was provided with a letter of informed consent outlining procedures and expectations of participation, including an acknowledgement that they will be co-researcher/participants, participation is voluntary, they are free to withdraw at any time, and that member checking will occur to check for understanding.**
Developing a set of questions or topics to guide the interview process; **A set of questions was prepared for the first interview. In preparation for the second interview, the questions evolved to correspond with findings as required in phenomenological research. See Figure 3.3 [Interview Questions]**
Conducting and recording a lengthy person-to-person interview that focuses on a bracketed topic and question. A follow-up interview may also be needed; **See Figure 3.3**
Organizing and analyzing the data to facilitate the development of individual textural and structural descriptions and synthesis of textural and structural meanings and essences. Direction was taken from **Glesne, 2016; Photovoice, 2007; Wang & Burriss, 1997; Moustakas, 1994.**

(Moustakas, 1994)

Initially, once I received Nipissing University Research Ethics Board (NUREB) approval and approval from the superintendent of the school board I intended to work with, I contacted

individual principals who put me in touch with the Foods teachers. I intended to connect with students through their school boards and establish initial meetings with their classroom teachers. Unfortunately, due to the timing of my research corresponding with a stay-at-home order issued in Alberta, only two of the five schools in the division were willing to allow me access to their students (Alberta Government, 2021). In one case, the foods program was suspended for the remainder of the year, and in two others, the teachers expressed concern that their students may be experiencing too much stress and change due to the move to at-home schooling and that they may reach out to me in the future.

Due to difficulty in attaining participants in this way at this time, NUREB was approached to revise the initial application. In keeping with the nature of the research (food related), it was decided to offer a food store gift card incentive to each of the participants. They were to be awarded $15 for participation in each stage of the research for a total of $45. In addition, a snowball approach was undertaken whereby the invitation was open to other students (outside of the original classes) and even the school itself. For instance, a co-researcher/participant might invite a friend to contact me to take part. These changes assisted significantly in securing co-researchers to participate in the study.

Letter of Informed Consent

Students willing to continue with the research process were asked to email a copy of the letter of consent to me. If the student was not 18, parental permission to participate was required. In this way, I had the contact information of the students who were interested and parental permission for them to do so.

Selection of Co-researcher Participants

Co-researcher/participants were selected on a non-probability sample based on willingness to participate. “The so-called non-probability samples typical of research within an interpretative perspective are usually much smaller, but the data collected is more detailed than in the case of a probability sample” (Oliver, 2013, p. 150). There were no specific criteria required in selecting participants other than age and attendance (or recent attendance) in high school. To a degree, the process was purposive in that some students were selected from rural Alberta schools as well as schools within the city boundary to get a wider breadth of opinions and experiences. The consideration was that rural schools might be able to offer insight into connecting an agricultural lens to the study because they may come from agricultural families or live in areas influenced mainly by agricultural practices. As stated by Oliver (2013), "The purposive sampling process may seek to identify people who, because of their experience or contacts, have special insights into the research question” (p. 150). In general, as young people were approached and expressed interest, they were invited to participate and fill out the letter of informed consent. There was no intent to look for specific demographic correlations because they would be misleading with the small sample size. According to Moustakas (1994), essential criteria for selecting participants include:

> The research participant has experienced the phenomenon, is intensely interested in understanding its nature and meanings, is willing to participate in a lengthy interview and (perhaps a follow-up interview), grants the investigator the right to tape-record, possibly videotape the interview, and publish the data in a dissertation and other publications. (p. 107)

Everyone had experienced the phenomenon in question, and the details of the research design outlining the three stages of interviews were specified in the letter of informed consent.

For example, food is a requirement for survival, and we all need to eat to do so. Food embodies other aspects of life as well, which is part of what this research was intended to reveal.

Three Stages of Interviews

Stage One: The First Interview

Google Meets was used to conduct individual interviews of 25 teens enrolled in classes in several different Southern Alberta high schools to practise maximum variation sampling (Glesne, 2016). For organizational purposes and to provide co-researcher participants with an opportunity to speak in a smaller group setting the initial 25 students were divided into separate groups. In keeping with the in-depth nature of phenomenological research, fewer but more in-depth interviews were conducted with a select group of participants (Glesne, 2016).

During the first interview, the questions were formulated to get participants thinking about their food experience. Some of the questions were deliberately open-ended to allow them to respond based on their own experience. For example, as an initial question, all participants were asked, “What comes to your mind when I ask you to tell me about your food experiences?” As the interview proceeded, questions became more specific such as, “Who in your life has had the greatest influence on how you think about food?” Additional prompting questions were available but it was important to be mindful that if participants had addressed certain topics early in the conversation, it was not necessary to ask some of the later questions because they had already responded to them. Participants were also asked questions such as, “What is some of the healthiest food we can eat?” and “Does your family garden or forage (gather food from nature)?”. The intention was to see what foods they considered to be healthiest and what kind of experience they had growing or gathering food from the seed to the table.

Photovoice Procedures. Additionally, I explained Photovoice procedures and asked them to take photographs (on their phones if possible) of anything that spoke to their individual food experience that they felt would be informative and that they would like to share with me during our time together. At this time, we discussed the SHOWED method of interpretation (Spencer et al., 2019; Wang & Burris, 1997). Each co-researcher participant was asked to send five photographs to me (indicating which one they would like to discuss in the future focus group discussion) as outlined by the SHOWED format (See Figure 3.2) (Photovoice, 2007).

Figure 3. 2

An Exemplar of the SHOWED Photograph Analysis Procedure Presented to the Co-Researcher/Participants that was used in this Research Project

Food Experience: A Phenomenological Study (supported with Photovoice) of Food Experience in Youth

SO WHAT DO I TAKE PICTURES OF?

Photovoice is your chance to share your ideas about your food experiences in photographs. For the purpose of this research question, we are looking for photographs of objects and places rather than people (we do not have research approval to photograph identifiable human subjects). Some ideas to get you started...

- What do you see (food related) in your everyday life? You could take your camera with you and make a "photo essay" about a typical day for you. Afterwards, look at the pictures, and see what stands out for you.
- Pretend you are taking pictures to send to a pen pal from another part of the world. What would you want to share with them about Canadian food and food related experiences?
- Start with an opinion or idea. Have you ever wanted to write a letter to the editor of the newspaper or a magazine and share your thoughts on food? What would you say? Now, try to create a picture that gets your idea across.
- How do you interact with food in your home? In your community? Show this in pictures.
- Make a collection of pictures showing all the things you think about when you think about food in a positive light.
- Make a collection of pictures showing all the things you think about when you think about food in a negative light.
- Use your emotions as a cue. Consider where you live and how you experience food... what gives you a strong emotional response (excited, angry, afraid, sad...)? Tell the story.
- From the collection of pictures you have taken, choose your top five and fill out the SHOWED questionnaire for each of them. Provide an explanation for why and how each photo is significant to you and send them along to me. Following this exercise, rate them in order of significance to

you from 1 to 5. (1 being the most meaningful and 5 being the least). Please be prepared to share your number 1 photo (and explanation) with the group in focus group discussions.

Name of Photographer _____

Title of Picture _____

Picture Number_____ Date_____

Please fill out one SHOWED form along with each of the five pictures you will submit.

Insert Photograph here:

S	"What is Seen here?" (Describe what the eye sees.)
H	"What is really Happening?" (The unseen "story" behind the image)
O	"How does this relate to Our lives?" (Or MY life personally)
W	"Why are things this Way?"
E	"How could this image Educate people?"
D	"What can I Do about it?" (What would I like to see happen in the future?)

SHOWED questionnaire modified for this study by Deborah Yawney (2021) supported by © Photovoice Hamilton Ontario 2007. Source: Photovoice Hamilton Manual and Resource Kit, Reproduced with Permission. (Courtesy of photovoice.ca, 2007)

The photographs provided by the co-researcher participants served as talking points and were used to prompt further analysis and discussion (Wang & Burriss, 1997).

Questions Used in Initial Interview. During this initial interview, participants were asked a series of questions closely aligned with the list of initial questions (See Figure 3.3). The original questions were formulated based on a similar phenomenological study conducted by Tan (2013) who made the distinction between asking *why* or *how* in clarifying food experience and this approach was taken into consideration when formulating the questions when possible.

> The decisive difference between these two classes of content and process lies in the first one questioning 'what' [which I changed to "why"], which results in interpretations, psychological origins or causal explanations, whereas asking 'how' aims at direct descriptions of lived experience. That is to say, instead of exclusively asking what is present in our experience when reporting on a state of hunger, we are interested in a direct description of how it is experienced. (Tan, 2013, p. 401)

In addition, as Glesne (2016) notes, "The process of drafting and redrafting interview questions requires time, thought and effort" (p. 106). Therefore, before conducting interviews, questions were piloted on colleagues, family members, and friends, with an eye and ear for clarity and improvement as needed (Glesne, 2016).

Figure 3. 3

Food Experience Initial Exploratory Questions

1. Tell me about yourself…interests, hobbies, etc.
2. What comes to your mind when I ask you to tell me about your food experiences?
3. When you recall a poignant or memorable experience with food from your childhood, describe how it was influential in your life.
4. When you think about your guiding principles in making choices about the foods you

Fix chart above

Formulated by D. Yawney (2021)

van Manen (2015) says,

> To truly question something is to interrogate something from the heart of our existence, from the centre of our being. Even minor phenomenological research requires that we

> not simply raise a question and possibly soon drop it again, but rather that we "live" this question, that we "become" this question. (p. 43)

This statement implies that research is a living and breathing process and these original questions evolved and took on new directions as the interviews proceeded and responses were evaluated. It was necessary to remain mindful of the need to ebb and flow with the results of the discoveries at each stage of research and practise reflexivity throughout.

Stage Two: The Second Interview

In both the first and second interviews, there was a warm-up period, initially asking participants questions to put them at ease, and then the questions became more focused on individual food experience (Creswell & Creswell, 2018). In many ways, the second interview was an extension of the first. Prior to the discussion, the initial interview transcript and recording would be reviewed, and questions would be prepared that allowed for an extension of the discussion from the first interview. When the interview began, the participants would typically discuss their images and SHOWED document that they had previously shared with me in an email. Depending on the details provided in the SHOWED document, additional information would be elicited, or they would be asked the questions that had been prepared in advance. Due to the effort to customize the questions based on the first interview, the questions might be quite different for each participant in the second interview. For example, "You talked about eating food that your grandmother prepared for you in the first interview--Do you know her recipes? Do you cook with her?" At times, questions were derived from interviews with other participants, but they were very effective in eliciting responses, so they became part of the repertoire of questions that would be asked in the second interview. For instance, in the first interview, the question, "Where are young people learning about health and diet?" came about as a result of a

question asked in the first interview, "Do you think it is important for young people to know about food?" Following this process, they were asked to share any additional insights they may have and were invited to consider which of the images was most meaningful to them and that they would like to present in a focus group discussion.

Stage Three: Focus Group Discussion

In the focus group discussion, care was taken to ensure that all participants were not known to each other. For example, in two instances the participants were siblings, and they were placed in different focus groups to ensure they maintained anonymity from each other so they felt comfortable speaking freely. All participants (in each of the small groups) joined a Google Meet to discuss the topic of their collective food experiences. Each person took turns sharing their number one rated image based on choosing their most significant image from their SHOWED document (Photovoice, 2007). In the introduction to the meeting, and at the end of the second interview in preparation for focus group, participants were reminded that asking questions and offering feedback to their peers was strongly encouraged. It was necessary to be mindful of allowing wait time following each entry and not to fill the space with talk to provide an opportunity for group members to add thoughts.

Each of the students was identified by their codes and asked to join the room incognito with their cameras off to protect their confidentiality. Following participant discussion, the trends and patterns that were developing in the first and second interviews were shared. Participants were provided with an opportunity to talk about them. They were asked if they had any other comments or contributions they would like to make at that time and if anything had occurred to them as a result of the focus group discussion. In addition, they were informed that they would be receiving a link to written work formulated as a result of our interviews at a future date.

I Prepared a Focus Group Slide Show. For each focus group session, a slide show was prepared that was shared in the google meeting room. Each slide show was customized for the group to include a list of questions derived from themes found in the first two interviews. Participants were informed that we would be coming back to these questions at the end of the presentation. This was done so that they knew there would be additional questions asked and to allow them to think about how they might want to respond. Additionally, the slide show included each of the selected images that the participants wanted to talk about with their peers. They each took turns presenting their image and responding to the presentation of their peers. For the most part, co-researchers were encouraged to lead this part of the discussion and prompting was provided occasionally to move the conversation along.

To ensure everyone had a chance to participate, turn taking was employed to ask each participant a different question, but also allowed all participants to chime in after the person who was originally asked had a chance to respond. This allowed for member checking of some of the themes that were developing, by asking participants to deny or add to the themes as they were forming.

With Regards to all Three Stages

Following the guidelines for conducting interviews outlined by Glesne (2016), efforts were made to ensure each of the interviews was kept within an hour in length and sufficient time was allowed between interviews to reflect on and record responses to each of them. *Otter* (Otter, 2020) was used to record the interviews and focus group discussions. Otter is a program that digitally records voices and synchronously converts them to text. To ensure the accuracy of the interpretation of the interview, the material was reviewed as soon as possible following the discussions. Recordings were reviewed and interview transcripts were re-read while taking notes

in a research diary to record impressions, and interpretations, and to ensure that the interview had been properly transcribed and correct meanings were attributed (Glesne, 2016). In this way, reflexivity was practised on an ongoing basis and ensured that the voice of each of the participants was captured promptly (Creswell & Creswell, 2018).

Being seen as a Researcher. Initially, I chose not to conduct research at the school where I was employed to ensure that I was seen as the researcher and so that previous experiences and relationships did not affect data collection (Glesne, 2016; Oliver, 2013). However, as a result of snowball sampling methods (and not wanting to exclude interested participants), there were three participants enlisted who attended the school where I worked. These students were not previously known to me, were in an academic stream, and did not intend to take foods classes while in high school. As one research methodologist acknowledges,

> Research should be undertaken at least far enough away so that your job role does not interfere with your activities. Second, conduct your research where you are not so emotionally close to your subjects that it distorts your design, preferably someplace where you have not worked and lived for many years. (Glesne, 2016, p. 49)

To elicit a mutually rewarding experience, when I sent out the link for the meeting, I encouraged co-researcher participants to make themselves a cup of tea and to choose a place where they felt comfortable conducting interviews. I tried to allow individuals flexibility to choose meeting times to coincide with when they were available. I followed the interview protocol as outlined by Creswell and Creswell (2018):

1) Begin with basic information about the interview.
2) Introduce yourself and define terms.
3) Ask a question to put the interviewee at ease.

4) Ask question(s) as outlined.

5) Use probes as needed and provide closing instructions.

Changing Question Patterns

After a few of the initial interviews took place, some of the questions were eliminated and revised for clarity and to encourage more open-ended discussion. As mentioned, at the end of the initial interview, a few minutes were reserved to explain the nature of the SHOWED document and Photovoice project and what was expected of participants in terms of the next steps. This was an important consideration because, as participants began to participate in second-stage interviews, it became apparent how important this initial conversation about expectations was to prepare them to complete the Photovoice/SHOWED document component successfully and alleviate any stress on their behalf in doing so. Most participants acknowledged they were leading very busy lives and were challenged by carving out a little time in their schedules to participate in interviews. In addition, Photovoice was intended to be their voice, so it was important that they carefully selected the images and thought reflectively about their selection, assisted in this process by the SHOWED document.

Honing the Research Process Continued

As mentioned, another helpful strategy was listening to the first interview again just before the second interview and preparing a list of observations that was shared in the first interview to remind participants of topics discussed. Questions were created for the second interview directly from the transcription of the first. In this way, the questions were more relatable. This approach encouraged better use of our time and allowed for member checking with each participant ensuring their original comments were accurately interpreted. Another significant advantage of

this approach is that it was very affirming for the participants. It communicated to each person that what they had to say was important and their voices were being heard.

Entering the Meeting Room Incognito

In order to join the focus group discussion, all participants had to enter the room incognito. This means that they would come into the chat room under a code name so that they were not identifiable to their peers. This approach provided some challenges. Before the focus group discussion, all participants were given a list of instructions with the details on how to enter the meeting room. When asked for their name, they were to enter the code name that had been provided. Participants were told that the meeting room would be open for one hour in advance of the meeting and they were strongly encouraged to come and 'visit' to make sure that they knew how to enter the room. In a few instances, even with detailed instructions, and the room open one hour before the meet, participants were still trying to enter the room using their own account (thereby potentially identifying themselves in the process) after the meeting had started.

I Had to Turn a Couple of Participants Away. I had to turn a couple of people away because they hadn't entered their code names and their actual names would show up attached to their accounts when they attempted to join the group discussion. One person simply went back and read the instructions more carefully and was able to return in minutes (it usually involved logging out of google accounts). In two instances, the participants were not able to join the meeting they were originally scheduled to attend, and I reached out to them after the meeting, had them do a run-through with me, and scheduled them to join a future focus group. I was mindful of not wanting to jeopardize the full one-hour meeting with the participants who were already in the room and ready to go. In essence, it felt like a bit of a juggling act, but in retrospect, I think it was the best possible approach.

Code Names

Each of the focus groups (six in total) had names based on different themes (for instance, sea animals, African animals, and names of birds). Names were chosen to be generic and fun and not to elicit a connotation of any kind such as starfish or dolphin. For instance, a sloth can be associated with being slow, therefore would not be considered an acceptable code name. Participants were asked if there was an animal of a certain themed group that they would like to be or a couple of suggestions were provided, and they chose one. In the introduction to the focus group conversation, there were a few chuckles referring to each other in "code", but after a few initial giggles, the system worked very well.

Data Analysis (Combined Methods)

Phenomenological Analysis

To conduct a phenomenological analysis of my data I referred to the modified version of the van Kaam Method of Analysis of Phenomenological Data provided by Moustakas (See Figure 3.4) who modified the original document to be used to "guide human science researchers" (Moustakas, 1994, p. 120). As a new researcher, this document was particularly helpful in guiding me through the analysis and representation of each of the interviews with my co-researcher participants and ensured that critical pieces were not overlooked.

> The Modified van Kaam approach popularized by Moustakas (1994) is the most used form of data analysis, in large part because of the significant amount of data that is needed for this analysis. There are seven steps to the modified van Kaam analysis: (1) listing and grouping; (2) reduction and elimination; (3) clustering and thematizing; (4) validation; (5) individual textual description; (6) individual structural description; (7) textural-structural description. (Precision, 2019)

Figure 3. 4

A More Detailed Version of the Modification of the van Kaam Method of Analysis

Using the complete transcription of each research participant:

1. *Listing and preliminary grouping*
   List every expression relevant to the experience (Horizontalization)
2. *Reduction and Elimination: To determine the invariant constituents*
   Test each expression for two requirements:
   a) Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?
   b) Is it possible to abstract and label it? If so, it is a horizon of the experience.
   Expressions not meeting the above requirements are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more exact descriptive terms. The horizons that remain are the invariant constituents of the experience.
3. *Clustering and Thematizing the Invariant Constituents*
   Cluster the invariant constituents of the experience that are related into a thematic label. The clustered and labeled constituents are the core themes of the experience.
4. *Final identification of the Invariant Constituents and Themes by Application Validation*
   Check the invariant constituents and their accompanying theme against the complete record of the research participant. (1) Are they expressed explicitly in the complete transcription? (2) Are they compatible if not explicitly expressed? (3) If they are not explicit or compatible, they are not relevant to the co-researcher's experience and should be deleted.
5. *Using the relevant, validated invariant constituents and themes, construct for each co-researcher an Individual Textural Description of the experience*. Include verbatim examples from the transcribed interview.
6. Construct for each co-researcher and *Individual Structural* Description of the experience based on the Individual Textural Description and Imaginative Variation.
7. Construct *for each research participant a Textural-Structural Description* of the meanings and essences of the experience, incorporating the invariant constituents and themes.

From the Individual Textural-Structural Descriptions, develop a Composite Description of the meanings and essences of the experience, representing the group as a whole.

(Moustakas, 1994, pp. 120-121)

Photovoice Data Analysis

Similarly, Photovoice provides additional tools for analysis and discussion. These tools can be used to enhance phenomenological procedures. For example, as Wang and Burriss (1997) point out,

> In using photovoice for needs assessment, participants should be involved in a three-stage process that provides the foundation for analysis: selecting (choosing those photographs that most accurately reflect the community's needs and assets); contextualizing (telling stories about what the photographs mean); and codifying (identify issues, themes, or theories that emerge. (p. 380)

Phenomenology Combined with Photovoice

The process for using Photovoice can potentially be aligned with the requirements of phenomenology in that individuals can take pictures and reflect upon their importance before sharing them with the researcher and the other co-researchers in the focus group discussion. Further, this reflective process assists them in formulating ideas for themes they can contribute to the conversations throughout the research process. The use of photographs also enhances individual confidence and provides them with the tools they need to join in the ongoing conversation.

For example, women in Yunan (who lacked a means of written expression) were able to speak through Photovoice. According to Wang and Burriss (1997) they, “narrated the meaning of their images in discussion groups, wrote captions for them, or told their stories to family members or friends” (p. 381). This points to a powerful example of a means for young people to share their insights; the notion of sharing concepts that they may not even be able to articulate with words at this stage of their lives.

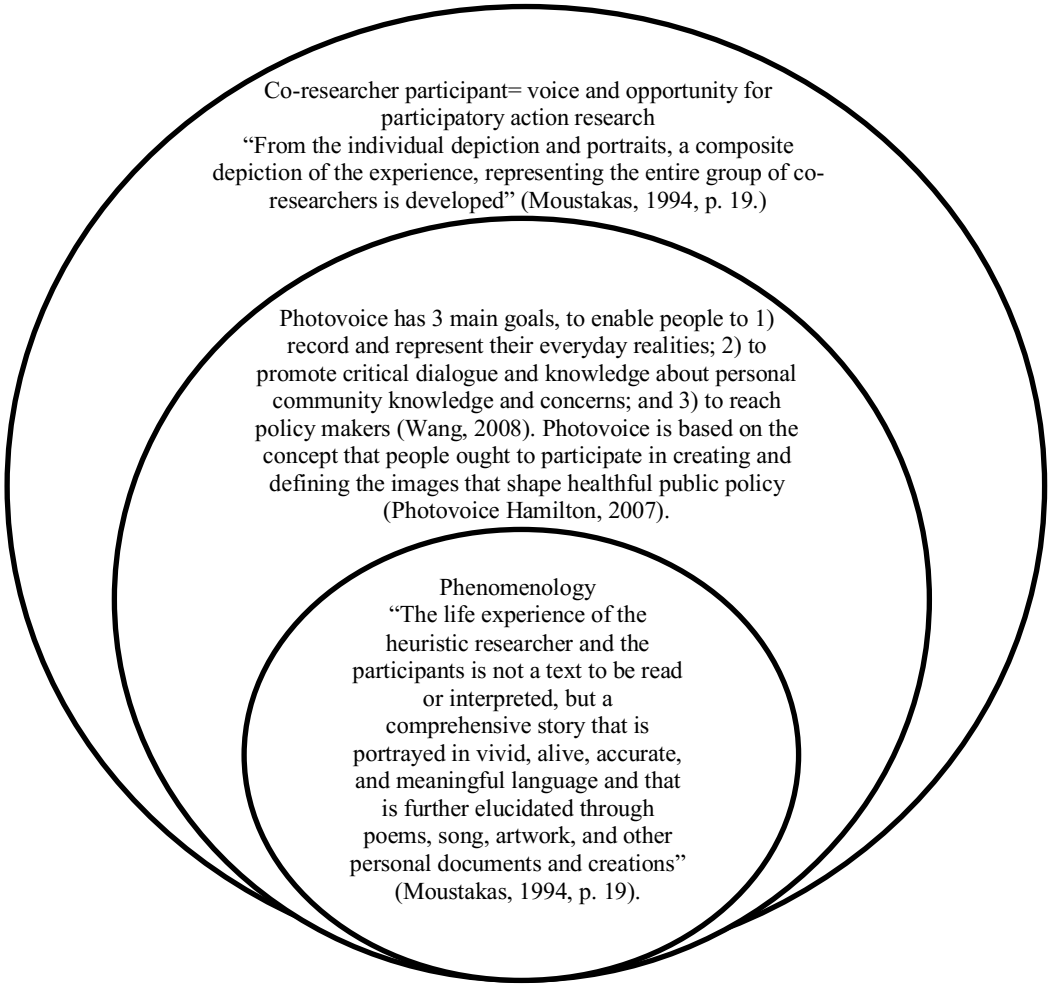
Sharing of Photos. The sharing of photos amongst everyone in our focus group discussion assisted us in establishing codes and themes. We discovered similarities and differences in the images that helped with this process. Wang and Burriss (1997) add

> The participatory approach gives multiple meanings to singular images and thus frames the third stage - codifying. In this stage, participants may identify three types of dimensions that arise from the dialogue process: issues, themes, or theories. They may codify issues when the concerns targeted for action are pragmatic, immediate, and tangible. This is the most direct application of the analysis. They may also codify themes and patterns or develop theories that are grounded in data that have been systematically gathered and analyzed in collective discussion. (p. 381)

Image 3.5 depicts how the key aspects of Photovoice may complement the key aspects of phenomenology thereby creating an effective means to "develop a Composite Description of the meanings and essences of the experience, representing the group as a whole" (Moustakas, 1994, p. 121).

Figure 3. 5

Phenomenology Supported by Photovoice = Participatory Action



Developed by D. Yawney from the work of Moustakas (1994), Photovoice Hamilton (2007), and Wang (2008).

Steps of Analysis

Using the Modified van Kaam Method of Analysis of Phenomenological Data presented by Moussaka 1994, I was mindful of the following steps as I proceeded to analyze the first and second interviews as well as the focus group discussions.

Step one: Transcribe each initial interview with the use of Otter ensuring that the text reads accurately and listening to the recording of the session to clarify language as needed.

Step two: Go through each transcription listing and preliminary grouping (Moustakas, 1994).

Step three: Evaluate a second time to determine invariant constituents as outlined in the van Kaam method and go through the process of reduction and elimination with each concept presented in the interview (Moustakas, 1994). As required, I asked the two questions presented in the modified van Kaam method:

a) Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?
b) Is it possible to abstract and label it? If so, it is a horizon of the experience? (Moustakas, 1994).

For each theme described, I asked if it was necessary and sufficient in terms of describing the food experience of the individual sharing the story. I found it helpful to think of these experiences as capturing the essence of the phenomenon being shared with me. Similarly, the Stanford Encyclopedia of Philosophy (2017) provides the following description.

> A handy tool in the search for precise definitions is the specification of necessary and/or sufficient conditions for the application of a term, the use of a concept, or the occurrence of some phenomenon or event. For example, without water and oxygen, there would be no human life; hence these things are necessary conditions for the existence of human beings.

Using this criterion as a guideline, I was able to identify the horizon of the experience. In this way, some of the random discussions and peripheral conversations that led to these realizations were eliminated, as noted by Moustakas.

> Expressions not meeting the above requirements are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more exact descriptive terms. The horizons that remain are the invariant constituents of the experience. (Moustakas, 1994)

Step four: Clustering, determining themes, and crosschecking all data for each participant (Moustakas, 1994). All the steps up to this point were conducted after each stage of the research process. I continuously checked for understanding after both interviews with each participant and presented the themes that were emerging in the focus group discussions and asked participants for confirmation and to elaborate or clarify as needed to ensure that we had a meeting of the minds and that I had accurately recorded their position. (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014).

Step five: "Using the relevant, validated invariant constituents and themes, construct for each co-researcher an Individual Textural Description of the experience (Moustakas, 1994, p. 121)". At this stage, the power of combining both Photovoice and Phenomenology became apparent. I had the edited transcriptions from two interviews and our focus group discussions available to support the process of horizontalization and I was also able to use the pictures and accompanying rationale (text) the participants provided me within their SHOWED documents. This had the added advantage of allowing each participant a key period of reflection before submitting their documents via email. In addition, they discussed each image with me in our second virtual interview. They also selected the image they deemed most important to share in the focus group meeting. Therefore, we achieved the requirements as set out in the modified van Kaam method of analysis, while simultaneously also meeting the requirements for Photovoice procedures, that

participants choose photographs, tell stories about their meaning, and assist in codifying emerging themes (Moustakas, 1994). At each of these stages of research, data were mined to determine emerging themes (Moustakas, 1994).

Step six: All of the data combined (interview and focus group transcriptions, pictures, SHOWED rationale) were effective in allowing me to "construct for each co-researcher an *Individual Structural* Description of the experience based on the Individual Textural Description and Imaginative Variation" (Moustakas, 1994, p. 121).

Step seven: "Construct *for each research participant a Textural-Structural Description* of the meanings and essences of the experience, incorporating the invariant constituents and themes (Moustakas, 1994, p. 121)". At this stage, I revisited earlier interviews, drew comparisons across each of the stages of research presented in interviews and focus group discussions, evaluated the photographs and rationale that each participant chose to share with me and which photograph they deemed most important to share with the group, to produce a comprehensive study of each participant's contributions to the phenomenon of their individual food experience.

Step eight: *"*From the Individual Textural-Structural Descriptions, develop a Composite Description of the meanings and essences of the experience, representing the group as a whole" (Moustakas, 1994, p. 121). This process allowed me to see clear connections across themes that kept surfacing as the most important experiences that the participants were choosing to share. Naturally, in considering human subjects, some of these themes were presented by many participants, while other themes were mentioned by fewer participants, but a very distinct pattern of experiences began to emerge. Oliver (2013) says,

> In the interpretative tradition, the respondent has a potentially much greater influence upon the analytic process. You and respondent engage in a much more interactive

process, and during the data collection the respondent may in a variety of ways influence your ideas towards data analysis. (p. 156)

Where clear themes were established, I selected samples across the pool of participants and shared specific examples to elaborate on each of the themes that we encountered. I found the analogy of a sunflower to be useful in depicting an artistic interpretation of this process and used this image to set the stage for the themes that we collectively arrived at as presented in Chapter Four.

Step nine: In keeping with the nature of Photovoice method and to contribute to a participatory action approach, participants were reminded that the work that they were doing was important as food is vital to our survival and the experiences they chose to share would be helpful in shaping our contemporary understanding of food experiences of youth today. In addition, they were informed that the result of their shared experiences may contribute to improving future curriculum and policy with regards to treatment of food.

I was careful to do so without judgment and practised reflexivity throughout. Yet, as a means of allowing the participants the final word on their food experiences and what they would like to share if provided with a larger audience, I asked them if they had a message for their peers or the powers that be (namely government or educational authorities). These insights helped to shape the final analysis of this research study as presented in Chapter Five.

Ethical Considerations

Research Ethics Board approval was sought and received from Nipissing University Research Ethics Board (NUREB). The superintendent of a Southern Alberta rural school board was approached for permission to conduct research within their district. In addition, snowball sampling was used, and participants were recruited through word of mouth and by sharing a

short recruitment video that explained the nature of the research, the parameters of the study, and the nature of the incentive. Students were asked to respond to and return a letter of consent via email, thereby acknowledging their willingness to participate. Parental consent was required for students under 18. At this point, students were coded, and these codes were used to protect student identity moving forward.

As mentioned previously, interviews were recorded via Google Meet at the time, and *Otter* (2020) was used to record the interviews and transcribe them. Transcriptions were reviewed as soon as possible following discussions. All recorded data were coded to ensure participant privacy, transcribed by the researcher (using *Otter*), and stored in a locked private home office. Electronic interaction with participants (e.g., Google Meet) throughout the data collection phase was used to attend to safety protocols as per the local health unit and NUREB guidelines. In addition, a password-protected, encrypted computer was used.

Chapter Four: Presenting the Data

Results and Interview Themes

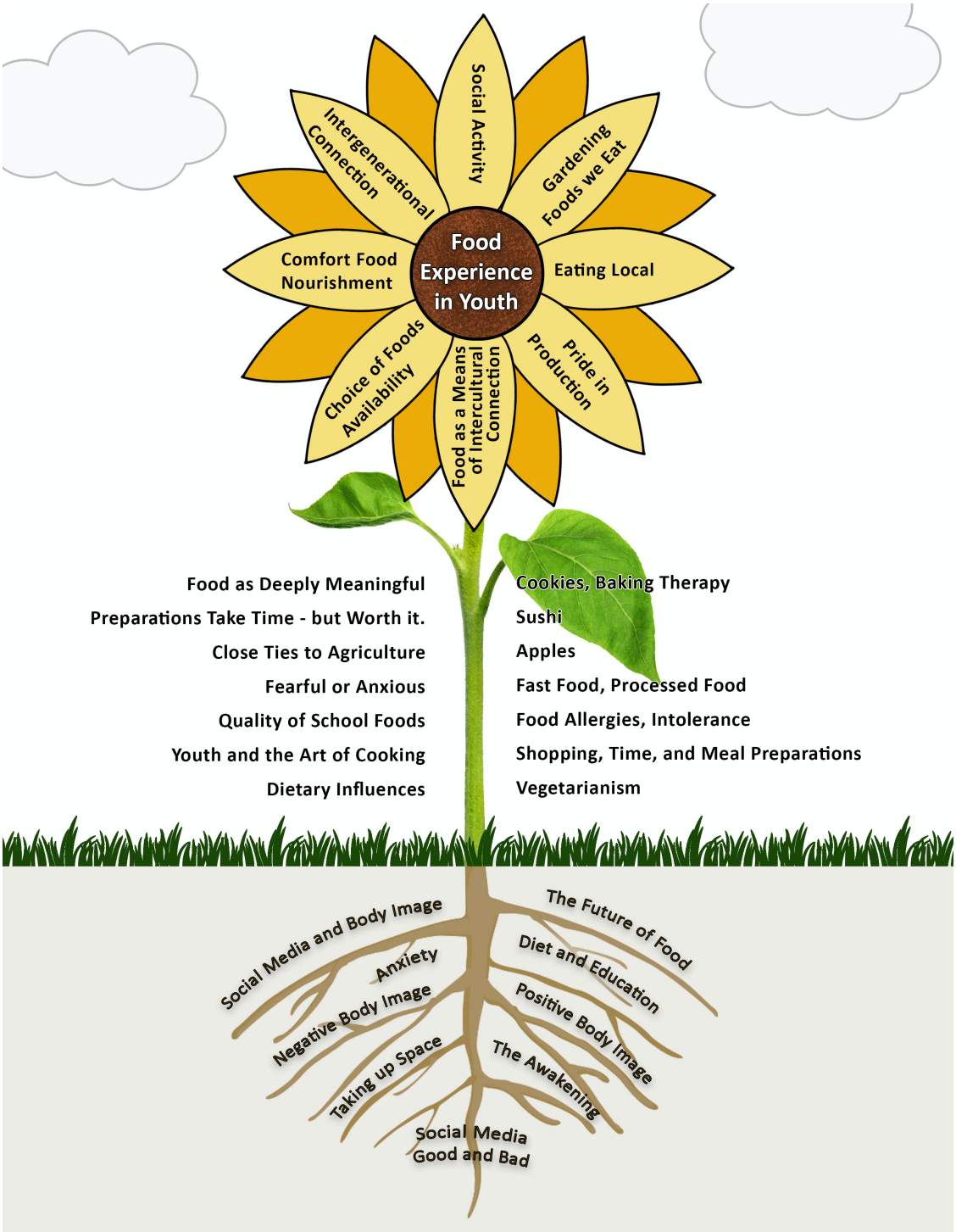
For this research, 9 male and 16 female participants were interviewed. Throughout this section, participants will be referred to interchangeably as participants, co-researcher(s), young people, etc., since the intent is to emphasize the individual and collective voice of the young people participating in this research as is required by a phenomenological study. In addition, the language in the quotes shared in this chapter may be altered slightly for ease of reading. However, the content and context remain as intended. For example, phrases or words that were repeated in the discussion were removed.

The Sunflower as a Metaphor for Food Experiences

As I write this, there is a war going on between Russia and Ukraine. I have Ukrainian lineage and I have recently learned that the sunflower is the national flower of Ukraine, and it calls to my mind my Baba, standing tall in her garden next to her prized sunflowers. In this chapter, where I aim to make sense of the long hours of research and detailed conversations that I have had with participants, I find myself thinking of the sunflower and how it may serve as a metaphor for my findings. I see the petals of the sunflower as the results of the initial interviews, a general discussion of various food experience-related topics. The stalk of the sunflower serves as the foundation for these ideas, offering support and nourishment. Finally, the root system represents the heart of our research; for example, it contains the very essence and lays the foundation for the plant itself. For this reason, I describe the research in three stages: The Petals, The Stalk, and the Root (See Figure 4.1). Each section represents the stages of research and how deeper understanding was achieved as research progressed from the showy petals of the flower to the buried root system. As this chapter progresses, the details provided in Figure 4.1 will be explained.

Figure 4. 1

The Sunflower: Getting to the Root of the Research



Note: Formulated by D. Yawney with Graphic Design Assistance by Maggi Larson

Themes Revealed

The Flower: First Interviews and Initial Realizations

Availability and Choice of Foods

In the initial interviews, all participants I spoke with acknowledged that the availability of food was not a concern for them and that they felt they had a say in the foods provided at home. They felt that their wants and needs regarding their food choices were taken into consideration and they could ask for and receive different foods they would like to include or try in their weekly diet. A few individuals did say they would like to eat lighter and healthier foods but as they did not purchase or prepare the food in their homes, they were not able to change family eating patterns for one person when most of the family was happy with meals that were prepared. These individuals did indicate they planned to wait to make changes until they were living independently in the future. All CRs participating in the interviews acknowledged they had never known or experienced what it was like to go hungry for an extended period beyond awaiting their next meal.

Food as a Source of Nourishment, Comfort and Demonstration of Love

One common theme was that the participants appreciated the role of food as a source of nourishment as well as comfort in the home and a theme of food as love arose. Participants spoke about how food can be a means to show love and that one can tell if food has been prepared with love. They noted that when someone prepares something with love, they take into consideration the likes and dislikes of the individuals for whom the food is being prepared. They shared that mealtime was considered an important time for their families to gather and discuss the day and share a meal together. In some cases, participants lived in blended families and shared how their food experiences were different depending on which household they lived in from week to week.

New Family Traditions are Being Established

Many of the participants talked about special events such as birthdays and course completions being acknowledged and celebrated by going to restaurants or ordering meals at home. They talked about how, throughout the last couple of years, new family traditions have been built around ordering food from companies like Skip the Dishes to celebrate special milestones or family occasions. Ordering in was referenced in terms of a means of celebrating a special occasion, as well as a way to continue to support local businesses that were struggling and in danger of closing due to the impact of Covid restrictions and the closure of restaurants for public dining.

Eating Ethnic Foods as a Quick and Healthy Alternative. Many participants talked about eating ethnic foods in restaurants and sometimes preparing them at home. Several participants mentioned how much they enjoy Vietnamese food as a healthier and tastier alternative to fast food when their family wanted to order in. Ada (15) said, “We eat out more for occasions or a celebration, but we will order in from a Vietnamese restaurant on a night where we have a lot to do”. Celia (18) said, “The meat in the spring rolls fulfills your craving for hardy food but the noodles are nice and light. By the end you've filled up with veggies and lighter stuff, so you don't feel completely stuffed or anything”.

Food as a Means of Intergenerational Connection

When asked about early and most poignant memories of food, many participants shared stories about bonding and relationships established with grandparents and elders through shared experiences, whether this was in the kitchen assisting with preparing recipes or in the yard helping with the garden. For example, Jane (14) remembered, “My dad said that he used to make pickles and stuff with my grandma. So, it just kind of seems special that now I'm doing it with my dad. I don't know. I just like the feeling”. When CRs spoke about these experiences, a

nostalgic tone would often arise in the conversation, and they would speak with great tenderness and awe at the realization of what those early experiences contributed to their lives.

Food as a Means of Intercultural Connection

Many of the participants who I spoke with did not identify with any one specific culture but a few mentioned that they had a cultural component to their heritage and prepared certain meals as a result. For instance, one young man stated, “My ethnic background is 10 different things. I don't really know what I am” (Kevin, 16). This response was typical of most of the participants, who did not identify with any one specific culture. A few participants did acknowledge cultural ties, but many of the young people in this study could not provide their cultural history beyond their generation.

A few participants talked about making sushi at home because it was part of their heritage, or they had friends who were Japanese and enjoyed learning about different cultures. Others shared that they simply enjoyed learning about all kinds of cultural foods. Raya (18) said, “I love learning and trying different food cultures. I'm always intrigued by that. I have friends from different cultures, and I always want to try different types of foods from different places. I love it”.

There are Not Enough Opportunities to Learn How to Prepare Ethnic Foods. When discussing opportunities for learning about different cultural foods, Raya (18) said,

> The last time that I did [celebrate cultural foods] was probably in grade three throughout my 12 or 13 years of schooling. I don't see it anywhere in town or anything like that. There's no chances to go try different meals unless you're specifically ordering from a place that's a different culture. I don't think there are opportunities.

Most participants expressed a desire and willingness to try ethnic foods and a few of the participants acknowledged that their families did try to prepare ethnic foods from time to time but on the whole, there was very little opportunity to learn how to make authentic ethnic foods.

Food as a Cultural Practice. Of the few who identified with a specific culture, one young lady talked about making cabbage rolls and perogies quite regularly due to her Ukrainian heritage. Amy (15) discussed the process of making perogies with her family and how rewarding she finds the activity.

> It's a lot of work because you are filling the dough and cutting the perogies. It can be difficult if you are new to doing it. But it's a fun thing to do as a family because there are so many steps and it's easy to divide them. It takes up an entire afternoon or even a day depending on how many you're making. So, it's a fun way to bond and set aside that time to be together.

Another young man reflected on how his family often had tortière at Christmas because of his family's French-Canadian heritage. For instance, Jake (16) shared a picture of a tortière in his SHOWED document and said, "Tortière is a traditional meal that my family makes (See Figure 4.2), normally for Christmas. My mom makes four or five of them. And then we take some to my grandparents' house and we have a big family gathering".

Figure 4. 2

Tortière is a Traditional French-Canadian Meal

Food as Social Activity with Friends and Family

The theme of food and its role in social activities arose throughout the conversations. At some point in our conversations, all participants spoke about the importance of food for family gatherings. They shared stories of how traditions developed around family get-togethers involving potlucks and the sharing of food and the close-knit bonding amongst families that occurred during these gatherings. When asked what she recalls about her food experience from her childhood, Ella (15) said, “I don't know, eating a lot of fruit from our garden or big family dinners with our family at holidays”.

Some participants spoke about meeting friends at fast food restaurants as a means of spending time together. In an initial interview, one participant commented on how her relationship with fast-food establishments shifted during Covid along with the restrictions of the moment. She acknowledged that at one point she and her friends were going through drive-through restaurants and meeting with friends frequently (because home visits were not allowed). This practice shifted, to purchasing a take-out beverage like a Slurpee or iced coffee and then choosing to prepare and share foods at their own homes.

Sharing a Meal as an Arc. John (18) spoke about the act of sharing a meal as an event in the shape of an arc as he describes in this passage.

> I think it's like a kind of like a story and there's an arc to it. You go to a sit-down restaurant, you sit down, you order your food, you're able to talk a while before the food comes. Food comes, you're able to eat and talk through it. I feel like you appreciate it more because you associate the taste and the general quality of food with the general appreciation of hanging out with your friends and other people.

Food Offers Comfort in Times of Stress. Several participants also discussed how food offered comfort in times of stress. Due to Covid some young people were choosing to gather at each other's homes to visit and prepare food together because they felt safer. Figure 4.3 demonstrates one such outing when a group of friends got together to enjoy s'mores during Covid. This image and reflection from the SHOWED document (See Figure 4.4) is typical of responses provided using the combined Photovoice and the SHOWED methods.

Figure 4. 3

Being Social and Safe During Covid

Figure 4. 4

SHOWED Rationale for Inclusion of Photo in Figure 4.3

S	**"What is Seen here?" (Describe what the eye sees.)**
	Myself and two friends holding s'mores over a fire
H	**"What is really Happening?" (The unseen "story" behind the image)**
	Some of my oldest friends come over to roast s'mores during the summer where we talk about our interests and spend time together.

Gardening and Food

In initial interviews, several participants commented on how they shared gardening in some capacity and how foods grown at home or closer to home (purchased at farmers' markets or locally) were much more satisfying than foods purchased at grocery stores. The consensus was that it felt more nutritious, and it tasted better. They also appreciated it was fresher because it did not need to travel as far or take as much time in transit before it reached them. These young people who participated in gardening commented that there was a certain pride in self-sufficiency, particularly considering the uncertain environment brought on as a result of Covid. Participants also acknowledged gardening can be a therapeutic activity and had many benefits simply as a result of participating in the process of gardening. Of those who gardened regularly, four people lived in rural areas and their families relied on what they produced as the main contributor to their diet.

The Stalk: Second Interviews and Focus Group Discussion

Going back to our analogy of the sunflower, the stalk of the plant exudes flexibility and strength and serves as a conduit for nutrients from the root system to the flower and back again as the flower gathers its energy from the sun.

Participating in Food Research Prompted Deep and Meaningful Thought

In each instance where participants were asked if anything had changed in their food experience because of our initial conversation about food and the act of participating in the research, they acknowledged that their thinking had deepened and become more critically reflective. Dom (18) said, "I've definitely been thinking. Thinking just more about my food experience in general. Like I've been more aware of certain things" and Raya (18) said, "I think

since we talked, I've been looking at food differently, like maybe I need to include more veggies or thinking about what meal I'm going to make when I get home."

The act of having young people participate in Photovoice and reflectively responding to the SHOWED document seemed to prompt deep and meaningful thought in terms of food experience. Participants shared that they felt more confident in their food choices and that they were thinking more about societal food systems in general as is evident in some of the anecdotes they shared in the second interview. One participant, who had previously expressed concerns about body weight and admitted to struggling with limiting food intake, began to make conscious choices to listen to their body and eat guilt-free food that would nourish them and make them feel good. Aria (18) shared,

> Right after we talked, about a week later, I went to Mexico, and I went to an all-inclusive resort, and I thought, you know, unlimited options of food, and I just enjoyed it. Honestly, I didn't restrict myself. I just ate whatever I wanted to. And I felt good.

In addition, Jake (16) made connections between growing apples at home, thereby playing a role in our current food system, and avoiding some of the environmental costs.

> If we grow some of our own food, there are no pesticides; it doesn't need to be shipped. There are no questionable labour farming practices used or involved in getting the food to us. And I think it's just sort of a cool idea that we are responsible, you know, for the entire farm to the plate process of bringing this food to my family.

Many shared their 'aha' moments that occurred to them in the space of time between the first and second interviews. These observations tended to be on a deeper level than the initial meetings. Jenna (18) relayed,

> I think when we're talking about experience with food, I definitely think that the idea of eating meals together sort of informs an ideology almost of the significance of being together and having those moments and prioritizing human connection. And it's interesting, too, that eating is essential for us, and you know, so is human connection.

CRs appeared much more confident in their voice and willing and able to share specific examples of what it was they were trying to say as is increasingly evident in the following sections.

Food as Deeply Meaningful

Similar to initial interviews when participants remarked on how food could be a source of comfort and demonstration of love, second interviews often extended this idea, and they told stories of how food was a source of comfort at difficult times. For example, one young lady discussed how Taco Tuesday was so meaningful to her, because it started when she was a child, and her parents were separating. There was a lot of uncertainty in and around her life. Taco Tuesday was a constant presence, and it represented a connection with her father, which was important because she was transitioning from being able to see him every day to only scheduled visits. Aria (18) said, “Every Tuesday we had speed skating and right before speed skating we had Taco Tuesdays and I was just super excited for Taco Tuesdays because it was a good time for my family on my dad's side to get together because, at the time, we weren't able to see my dad often, just on the weekends”.

Another participant talked about how her grandmother was an excellent cook and you could follow her recipes, but the result would never be as good as grandmas. Marin (16) said, “She [Grandma] shows her love by cooking food for other people. So, she just likes to teach us how to cook”.

Cookies

Surrounding this theme, many participants shared stories about intimate connections with family members and loved ones that occurred because of sharing a special meal in a restaurant or something as simple as a homemade cookie together. Cookies may not be so simple after all. They came up several times throughout the interviews and were often referenced as a special gift received and stories of warm memories associated with the cookies were often shared in our conversations.

The theme of cookies appears to encapsulate a notion of a relatively simple cookie holding much deeper meaning. The act of preparing it for someone else conveys thoughtfulness and love. In addition, the sharing of the cookie prompted a deeper connection through time spent together and in conversation. In the first interviews, some of the participants shared observations that they revisited and extended upon in their second interviews by presenting them in their SHOWED documents and discussing them in second interviews and focus group discussions.

For instance, in the initial interview Lily (17) talked more about the mechanics of preparing food such as dairy-free recipes.

> I did some experimentation with low-dairy dessert recipes because I found in the fall my body just didn't like dairy very much. So, I experimented with vegan cheesecake, things like that. And I always like making cookies. And I tend to go with cakes every now and then.

In the second interview she reflected on the potential significance of baking and sharing food, as demonstrated in her SHOWED document. The image represented in Figure 4.5 in conjunction with the excerpt from her SHOWED document (See Figure 4.6) exhibits how she is making connections between food and the relationships in her life.

Figure 4. 5

Warm Cookies to Come Home to

Figure 4. 6

Creating Bonds Together

	"How does this relate to our lives?" (Or my life personally)
O	Baking and eating the cookies together strengthens the bond I share with my sister due to the meaningful conversations that accompany them.

In another example, a participant described a teacher at her school who loves her students. When asked for an example of how this teacher demonstrates love, Marin (16) responded, "Some days she'll make cookies during their foods class in the morning and then she shares them with us".

Baking Therapy

Covid prompted unanticipated shortages of many supplies. Namely, baking supplies were running out in grocery stores across the country (Byron, 2021). Several participants discussed

how they resorted to baking more frequently during Covid because they had time to do so. When asked if she found herself baking more during Covid, Amy (15) said, “Oh, definitely. I think there was one week where I baked every day. So yeah, I definitely did more during Covid”. Marin (16) described how she started a bread-making practice with her friend.

> I went over to her house on Thursday after school and we decided we were going to make bread. It was a lot of fun. So, we decided we should do it more often. Then every Friday after school when we can, we go to each other’s house to bake bread together.

A theme of baking as a form of therapy and a means of dealing with stress was very prominent throughout our conversations. Amy (15) discussed how she finds baking very calming during stressful periods in her life. “I really love baking. It's one of my main ways of calming and grounding myself. I also really love painting and drawing as alternative ways if I don't have the means to bake”. Amy described how the process of baking itself is calming when she is really familiar with a recipe, and she is able to ‘turn off her brain’. When asked, “What is your favourite thing to bake?” Amy (15) responded, “Cinnamon buns, because there's so many steps and it's like a process that I'm really familiar with, so, it's just really easy to do it and I don’t really have to think about it”. Jada (18) described a similar sentiment when she talked about preparing a familiar recipe.

> I have this recipe that I got from school. I did foods and I really enjoy that recipe. So, I brought it home and I do it enough that I actually know what I'm doing. So, I feel like I’m in my comfort zone and I think that's what makes me enjoy it so much. But yeah, trying new things is scary.

Many participants described a process that occurred when they were working with a very familiar recipe. They found the act of baking allowed them to take time away from the pressures

of life they may be experiencing and focus solely on the project at hand. As an added advantage, the product (baking) of their efforts was often comforting as well and they received special recognition (and appreciation) for their efforts.

Cooking Takes Time – But it's Worth it

Several young people I spoke with acknowledged that they enjoyed cooking and baking and found the process and the result worth the effort it took to prepare. These same individuals said that their preparation time was sometimes limited due to their busy lives. Participants who acknowledged that they baked more frequently and enjoyed the process felt very strongly that it was well worth their efforts and listed a variety of reasons. Amy (15) said baking is worth it because,

> Not only do I get to eat delicious food afterward, which is always a plus. But it's like it helps me stay like calm. It makes others happy. So, there's way more benefits than things that go against me baking because sure, some recipes can take quite a while, but those are the ones that helped me the most and the ones that my family and friends enjoy the most.

Marin (16) added, "Making food from scratch is definitely cheaper and healthier than buying it in a fast-food restaurant, even though it takes longer to make, the end result is worth the extra work put in" and, "I would like to see people feel more motivated to start making food at home whether it be as a tradition with friends or a way to relax". Kevin (16) shared,

> When you make your own food, not only can you balance your nutrition better, but it also kind of makes you happy in general, to be eating something that you know you made. It tastes better I find, and it really lightens up your mood and it gives you a bit of more motivation to keep going on with things.

Sushi

In initial interviews, the topic of sushi came up frequently. Participants talked about sushi being a favourite food. They discussed how they found it very satisfying in several ways including that they felt good about eating it and they felt it was healthy and agreed with their bodies. It seemed to be associated with a spirit of adventure and a willingness to try something new. In addition, they appreciated the detailed presentation characteristics that are frequently typical of sushi, such as the contrasting colours and designs. Also related, was the idea that when you went for sushi it was often a special occasion or celebration like a birthday or significant event and did not happen as frequently as trips to other more typical restaurants. Some participants talked about the experience of going with someone else and sharing the time with them as being what was most impactful. “I get it [sushi] every year on my birthday and it's just my favourite food. Also, I have some good memories alone in the restaurant with my mom eating food and it's just nice and brings back happy memories” (Jane, 14).

Close Ties to Agriculture

Fittingly, regarding the stalk analogy as being a conduit between the root system and the flower, participants with agricultural experience discussed how the production of their own food was beneficial in integrating all parts of their lives resulting in better personal and environmental wellness. Participants who had experience with gardening or interacting with the production of fruit or vegetables in some capacity such as picking berries, growing tomatoes, or picking apples from a tree in their backyard, spoke about how significant and seemingly beneficial it was to eat something they had a hand in growing. When they felt they had a part in the process, there was a certain kinship with the product they produced. Kevin (15) talked about how he put in a lot of

work to transplant an apple tree that was struggling in hard soil and expressed how rewarding it was when the tree flourished in a new location. He said,

> This tree used to be horrible. But now, it grows nice apples that we turn into apple cobbler and applesauce. I just like it because it's so fun to see; you put so much work into this right? And then you finally get to see the rewards of it.

Everything is Interconnected. In addition, Kevin (15) talked in detail about the interconnectedness of the ecosystem on his farm. For instance, he discussed how introducing pollinators improved his family's tomatoes and pepper crops and how llamas are protective creatures and will fend off threats to domesticated animals under their surveillance. Kevin (15) said, "We got to see how directly related the bees and pollination are to plants because as soon as we got bees, we had so many more tomatoes, peppers, squash, and pumpkins. It was really cool to see".

Home-grown Food is More Nutritious. Many expressed how they felt home-grown food was more nutritious than its counterpart purchased at the grocery store and additionally, that it was far superior in freshness and taste and had the added benefit of not containing additional preservatives and chemicals from treatment in production. Jane (14) shared, "I don't know… there's something refreshing about having chives from the garden and putting it on your food and stuff. I always find that they taste better too because they're fresh". Dani (15) described how she felt about the food her grandma grows in her garden, saying "I do feel like it is healthier, and you just feel better about eating it in some way, you know?" Chris (17) said, "It makes sense to buy local. Sometimes it might be a bit more expensive, but most of the time the food is better quality and tastes better".

Making Connections with the Land. Young people whose families had close ties to agriculture were far more likely to express concerns about the production of food such as water shortages and pesticide use. Rural individuals with agricultural ties had direct experiences to share regarding how water shortages affected their families. One participant discussed what he felt was a societal disconnection between how we do not value our land and water supply as described in this passage. Kevin (16) said, "Because out here in Alberta, there's so much farmland, but it isn't really used efficiently all the square footage, there's so much wasted and so many fields just go dry with salt because people don't take care of them".

Kevin also commented on how people in general tend to take water for granted which is exemplified in the following statement. "People out here (Alberta) just assume that the dams that bring water from British Columbia, they'll just never run dry and the aquifers they will magically fill up with water again" (Kevin, 16). Dom (18) also has ties to agriculture and shared the following distinction between rural and urban living.

> Living in a rural area there. Things are a little different with water. We do not drink our water out of a tap. We have a water cooler. So, we have to get water. We have a well that could dry up. There's a water line that comes from the nearest town hooked up from the line to our house. We were petrified in the summer when they said they were going to turn it off in August. Oh, yeah. And we have irrigation. They said they were going to turn it off in August and we didn't have water for our animals and our trees. So yeah, it's a very critical resource.

Urban Youths do not Consider Water Shortages. In focus group discussions, participants who purchased most of their food from grocery stores did not share the same concerns about the importance of water required to produce food on a regular basis. For the most

part, the topic of water simply did not come up with urban youth. This prompted me to begin to ask them if they had experienced water shortages or if that was a concern for them. Most of the participants who lived in the city shared similar comments to Jamie (16) who said,

> I have never experienced a water shortage. I guess I haven't really been concerned about it. I mean, in southern Alberta, it does get pretty hot in the summers. And I know sometimes my grandparents were worried that their crops might not get enough water. But overall, I wasn't too concerned because I've just never really thought about it. I guess with water shortages the city can probably sustain itself. But I, I never really thought about that.

When asked whether she experienced a water shortage, Aria (18) said, “I don't believe so. There was like one time a while ago that there was something in the water. Something happened to the water. Where it wasn't drinkable or something. I can't remember but it was only there for a day or two”.

During the focus group discussion, urban participants acknowledged that they did not share the same close ties to agriculture and therefore the same concerns (agricultural) that some of the rural living participants did. Jake (16) said,

> I think it sort of depends on who you talk to because there are some people who own farms, they come from the country; those people definitely have a tie to it. And there are other people who live in the city and they don't have as many ties. I guess whenever we eat local foods we're sort of being tied to these farms.

Some urban living participants came to realize their food depended on the availability of water and felt that it was an oversight on their part and they would see it in a different light in the future. Lily (17) said,

> I find it interesting that people today put a lot of emphasis on protecting food and ensuring there's enough food for people but there's not that same emphasis being put on drinking water. But when you think about it, water is kind of the basis of most, if not all, of the food we eat.

Unfamiliar with Foraging Opportunities for Local Food. I also note that many young people who have lived in Southern Alberta all their lives are not familiar with the foods available for foraging in the area. They spoke about growing berries at home or picking them at farms, but only a few went berry picking in wild spaces. One participant shared a picture of chokecherries in focus group discussions. When the other participants were asked if they were familiar with chokecherries, Marin (16) responded, “I have no idea where they grow. Before now, I did not know they were a thing”. Celia (18) asked, “Where are the good spots to go?”. Chokecherries grow wild throughout Southern Alberta in several places along the roadside and in the coulees.

Apples

Apples came up in conversations frequently. In the same way that participants who had experience with agriculture spoke in familiar terms about the challenges of farming their food, people who had access to apple trees in their yards shared stories about picking apples and preparing several different recipes with them. They also connected this process with the larger food system and the role apples play in supplying food for their families and their role in helping to harvest and prepare them.

The picture of an apple tree (Figure 4.7) and the corresponding comment from the SHOWED document (Figure 4.8), illustrate how food from a grocery store is not considered REAL food and is perceived not to have the same nutritional value as home grown foods.

Figure 4. 7

Food as Nourishment, Not a Commodity

Figure 4. 8

SHOWED Reflection on the Apple Tree

	"How could this image educate people?"
E	Enjoying food that is grown or produced close to home can have a more positive impact on someone's view of food than products imported or commercially produced, as it allows food to be seen as nourishment as opposed to a commodity.

Lily (17) talked about how much she appreciates fruit from a tree in her back yard.

> I find if you buy apples in the store, you get the finished product, and you take them home and eat them or cook with them. But I feel like it means more when you watch them from blossom to apples, just growing for a couple months and then finally ready to harvest in the fall.

Jake (16) shared an image (See Figure 4.9) in his SHOWED document and said, "Many people have the opportunity to grow some of their food, and while it may not be the most efficient method of obtaining food, it is certainly cost-effective and good for the environment".

Figure 4. 9

Efficient and Good for the Environment

Another young person commented on how her family used apples grown in their backyard to produce their own applesauce. She talked about how much work was required to trim the apples due to insects eating them (See Figure 4.10). Celia (18) said,

> I suppose this image can show people what a crop of apples grown without the use of pesticides or chemicals looks like. It's also an example of food grown right in a backyard. I think there are lots of wonderful opportunities for people to grow their own food in Southern Alberta.

Figure 4. 10

Untreated Apples

Treatment of Apples for Retail Purposes. Apples also came up in another context, when one participant talked about how apples are being treated before arriving at the grocery store for sale. When asked, "Do you think about the process food undergoes?" Jane (14) responded,

> Not very often, but recently, I just learned that they put wax on apples and stuff like that. They use a spray to try and make it look shiny. So now I kind of wonder about that. Like why do they do it? Is it to preserve the apple and to make it look nicer?

Nature of Abundance. In general, participants who grew their own apples, spoke with enthusiasm about the nature of abundance and the ability to pick something from their back yard and eat it. They appreciated that it was not covered in harmful chemicals and that their families could preserve and create products that they were able to enjoy during the fall and throughout the year.

Vegetarianism

Of the twenty-five participants interviewed, only one person stated that she was a vegetarian. Her rationale for her dietary choices demonstrated careful consideration of her food philosophy in terms of not wanting to kill animals for food and wanting to eat sustainably. Erin (18) said,

> My philosophy is that I want to be a vegetarian. I don't know if the right word is moral compass, but I don't want to be eating something that had to be killed for me to eat it. And with that, I attribute something with an active nervous system. For example, I would eat mussels because mussels don't have an active nervous system. And even though it's technically sort of an animal, my philosophy is not to hurt and kill. My other consideration is sustainability. One thing I appreciate about my family is, they do eat meat, but they're super sustainable about it. My parents will often buy cows, from local ranchers, and then they'll have a cow; they knew their family, they knew how it was raised. They'll have it in the freezer and they can eat meat that way, instead of getting it from the store where it might be mass-produced and that kind of thing.

Erin also shared that she spent time with a family who was vegetarian and learned cooking techniques from them. In addition, she talked about how she enjoys cooking vegetarian and that it requires her to be creative. She mentioned that she and her family would take turns with meal preparations and her family ate the vegetarian meals she prepared often. Erin demonstrated careful consideration for her food choices and made connections between choosing not to eat animals and the importance of eating in as sustainable a manner as possible.

Is there Anything Related to Food that you are Fearful or Anxious About?

At one stage in our conversations, I asked participants, “Is there anything related to food that you are fearful or anxious about?” I purposefully left the question broad to see how participants would interpret the question and respond. Evidently, the question was construed in several ways. The following responses were shared by participants.

Fear of Way of Life

Raya (18) discussed how she is fearful that young people aren’t learning how to prepare their own meals and that they will rely on fast food as a regular diet.

> I'm kind of nervous about the future of food because I'm looking at younger generations not knowing how to cook compared to their parents. And going back to the idea that parents are making all the food in the household. There are not as many children making food. And I'm kind of worried that when we grow up, we’ll be ordering takeout constantly, instead of making our own food.

Fear of Trying New Foods

As stated earlier, most participants claimed a particular penchant for sushi and appreciated trying new foods. But one person did not share this enthusiasm for sushi. Celia (18) said, “I definitely am not into sushi or anything. I'm really not a fan of seafood and so I think the raw fish aspect kind of scares me”. Another young lady also talked about not wanting to try new foods, “I know for myself I'm not a big fan of trying new things because I am more of a pickier person. Once I find what I like, I kind of stick to it” (Lucy, 18). This approach was not typical of most of the participants who were more appreciative of trying new things and variety in their diet.
One participant spoke about how as a child, she was a picky eater, but as she has gotten older, she has come to enjoy being more adventurous with food saying,

> I love trying new food. As a child, I was really picky, and I didn't want to try new foods. And then it all started when I tried sushi for the first time. At first, I thought, I don't want sushi. Sushi is gross. And then all of a sudden, I tried it and I loved it. (Aria, 18)

This same individual is now an advocate for going out of her comfort zone and trying new things. Aria (18) lives in a blended family spending a week at each of her parent's houses. She has experienced different dietary struggles throughout her life. She knows intimately the challenges she faced with her body image due to pressures she felt stemmed from exposure to social media. Aria attained nutrition knowledge while attending college in a nursing program and presently feels happy with her self-image, diet, and lifestyle. Her advice for other young people who may be undergoing some of the challenges she faced is, "Just eat. Eating is fun. Don't restrict yourself from eating. Try to pick healthier things to eat, but just eat. If you want to order ice cream, order ice cream".

Fear of How Diet Affects Skin

Being as the participants are teenagers, many commented that they were concerned with the way that their diet may affect their skin. When asked if he had narrowed down the foods that seem to affect his skin, Jamie (16) remarked, "Mostly it's cereals, where there's lots of processed sugars. That makes my skin hurt a lot. So, I can't eat really processed foods. I try to stick to as natural as I can". Ava (15) said, "I know being a teenager, what I eat affects my skin a lot. So, I want to think about that and not have too much sugar because it really affects me right now". Not all young people were making connections between diet and skin condition, but several were able to make direct connections and shared how they avoided certain foods in their diet.

Fear of Ingredients in Food

One young girl commented that she is fearful of the widespread availability of sugar. Ava (15) said,

> How easy it is to consume too much sugar? You know how easy it is to just have sweet things lying around and to eat them really quickly without really knowing what you're doing. I think I'm scared about that. Just how easy it is to consume so much sugar.

One participant talked about the fat content of certain foods. For instance, Kaley (17), who talked candidly about struggling with an eating disorder, described butter as being a fear food, "I don't like eating butter on things. I feel like butter is fear food. I will try to substitute it for as many things as possible".

Fear of Making Others Sick

Some CRs expressed concern about preparing and serving foods that might make others sick. Ella (15) shared cross-contamination concerns.

> Sometimes I have had to cook chicken and I don't like doing that because I'm kind of a germaphobe. I don't like touching raw meat and then I try not to touch anything, and I do get a little bit anxious mainly with chicken. Just from diseases like salmonella and whatnot. It kind of worries me. I have sometimes cut it up and helped put it in bags but I don't really cook it so my mom will always check it first. I know she has experience with that. So, eating it doesn't worry me - it's just like handling it that kind of worries me sometimes.

Kevin (16) shared the following fears he experiences.

> On a small scale, I would say that when a potato is grown in the sun it grows green and that means, it grows toxic, so animals don't want to eat it. As I harvest potatoes, there's always a fear that I might accidentally put a really green potato in and make somebody

quite sick, but, if you're talking larger scale. I do worry about the sustainability of like, almost 8 billion people on the planet.

Fear of Changes in Diet

Some participants talked about how they were fearful that people in society were eating fewer fruits and vegetables. Ava (15) stated,

> Probably just how it's becoming normal to not consume enough vegetables or fruit. Just looking at some lunches from other people at my school. It's a lot of packaged stuff, like cookies, chips, and granola bars, but not granola bars that are nuts and fruit, more just chocolate covered with caramel and different sweet items. So, I think I am a little bit scared over how we're not eating enough of the right foods and how the industries that are dominating right now are really the ones that are sending out pre-packaged foods.

The same individual noted that she felt that when her peers started preparing lunches themselves, they might be eating healthier because they were taking the time to prepare and add fruits and vegetables. Ava (15) said,

> It's kind of strange because I think it's gotten a little bit better because a lot of kids at my school in my grade are preparing their own lunches. And it's interesting because I do see that they choose a lot of healthy food for themselves. I know that some of my friends take the time to wash and cut vegetables for their lunches in the morning, which is cool to see.

Fear of Food Supply

There are varying messages arising when it comes to our food supply. Initially, participants in this study talked about trusting the Canadian government and felt that the government has checks and balances in place to protect our food supply. Jenna (18) said,

> There are some nations where things like that (mad cow disease) are more common where you do have to worry about getting diseases from the food that is available in the grocery store. And in Canada, we have really strict restrictions and a lot of stuff in place to prevent that sort of thing.

Yet, as conversations progressed it was revealed there is some confusion in understanding our Canadian food supply as is evident in a conversation I had with Marin (16) who talked about how it can be safe while acknowledging that they are unsafe at the same time. Marin (16) said,

> I mean, if they sell it in grocery stores, it's probably safe. It's pretty safe to eat, but it's not necessarily the healthiest, you know what I mean? So, some foods can have more chemicals in them and may not be fully naturally produced.

John (18) who works in a 7-11 convenience store, marvelled at the lack of nutrition labels on Slurpees.

> I feel like not only do they contain a lot of sugar, because that's all they are, is water and sugar dye, but you don't really know what's in it. If I make Slurpee, I take a blank carton and put it in the machine. There's no nutritional labeling anywhere. I think that's the weirdest thing. Of all things, it should have a nutritional label because doesn't that mean a company can just throw whatever they want in there?

Additionally, John (18) talked emphatically about how blue is a made-up colour.

> Lots of candy foods, and Slurpees included, are blue and there's no blue. Blue is just a made-up flavour. There's no fruit, maybe blueberry, but those aren’t even really blue. So, I think it's just a colour to catch the eye. And they make up an imaginary fruit to go with the colour.

Free Range vs. Store-bought

In terms of the quality of the food, a few participants raised concerns. For instance, one young person who is accustomed to free-range eggs commented on the differences she felt between free-range and store-bought eggs.

> Eggs for sure taste different when they're not from a store -- if they come straight from a person who literally took them out from under chickens then to me, they taste better right away. And just knowing that they're healthier, like they didn't spray anything on them to make them last longer, look different or anything. (Jada, 18)

There doesn't appear to be one concern that stands out from the rest that caused participants to be fearful or anxious. Yet, there does appear to be a range of concerns and uncertainties that arise when food is discussed, demonstrating the participants' realm of insight when pressed to consider the actual nature of food.

Fast Food: The Job

Participants who worked in fast-food establishments did try to choose healthier menu options because they were frequently eating the food from the restaurants they worked at. Celia (18) described her meal of choice at the restaurant where she works.

> It's the chicken bacon wrap, and it's just got tomatoes and lettuce and mayo in it, but I usually tell them "Really light on the mayo" because I punch in my own order. And I eat it every day. I don't feel like a lot of sauce on there too.

Guilt Associated with Working in the Industry

Celia also discussed the guilt she felt at the realization of the sheer amount of garbage the industry produces and their role in handing it out through a drive-through window.

> I think about drive-through culture, like McDonald's. It has to be so fast that you end up producing a lot of waste even just the bags that you hand people with food in. They get the bag and then they immediately take this food out, right? And they use these bags for 30 seconds maybe, and then it gets thrown in the trash. (Celia, 18)

In the focus group discussion, Marin (16) concurred with Celia's observations and said, "Where I work, we use a lot of plastic. And there hasn't really been any talk about transitioning to more environmentally friendly things such as like paper straws. I've also noticed the insane amount of plastic waste in the food industry".

Celia (18) revealed a sense of helplessness at being the conveyer of what she understood to be a destructive practice for the environment.

> I have to do my job right? So, I can't spend all that time thinking about all the food we're wasting or stuff because if I did, I would probably not be able to survive my job. I just have to focus on handing out the food and not really thinking about stuff.

Celia (18) shared feelings about how she feels guilty for the choices she makes at work each day.

> I feel guilty because I'm the one at the drive-through window passing stuff out. And sometimes it's decisions that I'm responsible for. For example, drink trays. At McDonald's, you don't ask for a drink tray. If it's three or more drinks, you automatically give one (to keep things moving quickly). I'll drive home after work, and I'll see the road littered with drink trays. Thankfully those are cardboard so it's a little less but that also means that you know, like the cardboard isn't getting properly recycled or disposed of and stuff. I feel partly responsible. Even though there's nothing I could do because all that stuff occurs at way higher levels than me. But I do feel kind of guilty sometimes.

Young people working in the fast-food industry talked about feelings of guilt they had every day in terms of garbage produced and how little control they had over the situation.

Fast Food: How it Makes you Feel

The topic of a fast-food diet did come up at various times in the interviews and the focus groups but relatively infrequently as an area of major concern. Many participants admitted to having struggled with over-consumption of fast food at one point in their lives but felt that they had achieved a better balance when I spoke with them. Most contributors in this study mainly ate regular meals at home with family and only occasionally ate at fast-food restaurants when short on time or as a break from meal preparations.

Several participants talked about how they noticed their bodies reacted to fast food and that they would experience physical responses such as bloating, heartburn, and generally feeling ill after eating fast food. For example, one participant said, “If I want to treat myself to a burger or something like that, sometimes, it feels good when I'm eating it but then afterward, I really don't feel well” (Celia, 18). Amy (15) said, “It's nice to have takeout as a treat. But I prefer homemade meals. They don't make me feel sick. They often taste better. And they might be a lot of work, but it's fun”. Aria (18) said, “I will quickly grab something from the cafeteria instead of making my meals or I'll grab something from fast food place during my breaks instead of making my meals just because I don't have enough time”. Fast food was mentioned in conversation as a means to fulfill nutritional requirements, but seldom as a preferred meal.

Fast Food Establishments as Part of our Commercial Reality. In general, participants tended to accept fast-food establishments as part of their commercial food reality and did not question why there were so many. Of the participants interviewed, most accepted that fast food could be part of their diet if used to supplement diets on occasion, but that it was important that it

not be relied upon as part of their regular diet. Luke (17) remarked on the prevalence of fast-food establishments as a societal concern and shared an image (See Figure 4.11) and corresponding comment from his SHOWED document (See Figure 4.12).

Figure 4. 11

What our Lives Have Become

Figure 4. 12 Open your Eyes

	"How could this image educate people?"
E	It educates people because it shows all in one place what we have everywhere and that we should be going more local and eating better foods; it kind of opens your eyes to what our lives have become.

Processed Food

In general, processed foods, described as food that has been manufactured and that you bring home in a ready-to-eat state, were used in most homes regularly. As with fast food, some participants identified concerns with food in general and noted how it could make them feel ill if they consumed too much sugar or processed foods. Ella (15) recalled, "Sometimes if I eat too

much sugar or unhealthy food, I'll just feel tired or my stomach will hurt, or I will be lazy when I eat a lot of unhealthy stuff".

Although most of the participants I spoke with believed their families ate homemade food daily, there was some confusion as to what constituted processed food. This confusion is exemplified in a SHOWED photograph (Figure 4.13) where the participant displayed a meal eaten at home largely made up of pre-fabricated products, as a meal that was homemade. This begs the question of what young adults and adolescents understand by the word "homemade".

Figure 4.13 Homemade vs. Prepared at Home

Homemade vs. Prepared at Home

Processed Food May Reduce Food Waste. One young person surmised that processed foods could be a means of reducing food waste since each item was individually packaged, and the consumer could partake in a portion as needed, resulting in less food waste. Celia (18) said,

> Most people live busy lives and so they need to take advantage of frozen and premade foods sometimes. Lots of food in the grocery store is produced, packaged, and marketed in this way. Everything that M&M sells is frozen! I like to think this eliminates food waste if food is designed to keep longer and can even be used over time.

Additionally, most participants acknowledged that they used processed foods for their meals at least in part by adding accompanying sides or dishes to it to save on time.

Ramen Culture

In a second interview, one young man noted the societal impact of Ramen and described how he felt that it represented a statement about our current society. John (18) discussed Ramen as being culturally accepted with almost a cult-like following.

> It's a staple of North American culture. You will see this stereotype of university students purely living on this. There's been documentaries and stuff about how prisons use ramen as a type of currency. And it's really interesting how massive a part ramen has in our culture.

He also pointed out that it contains a lot of calories due to being flash fried to make it convenient to prepare and the inclusion of salt and chemicals as detracting from its nutritional content as well.

Concerns with Fast and Convenience Foods

In general, participants have various concerns with fast and convenient foods ranging from health, effect on the environment, and the societal impact of convenience foods. The individuals in this study recognized that they rarely ate in fast food establishments and relied most heavily on meals prepared at home. There did seem to be some confusion between what constituted a homemade meal for some participants, and meals prepared at home.

Quality of School Food

Many individuals expressed concerns about the quality of food available in schools and noted that it was very much akin to fast and processed foods. They stated that it should only be eaten occasionally as a supplement to bringing your own meal due to the expense and lack of

healthy options available. In reference to his school canteen, Jake (16) said, “You’re sort of expected to bring your own foods and supplement with stuff there. Overall, I'd say it wasn't very good. It’s all very processed. It's not the kind of thing I want to make a whole meal out of”. Some participants felt that schools should be providing healthier options for their students and stressed the importance of food for overall health and improving the brain’s ability to focus and think better. Jane (14) said that she would classify the food at her school as “unhealthy” and added, “I don’t think I have ever seen anything healthy on the menu”. Jake (16) commented on his school food.

> It's hamburgers and hot dogs. I feel like over time, that wouldn't be a very good diet, especially every day. You know, you'd probably start feeling sluggish and probably stop performing as well. In athletics, at least that's what I assumed would happen. So definitely, I would try to avoid eating those meals all the time.

Another person mentioned that she felt the high school she attended should be providing food for students similar to an elementary school she had attended previously. Nikki (18) shared, “I think it would be pretty beneficial if that (a food program) was put into place in more schools because a lot of kids don't have food and you NEED food to function at school”.

Most CRs shared the sentiment that school food should only be eaten occasionally if at all due to expense and lack of quality. They also acknowledged the importance of healthy foods being available for all students to function at their best physically and academically.

Food Allergies and Intolerance

Lactose and Dairy

When asked, “Are there any foods that you try to avoid, or that you notice do not agree with your body?”, several people responded that they experienced lactose intolerance to some

degree and that it manifests itself in different ways, such as coughing, rashes, or a feeling of general bloating. Nikki (18) says, “My whole family tries to stay away from milk. We don't fully, but we drink milk alternatives. We still have cheese and stuff, maybe ice cream, but we do stay away from milk because it doesn't agree with most of us”. Another CR commented on her reaction to dairy. “I was drinking a lot of dairy, and I was having stomach issues. I was breaking out a lot and then I cut that out of my diet. And my skin cleared up and I was feeling a lot better and more energized” (Lily, 17).

As mentioned earlier, many young people commented on how they noticed direct reactions between the foods they were eating and their skin’s appearance. For instance, if they were eating more junk food than usual, they would notice breakouts on their face and skin. Correspondingly, when they were eating healthier, their skin would reflect that as well and remain blemish free.

Youth and the Art of Cooking

Almost without exception parents are doing most meal preparations in the families of the young people who participated in this study. The youth may have certain roles and responsibilities associated with mealtime such as setting the table or doing the dishes, but cooking main meals was most often undertaken by parents. For instance, when asked who does the majority of the cooking, Ella (15) said, “Usually my mom or dad will make it and me and my brothers will help do the dishes and clean the kitchen up after eating”. Some young people were occasionally preparing meals and more often baking, but these efforts were seen as being by choice, rather than an expectation. Most participants had a similar response to Dom (18) when asked if she contributed to the cooking at home. She said, “I help more with the prep stuff. My parents do more of the actual cooking but I do try to help”.

When participants were asked if they felt they had the skills to prepare meals for themselves and their families the responses varied. While some people felt comfortable others were more apprehensive. Dom (18) said,

> I can manage easy things. That's something that I will want to get better at as I get older. I've always been in a pretty good position where I've just been busy doing something else and someone is always making the meals. I've never been too concerned about cooking for myself.

Jamie (16) provides another typical response, “I should cook, and my parents want me to cook. But I do not cook. All l make is toast and beans”. They seem to appreciate that cooking is something that they will have to learn at a future point, but just not yet. Jamie (16) added,

> Yeah, I'm going to have to learn how to cook but I haven't decided when. I'm good at following instructions. So, I assume I'll be good at following recipes. I watch my parents cook when I'm waiting in the kitchen and stuff. So, I know how most of it's done. I do help out once in a while but not enough to know. So yeah, I am concerned about the future of cooking for me. I will have to learn at some point but I'm not sure when I will. Hopefully, I will be able to pick it up decently enough that I can cook for myself.

Focus Group Discussion on Cooking Skills

Several CRs shared their opinion on the lack of cooking skills of either themselves or their peers in a focus group exchange. They were asked, “Do you think most young people would be comfortable preparing meals for themselves in the near future?” Many expressed concern that they and their peers are not prepared to do so. Chris (17) responded, “I was back in cooking class last year. I had to help four people learn how to make eggs. And it was kind of weird. I expected

people to know how to make eggs. I suppose people just don't know how to cook I guess". Celia (18) has graduated from high school and will be going to college soon. She described her cooking experience.

> I think if I were living on my own, I would rely on a lot of the pre-packaged stuff. I'd be way more likely to buy a box of hamburger helper than to buy the pasta and the ground beef and then make the sauce myself and everything so I think if I had to buy ingredients and make stuff from scratch, I guess I would struggle more than if I was able to buy Kraft dinner and pancake mix and all that sort of stuff.

When asked how she would prepare a sauce for a stir-fry, Raya (18) said,

> Sometimes we'll make them from scratch and then sometimes I will purchase them. It depends on if I'm making it or if my mom was going to be helping out. So usually if I'm making it, I won't be making it from scratch because I don't know really know how to do that. My cooking skills aren't great. But if my mom's making it, then it will be from scratch.

Some participants felt apprehensive and commented that their diet may suffer as a result of a lack of cooking experience. When asked, "Are you ready to go out and cook for yourself and take care of yourself? Are you confident with that?" Celia (18) responded,

> I don't think so. I can cook like one meal, but it does seem intimidating to have to cook every meal for myself. I could do pancakes and Kraft dinner and stuff but to maintain a healthy diet… with meat especially, I need more experience with because I can cook ground beef and that's about it.

Lack of Desire. For the most part, participants spoke about a lack of time due to other commitments rather than lack of desire to cook. However, a couple of participants were vocal

about not wanting to cook at all and were happy to let others do this task for them. Jamie (16) said, “I don't really know how to cook and I feel like it takes a long time. And I get bored cooking. So, it just doesn't seem like a very pleasant activity for me. Instead of cooking I just let my parents do it”. A similar sentiment was shared by another participant who felt that she was forced to help prepare meals.

> I'm kind of forced to participate because my mom wants me to help her. But sometimes I don't really want to because I want to do my own thing and not help cook all the time. But my mom says it's good for me to have cooking skills so that I'll be ready when I move out. (Dani, 15)

There were a few participants who claimed to be comfortable in the kitchen. They were typically young people with younger siblings who were required to help cook meals or had experience cooking with parents or grandparents in the kitchen.

Shopping

As this research took place during Covid, many young people acknowledged that their shopping patterns had changed. For example, in the past, they would have participated more in the shopping for family meals than they have for the last two years. As Covid restrictions eased, participants were beginning to go shopping with their parents again. Some expressed how much they enjoyed it as a means of spending time with a parent they may otherwise seldom get to see.

> I feel like sometimes grocery shopping is kind of time where I can spend with my mom because I usually don't get to see her that often. So, it's kind of relaxing. It's not that hard. We just kind of talk. It’s meditative for me as well. (John, 18)

Time and Meal Planning

Participants acknowledged their diets often suffered because of lack of time. Most of the young people I talked to said that their families planned meals but what this planning looked like varied significantly between families. Some young people said their parents would prepare meals on a day-to-day basis based on what they had in the fridge, the time available to them, and what the family felt like eating.

Three individuals said their families practised more regimented planning and they had a designated meal preparation day on the weekend and prepared food in advance for the week ahead as is demonstrated in Figure 4.13. The young people who lived with families who regularly planned meals felt that time invested in meal planning resulted in less time being spent on meal preparation daily and a far superior diet overall. Raya (18) said,

> If you live a fast-paced life, it's hard to spend half an hour cooking a well-rounded meal. But in some ways with the idea of meal planning, you can take a few hours to make a large batch of something and then just eat it throughout the week. You invest your time and put the effort in early and then it's a lot easier for the rest of the week.

Figure 4. 13

Lunches Prepared in Advance

Most participants described a less structured form of meal planning where an item was pulled out of the refrigerator or freezer on the day of preparation. Ava (15) said,

> I hear my parents talking about who's going to do what tonight. Who is going to pick me or my sister up from our sports, that kind of thing. We'll also have a frozen meal ready to go. I think we have a frozen lasagna in the freezer right now that my mom prepared. So that's just a good backup in case we're not home in time to make something from scratch. But yeah, I'd say my parents are very organized. They always have the groceries ready. They always have some sort of plan.

Observations from a Blended Family on Meal Planning

Aria (18) lives with each of her parents for a week at a time and describes how meal planning changes from house to house.

> At one household, it is a weekly plan. Usually what we're going to have each week. I've tried to take one day a week that I will make supper but because I've been so busy, I

> haven't been able to do it very often. But my parents [dad and stepmom] will plan it out at the beginning of the week until Sunday. At my mom's house, it's a little different. We usually say, “Hey, what do we want to do for supper tonight?” Tonight, everyone was working late and got home late so we just ordered pizza. But if we're able to plan it out in the morning, we'll put out chicken to thaw or stuff like that. So, planning in the morning is more beneficial than just kind of planning it at night. So, here [at mom’s] it’s a little bit of last minute planning whereas, at my dad's house, it's a full week of planning.

Acknowledging the Benefits of Meal Planning. In addition, some participants who did not meal plan regularly acknowledged that their family talked about it, recognized the value in it, and planned to make it part of their practice at some point. Amy (15) said,

> We're always talking about how we should (meal plan) because it would make dinner time a lot easier to decide. But then, when we get around to grocery shopping, it just sort of slips our minds. Sometimes we do. We decide what we want one day and then we'll get it for that day. But then the rest of the week is just sort of what do we have on hand and what can I make with this at times.

For the most part, all participants acknowledged that having a plan, and preparing meals in advance would be ideal. Some families made a practice of taking a day and preparing meals in advance to lighten the workload throughout the week; others planned the evening or morning meals based on what was available in the fridge, and others took a different approach where meals were prepared as needed and may require a trip to the grocery store or ordering out if short on time. All conversations turned to challenges faced, work involved in preparing healthy meals, and lack of time to do so.

Dietary Influences

When asked who they looked to for direction on food choices, many participants immediately said that their parents had the greatest influence on their food choices and provided examples. Several individuals responded with some hesitancy and had to think about who was most influencing their choices. At this point, some young people discussed sources outside of their homes such as coaches, teachers, and the Canada Food Guide. Jamie (16) said,

> I think it's split between my parents and my coach. My coach has really taught us about the importance of eating properly. But my parents too. I think they also had a very big impact on my food. They like to eat healthy. They watch their diet a lot. They're making sure they're not drinking and eating the wrong foods. Because my dad and my mom, they're also both very active so they know what they're doing with their bodies and their food. So yeah, those two are the biggest groups that have influenced my food.

Another participant felt that her parent negatively influenced her food experience and that she felt the anxiety she experiences surrounding food may have stemmed from early lessons from her mother. She talked about how her mom would try fasts and cleanses but didn't do a very good job of communicating with her the purpose and intent of her dietary changes. Kaley (17) said that her mom probably influenced her most.

> But not in a good way. When I was growing up, she would always go on juice cleanses and talk to me about how I was eating and what I was eating. And I don't think it influenced me in a good light. She would always say that it's fine as long as you eat in moderation, but she never told me what moderation is. So, I just assumed it was as little as possible.

In addition to these influences cited in their lives, the majority of the participants recognized that, in some way, they were also personally impacted by social media, in both positive and negative ways as will be identified in the next section.

Deeper Still: The Root of the Matter

Going back to the earlier analogy of the root of the sunflower representing the symbolic root that holds the essence of the flower, there are some common threads that can be pulled from the discussions surrounding food experience. These threads range from the impact of social media on today's youth to a generally recognized need for more education surrounding food systems at all levels of education.

A few of the participants felt that they had successfully navigated these present-day challenges and talked about their journey to the other side. For this paper, this is referred to as 'the Awakening'. These people tended to be some of the older teenage females interviewed who had struggled with their body image as young teens and grew to become more self-assured and confident, as they got older.

In addition, a minority of individuals who were interviewed appeared relatively unscathed in terms of body image, anxiety, struggling with weight, and the current challenges presented by social media. By their admission, these individuals tended not to be as connected via social media as other participants and had a healthy background in nutrition training either through family members or knowledgeable coaches.

Social Media and Body Image

One of the most prominent themes discussed in every conversation had to do with the impact of social media on the lives of young people today. These conversations evolved to include how participants felt that social media and advertising had a burgeoning impact on their

dietary choices and were directly linked to feelings of anxiety that stemmed from insecurities about their body image and the unrealistic attempt to compare themselves with images and videos of celebrities prominent on social media sources. Many interviewees spoke about feelings of wanting to look differently and to look more like celebrities who they saw on social media. Even though they could identify that they felt this way and why they felt this way, it did not change the way that they felt. When asked whether social media or advertising played a role in her food choices, Kaley (17) responded,

> Absolutely. Yeah. My Instagram is full of health foods, and it always shows someone really skinny with an ideal body type. The trend is, it shows what they eat in a day and stuff like that. I think to myself that if I eat less than that, then I will get the results of that person's body faster. It doesn't play a good role [social media], or if I see someone who is like, prettier or skinnier then I'll think that I need to work harder.

Many participants talked about bouts of insecurity, self-doubt, and being ashamed of their bodies. They spoke candidly about limiting their food intake and resorting to binge eating as a result. Raya (18) reflected on her own experience.

> Personally, on social media, seeing all these different people, it almost seems like I want to up my standards, my beauty standards. I look at it that way, seeing all these beautiful people and thinking I want to be like that. And so, I struggle with food in that way, it connects, body issues and wanting to be this type of person, and feeling like, maybe I don't want to eat because I see how beautiful this person is.

Everyone Could Relate to These Concerns

This was a pattern that was repeated often throughout the interviews. Even those who felt that they did not personally struggle with their diets knew many peers who did struggle with their self-image and consequently self-worth because of a negative body image.

When asked why she felt young people were struggling with their relationships with food, Raya (18) said,

> I have friends who are trying to gain weight and are struggling with that, and they just don't know how to get that much food intake. They're eating as much food as they can and thinking that's going to help but they still aren't gaining weight, and they're struggling in that aspect. And then on the other side, I have friends who don't want to eat as much food because they want to lose weight but then it's a bad relationship with food in that aspect. So, I've seen both sides of all different types of stories revolving around relationships with food, like the difficulties of it. Definitely, I think in my age group, people struggle with food nowadays.

Social Media Targeting Young People

Amy (15) talked about how she felt social media was targeting young people's choices from a very young age.

> Right now, there's a trend going around with these fidget toys called poppets. And they make very sugary, unhealthy foods with them. And it's gotten to the point where it's even cooking accounts I used to really like, that's the only thing they're showing right now. And young people, especially younger kids who are watching those videos, will be influenced by them and think that that is what is normal to eat.

Amy (15) also added that she feels parents should be responsible for monitoring their young children.

> Parents are giving it (social media) to their eight and nine-year-old kids**.** They are giving them Instagram, Tik Tok, Snapchat, and Twitter, and saying, “Have fun”. I don't think that should happen because of how many negative influences are on social media. Especially if those parents aren't monitoring their kid’s social media accounts or what they're doing online.

The young people in this study talked about how influential social media was in their lives and some expressed concern that it was starting at a very early age when parents provided their children with social media accounts and did not monitor them.

Wanting to Appear Perfect May Lead to Anxiety

Several participants spoke about the impact of social media and the anxiety they felt associated with posting pictures of themselves online. There seems to be a common theme of putting their best foot forward and holding themselves to impossible beauty standards that surround them through social media every day. Celia (18) said,

> I think if you're not aware when you're browsing social media, and you look at your friends’ profiles, and you see oh my gosh, everything they do is so perfect because they only put their best moments out there. And so, if you're not aware, you kind of get caught up in thinking, “Wow, everyone's lives are so much better than mine!”

A few participants talked specifically about the angst and uncertainty they felt when trying to decide whether to post a picture of themselves or a comment. Kaley (17) said,

> If I post anything, even if I comment on a friend's Instagram post, I will have a constant fear of what other people think of what I said and or how I looked in a picture or how I sound in a post that I posted. And often I will post something and then overthink it a lot and then take it down immediately because I'm scared of what other people will think.

These young people expressed concern about the pressures they feel when it comes to posting pictures of them online. They also talked about comparing themselves to others and the fear of not measuring up.

Dietary Struggles

In general, anxiety to appear a certain way leads to negative body image and consequently dietary struggles. As mentioned, the topic of diet and weight was a relatable topic to all females in the study. A few girls acknowledged that they did not share concerns with their diet and weight, but even if they did not personally struggle, they could relate and described a close friend or an acquaintance who had confided that they did. Many of the female participants did talk about how they felt compelled to watch their weight on an ongoing basis and were greatly impacted by small movements on the scale.

Kaley (17) described how she tries to control her weight.

> Looking on social media if someone says something or someone mentions someone who I think is in really good shape, and they mention their weight, I will try to get to that weight. And right now, I'd say the ideal weight is 115 to 120 pound-ish.

Some participants discussed difficult periods of their lives when they struggled with their weight and what it was like to have an eating disorder. Even though they acknowledged that they knew they had a problem, they did not appear to 'own' that problem but rather discussed their diet as though it was out of their control or something they were observing from a distance. When asked if she is aware that there are different body types, Kaley (17) responded,

> I am and I should listen, but I don't. I'm aware that a lot of it is genetics. But I will still push myself to look like someone else even if it's genetics. I will still convince myself that I can get myself to look like that.

When Aria (18) described her self-esteem she said,

> It’s definitely not the best. I have had times where I've had to delete apps because of this. Honestly, I've been eating less because of school and how much I've been doing, and at first I thought it was a good thing. Because I might start looking like these people [on social media]. And then I had to kind of take a step back and realize I want to be healthy. I don't want to be skinny because there's a difference.

Jane (14) described conflicting emotions she feels with regard to her diet and weight.

> There was this time where I didn't like eating. I don't know. I just didn't like it. But my parents showed me a picture of these girls who would stop eating because they were scared they looked too big and stuff like that. And that kind of scared me. So now I'm always really concerned about being healthy. It influences me to eat healthy all the time.

Dom (18) commented on the complexity of her relationship with food.

> If I eat too much of one thing one day or if I'm not eating as healthy as I'd like, I kind of subconsciously do this thing where I overcompensate by working out more or eat less or something which I know is not a good thing. But it is easy to fall into that type of headspace. So, I think a lot of people, in small and even big ways, my age have a weird relationship with food and stuff.

Changing Behaviours When out with Friends. Aria (18) also discussed how she would change what she ordered in restaurants when she was out with friends, because she was worried about being judged or how she would be perceived by her friends. She said,

> I think that being my age, I worry about what other people will think of me. So, when I go out on a social outing with my friends, I might eat less than I would with my family just because I’m worried about being judged.

The topic of being concerned with personal weight (either losing or gaining) came up for most participants at some point in our conversations. Their ideas usually identified that they personally struggled with weight or had close friends who shared this concern. It was clearly more prominent amongst the female participants.

Taking up Space

In addition, young people talked about the notion of taking up space as it related to their knowledge and acceptance of their place in the world. Many acknowledged that they struggled with their bodies in terms of body size and how it corresponded with their sense of personal value. This topic arose repeatedly in one-on-one interviews and focus group discussions. There was a consensus that societal expectations were that ideally young women should take up less space and young men should take up more.

Current Fashion Trends and Sizing

This notion translated to conversations about sizing in clothing. Raya (18) said, "There's not just small to large anymore. There's like 00 or, extra, extra, small things like that. The sizes keep getting smaller!" These participants discussed how sizing changed from one store to another and how their feelings of insecurity changed with it. Amy (15) said,

> I know what's going on because I've had people in my family working retail, so it doesn't really bother me as much as I know it bothers other people. But it also makes me feel annoyed - mad for those people who it will automatically make them think that they went up two sizes instead of them realizing that they are still the same size.

Several participants talked about how they could feel easily deflated and upset by the idea of wearing a larger size. One girl described how she felt personally attacked when a salesperson offering to bring her another size of an item, assumed she wanted it in a large. Jenna (18) said,

> I don't know if she meant any offense by it. It might have been just random, but I know internally I felt attacked because it's like, No! I fit perfectly into a small and even though I'm not large, that isn't really something that should have offended me if that makes sense? Because so what? But in my mind, I think, “no way”. I have to be small. I am a small. That's the way I am!

Amy (15) expressed frustration at clothing options available for young people and how she felt that options are influenced by the media around them.

> There's definitely quite a few social media influencers. There are clothing brands that push their agenda. Specifically, Garage in our mall, right? You look at their clothes and it's all tiny and they barely have any plus-size clothing options that would make the person feel comfortable in it. There are shows on TV, even now geared for young kids. There's Barbie and Tinkerbell. They all have that same body shape. The Disney Princesses - that's not natural, but it makes young girls want that. They see people looking like that from a young age and then as they get older, it gets pushed more and more onto them by models and shows, too. It's just not fair.

Social Media: Shining a Spotlight

Kendra (18) discussed how she felt that social media takes social issues and shines a spotlight on them, making them more prominent than ever before.

> I feel like with social media, everything is amplified. So, the good is amplified, but also the bad is amplified. I think that it brings things to the surface, things that already existed for example, the compulsive forcing of girls to be skinny and not take up a lot of space, to look a certain way to please men. It already existed but it almost just gets more in focus when you have young girls on social media.

Physical Space and Personal Voice. The idea of taking up space was extended by some participants to include the notion of girls not wanting to take up space in terms of having and sharing individual voice and that these individuals did not want to draw attention to themselves. Ava (15) shared,

> I think it [taking up space] can also be a behavioural thing. Where in your mindset, you don't want to cause any trouble you know, be a doormat in a sense. And I think that there's taking up space literally and just feeling intrusive. It could be behavioural.

Kendra (18) also talked about societal expectations of females versus males.

> I think women are kind of encouraged to not be the center of attention. Taking up space to me means not letting yourself be too big, not letting yourself get in the way of other people, not making yourself an inconvenience and I definitely think that's a message that's pushed onto little girls.

Not Eating can Affect Your Emotions. Raya (18) also drew attention to the physiological impact of not eating and said,

> When I hear 'not taking up space' in the moment, the first thing that comes to mind is if you don't eat enough it can affect your emotions too. And so, I've seen it with my friends, and I've experienced it - where I won't eat and then I become hungry and it affects my mood and it affects the people around me as well. Because I'm grumpier compared to when I am eating. So, that can relate back to, not eating enough and girls wanting to be thin, but also it affects their emotions and their hormones as well. You do need to eat consistently and the same amount or else it can affect your emotions, which can affect the people around you. So, it's kind of a constant cycle of just going through everything.

Males are Encouraged to Take up More Space. When this topic was brought up with the males in our groups, they admitted that they felt pressure to bulk up and that they should be doing weight training and following a corresponding diet that would help them build bulk and muscle. Jamie (16) said, “I think there is a general consensus around young people that I have noticed, that boys need to be strong, and that buffing up is cool. And it'll help you get a girlfriend faster, stuff like that”. On the whole, the low-key response by males was not comparable to the emotional outcry on this topic exhibited by females.

Social Media: Good and Bad

While the finger is pointed at social media as being the impetus for many conflicts in the lives of young people, these same young people were quick to defend it and point out that if it is used judiciously there is a lot to commend it. Kendra (18) talked about how social media can have a positive impact on individual perspectives. She said,

> You know how with friends your view of the world is so dependent on the people you surround yourself with and the environment that you create for yourself? I feel very strongly that it's that way with social media. It's important to follow productive accounts and individuals who are going to reinforce positive body images and positive messages and share healthy recipes rather than like the weight transformation journeys or the here's how you lose your belly fat and that sort of thing. It's important to surround yourself with good, especially in social media.

Figures 4.15, and 4.16, shows how two individuals shared very similar photos and rationales in their SHOWED documents. I have combined both responses from person 1 and person 2 into Figure 4.17 to demonstrate how similar the responses were and how effective the SHOWED approach was to generating feedback. These responses emphasized the notion of

social media playing both a good and a bad role in society and the importance of making educated decisions about its use.

Figure 4. 14

Hand Holding Phone

Figure 4. 15

A Second Image of Hand Holding Phone Presented in SHOWED Document

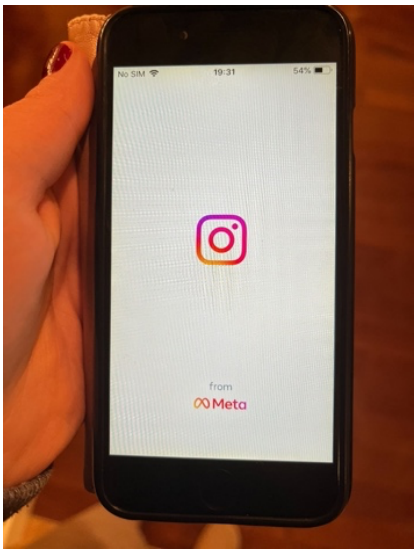


Figure 4. 16

Similar Responses in SHOWED Document Provided by Two Different Participants: (1) and (2)

S	**"What is seen here?" (Describe what the eye sees.)** 1) This photo shows someone going on their phone. 2) A female hand holding a cell phone as the Instagram app launches.
H	**"What is really happening?" (The unseen "story" behind the image)** 1) The unseen story is that we as a society are immensely influenced by the media. This influence plays a large role in our diets, our relationship with food, and how we view ourselves. While finding things like recipes or helpful tricks is great, the impacts of media, specifically social media, are not always positive. It is easy to feel bad about oneself when being exposed to media that may or may not be realistic. This type of media can negatively influence the viewer, and as a result, cause conditions such as eating disorders. 2) Social media can have a heavy influence on our relationship with food, [both] for better, or for worse. This photo is meant to describe what a powerful influence an app like this can be on our lives.
O	**"How does this relate to our lives?" (Or MY life personally)** 1) This issue relates to my life because as a teen I have to try to navigate social media. There is most definitely value to social media; however, it can also be exceptionally toxic. 2) Just like with friends, our experience on social media is highly dependent on who we surround ourselves with, and the kind of environment we create for ourselves. Social media can foster negative relationships with eating, but it can also create a safe space of body positivity and fun new recipes!
W	**"Why are things this way?"** 1) Things are this way because the goal of social media is the profit of the company, and oftentimes the humans' (using these tools) best interests are not put first. Also, everyone is trying to put the best version of themselves on social media, which is not in itself bad, but it is easy to forget that that is just one posed moment in a person's life. 2) Since a large portion of our lives is digitally based, social media can be just as, if not more, influential than traditional interaction.
E	**"How could this image educate people?"** 1) This image could help educate people by having them reflect on their exposure to media and how it affects them.

	2) It is important that individuals, particularly impressionable ones, understand that social media can be both an asset and a setback to healthy relationships with food, and it's important to understand how to surround yourself with the best information and influence possible.
D	**"What can I do about it?" (What would I like to see happen in the future?)**
	1) I can try to be conscious and monitor my own exposure to media, as well as try to help others to be conscious of their own exposure to media. In the future I would like to see social media become more of a safe space and media become less harmfully unrealistic in terms of diet, and body and beauty standards. 2) I will continue to use social media in a way that fosters a healthy environment for others, and I will encourage my friends to follow positive influencers online.

It is Up to You to be Discerning. On navigating social media, John (18) said,

> I think there's an individual responsibility to be able to enjoy the more comedic side of social media, but also being able to recognize, like someone's determination to complete a goal, or someone's desire to pursue something. I think you should have a mental filter going on whenever using social media so you can look at everything critically and see is it all banter. Or does it actually mean something?

Participants in this study shared examples of how social media can be good and bad, but there is an emphasis on critical thinking, and being up to the individual to use their time wisely and make educated choices.

Limited Social Media Use

By their own admission, a few of the participants stated that they only used social media to a very limited degree. For instance, one girl said that she only used her phone to text her friends but that she did not subscribe to any social media accounts. Jess (15) said,

> Yeah, I haven't really had a phone much and I don't really care to be on social media and see what other people are doing. I can text my friends to see what they're up to. And I just see my close friends and I don't really care what others are doing other than that.

In response to his observations about social media, Jamie (17) said, “I can't really say anything about social media because I really don't use it. It's not a big thing. Like yeah, I'm not on there enough to know what kind of advertising is done.” Both boys and girls who claimed to have little to no contact with social media also stated that they were not concerned about body image or weight gain.

Another young man demonstrated that he has been thinking about how our brains are evolving as a result of Internet usage and related a story comparing video game addicted 30 to 40 year-olds and 20 year-olds. John (18) said,

> Once I read an article on video game addiction, where people addicted to video games, that [who] were 30 to 40 years old, were able to quit the addiction in a month or two, but people who were addicted to video games, and were around 20 years old, and had been playing them for the entirety of their lives took six months to fully quit. The new and rising world of technology and social media changes the way that our minds act. What if I was born in 1960? How would that change how I think? Would it change my personality? I think about that and it's kind of interesting.

The individuals who stated that they did not use social media (or only to a limited degree) did not share common concerns about their body image and weight gain.

The Awakening

One theme that evolved during the conversations was an individual shift in perspective that resulted in changing behaviours. This process is referred to as ‘an awakening’. During this phase,

participants, typically the older females in the study, described how they realized that they no longer wanted to be subjected to negative self-image and the oppressiveness of the scale and rather opted for health and nutrition over letting it dictate their lives. The awakening often occurred after long periods of food deprivation, self-loathing, and dissatisfaction with their bodies and appearance. Participants who experienced an awakening demonstrated confidence in their decision-making when it came to dietary choices and developed a sense of respect and appreciation for their bodies. (See Figure 4.18.)

Figure 4. 17

Scale of Happiness

Kendra (18) described why she included the image of the scale in her SHOWED document as her number one choice to talk about in the focus group discussion.

> I actually didn't want to see what I weighed because I know that I'm just going to judge myself for it. And honestly, I'm in a place right now where I feel good about my body and for the most part, I feel good about the things that I eat. And if this number could be harmful in any way to my mental health there's no real reason that I need to know the number of my weight so long as I'm happy and healthy. And that's really what I wanted

> to emphasize in this photo is that it's not the number that matters. It's the scale of happiness that matters. (Kendra, 18)

At one time Raya (18) struggled with her body image and diet. She started working out with a friend and talked about how she has overcome earlier insecurities.

> It's taken me a few years though definitely to get to the point where I am now. I'm comfortable with my body. I still have days where I struggle with that, and I wish I could change my body. But I think I'd say I'm at a good weight and I'm healthy. I think that's what matters the most. I'm comfortable now.

Aria (18) is a nursing student who acknowledged that she has struggled with her diet in the past. She described how knowledge gained through a nutrition class she took in her nursing program is helping to change her outlook and her diet.

> I do catch myself thinking I'm in a calorie deficit. You know, that might mean I lose weight, but then I think, "Okay, how many of those calories are actually healthy calories that were filled with nutrients?" There's a difference between having a calorie deficit if you ate one burger or you had a whole bunch of salad and a sandwich and you're still in a calorie deficit but you're getting the nutrients you need. I just want to think about that. That's where I'm trying to direct my focus. But I still catch myself thinking about it [weight]. Definitely.

The awakening generally corresponded with periods of self-education and finding like-minded, healthy role models, either online or in their friend groups.

Participation in Sports

Benefits of Sports

The majority of the male participants and a few of the female participants in this study who said that they were not concerned with their weight, cited the fact that they were very active, had a high metabolism, (due to ongoing activity), and were aware of their dietary needs for their lack of concern. Most of these individuals identified as athletes and talked about the importance of quality food for peak athletic performance. This was an especially prominent topic amongst participants who practised running, weightlifting, and regular physical activity. Specifically, three individuals who were runners (and male), discussed how they received special nutrition training classes as part of the running programs they were involved in, and talked about how influential the programs had been in their lives and ultimately their performance as runners. They directly attributed nutrition training received because of their running training, to their confidence in knowing what and how to eat to meet the challenges of their particular sport. For example, when asked, "Are you aware of certain foods that affect your body and how they affect your performance?", Jamie (16) responded,

> With track, if I eat the wrong foods, I cannot run at all, and my stomach hurts really badly. So, I have to be careful with my diet and the past few years, I've narrowed it down quite a bit. So, it's very specific now and I know the foods I can eat and the foods that helped me develop my muscles and stuff.

Luke (17) is also involved in running and when asked about where his mind goes when he thinks about food experience, he described his thought process in detail.

> Well, I start to think about food. I think about snacking and it immediately kind of starts to go to what am I feeling? What am I wanting to eat? What should I eat? What do I have going on throughout the day? Like, if I have track practice, for example, that

> usually starts at five. So, I'm consciously thinking about it in the morning. I'll eat earlier like seven because I don't really eat too much in the mornings sometimes. So, I'll eat at seven, then eleven, then two to give myself a good three hours before it (practice) starts so that I don't get cramps and that type of stuff with my body.

Athletes Pay Closer Attention

Participants who referred to themselves as athletes tended to have a more developed awareness of their diet as it related to performance. Lily (17) is a dancer and attributes that to why she pays close attention to her diet. She said, "I think it probably has to do with some of my more athletic background, that I want to take care of my body, kind of be somewhat conscious of what I put in it". Lily (17) adds,

> I find personally, eating healthier foods allows me to fuel my body properly for the activities I take part in or my daily life. It generally helps me feel better and improves my performance. I find it does make quite a difference. It's hard to eat well if you're leading a busy life, but you realize you feel a lot better. Personally at least, I feel a lot better physically, if I make sure I eat a balanced diet.

John (18) explained why he feels the need to read labels on food items before consuming.

> I'm pretty health conscious. I like a little bit of control in my life. I'm a bit of a control freak. I like to know what I'm putting into my body. Especially if it's going to make it more difficult for me to exercise, or do something like that, or it's just going to slow me down. I'd like to make sure that that doesn't happen.

Dani (15) talked about the internal debate she experiences between being an athlete and her dietary choices.

> I want to eat really healthy because I'm an athlete and I don't want to be out of shape. But sometimes I just want to eat junk food because I want to, and I don't really think about sports. It's kind of on and off. Sometimes I want to eat healthy and sometimes I don't.

Participation in Sport Pared with Nutrition Knowledge. A few participants, who did not necessarily identify as athletes, felt that they knew a significant amount about nutrition because their parents were knowledgeable about it and taught them about nutrition throughout their lives. Jess (15) said, "My mom has done a good job making sure we have a balance of veggies, fruits, proteins, carbs and whatnot. So, I make sure I have a balanced meal". Participation in sport combined with knowledge of nutrition seemed to pare well to establish a desire to eat well and maintain a healthy body image.

Sport Can Also Have a Negative Impact on Body Image and Diet

Conversely, another young person who took part in judo at a competitive level talked about how her sport led to insecurity with regard to body image and weight. Erin (17) described her experience.

> Judo is a very weight-based sport. And so, for tournaments, you need to weigh in at a certain level and there's a lot of strategy that goes into it. For example, I'll fight in the women minus 57 kilograms. And the maximum weight you can be to fight in women's 57 is 57.1 kilograms because they allow point one for your underwear because you can't strip past your underwear. So, you want to weigh in at the absolute maximum weight you can which means you're cutting weight so that you can be the heaviest in the category, which will mean not eating anything for two days and doing water fluctuation weight loss where I'm drinking eight liters of water the first day and then cutting it in

> half every day for the next week. So, I'm just losing weight by water. When I was highly competitive, I would often have an egg for dinner, that kind of thing.

Erin talked about females being required to wear very little clothing under their judo gis, and males being required to wear even less. Erin (17) described the process as she empathizes with the boys in her judo club being weighed on a scale in front of their peers wearing very little clothing.

> The guys aren't allowed to wear anything under their gis. And so they'll strip down to their underwear. So, you'll have all these guys just in their underwear in front of all these girls. They have to step on the scale in front of their coaches. Totally exposed. And obviously, most people are going to be as respectful as possible and not try to make them uncomfortable. But, I can imagine I would feel really vulnerable to have to fully expose yourself and then step on the scale in front of your coaches and have them, it's not like they criticize you, but they see how much you weigh and then they're going to tell you how you need to live your life and that kind of thing.

Weight Requirements Severely Impacted Her Sense of Well-Being. Erin found the weight requirements and corresponding activities in judo to have a very negative effect on her well-being and outlook and acknowledges that she was much happier with participating in judo at a recreational level and no longer having to be constantly watching her weight. Erin (18) said, "I definitely think with this culture that is perpetuated by my sport, but also by society, in general that your worth is defined by your weight and that your achievement is defined by your weight is really regressive". For the most part, individuals spoke about the positive mindset attached to participating in sport. Erin reminded us that not everyone experiences sport in the same way.

Covid Realizations

A significant number of participants talked about how beneficial the experience of Covid was in allowing them to reflect on their health and make significant changes. Due to Covid, people were required to work and go to school from home on and off throughout the pandemic. Several participants talked about how they benefitted from having time to reflect on their lifestyle and prepare individual meals for themselves. Some young people talked about using social media for good and wanting to try out particularly healthy recipes recommended online, such as breakfast bowls and smoothies, and discovering how great they tasted and the corresponding benefit to their health. These participants also talked about taking the time to begin weight training programs and going for runs and walks outdoors.

One individual talked about how Covid allowed him to have a break from peer pressure and the opportunity to reflect and change some of his habits. John (18) said,

> I feel like peer pressure is a big thing when it comes to eating food and, before Covid I felt I had strong willpower, and I was able to just resist not eating unhealthy foods. But I felt like it was good to take a mental break from trying to hold against peer pressure when you didn't really see many people.

John elaborated that even though he tried to follow a healthy diet he had set for himself during Covid, he was sometimes swayed by societal expectations such as the need to have cake at a birthday party. John (18) said, “I kind of ate sweets and stuff for politeness because if you go to a birthday party, you gotta’ have cake. Saying “no” just kind of seems rude”.

Covid Offered Opportunities

Another participant described how he became more focused on his eating habits around the same time as the start of Covid. Jamie (16) said,

> I don't know if I can really separate it [change in eating patterns] from athletics, because around the beginning of Covid that's when I really started paying more attention to my diet. I guess Covid has allowed me to look at food in a different way, since some stuff started getting produced differently. And there was more news about it, so I guess I'm not sure how much of a role Covid played with it. But since the start of Covid I've definitely noticed a change in my eating habits and my knowledge of food.

Jenna (18) described how she felt she had more time and less responsibility during Covid allowing her to focus on a healthier diet.

> With Covid, I had less stuff weighing on me. All I had to worry about was showing up for my online classes and some online clubs and that kind of thing. I had so much more free time where I learned how to make dinners for my family, and I would make like better meals for myself too. I learned how to make some cool breakfasts and lunches for myself, or I would have these go-to meals that were lots of vegetable, lots of protein. I think that Covid was positive for my experience with food because it gave me so much more opportunity to learn how to make good foods because I honestly think I had less responsibility with Covid. I just had to worry about myself sort of thing.

Another participant shared how her process of thinking changed throughout Covid. She described how she had been overly consumed with online messaging and being obsessed with counting calories, and Covid provided her with an opportunity to reassess her behaviour and emerge in a healthier mental state and more aware of the brain-body connection. Aria (18) described the process.

> For however many calories I would work out for, I would consume exactly that amount. Not knowing that my body was just burning energy laying down or sleeping or sitting or

> not just doing exercises and so at the beginning of Covid my calorie intake decreased a lot. And I just couldn't sustain that. It was really hard. I stopped doing that…I just stopped caring because I wasn't seeing anyone. And when I say wasn't seeing anyone, I mean I wasn't going out and I was staying at home, so just kind of ate whatever I wanted.

More Baking During Covid. Participants also shared how they were baking more and visiting less as a result of being required to stay home and look for comforting ways to keep busy. Ella (15) said, "Before Covid we would go to our relative's house and eat and have dinner there once in a while. We've definitely done more baking because we are home more. And so, that was nice". One participant talked about the need to be more innovative in the kitchen because you were required to stay home as much as possible. Amy (15) said,

> I've definitely experimented more with my cooking and baking because I can't just run out to the store and get something because we didn't have it. If I were baking, I would have to find ways to substitute it or something. So, it's definitely changed because there was more experimentation involved with food.

Changing Shopping Patterns. Participants also shared how shopping patterns had changed and how they may have previously accompanied parents on trips to the grocery store; shopping became more of a mission. Ava (15) said, "With Covid, especially we didn't go at all because it was just more of like a mission that we had to do, so we fell out of the habit of going to the grocery store".

Changing Thought Processes. Covid and the corresponding pressures on our supply system have also led many participants to consider the source of our food in terms of availability and sustainability. Ava (15) discussed her concerns in terms of sustainability.

> With the way that the world is kind of deteriorating right now, we need to know how to be sustainable. So, the human population can live on, just with climate change and all the different causes. I think we have to be ready and be able to source our own food instead of relying on companies and stores to supply us. For example, with Covid, everyone was going for resources at the same time. And that's when I kind of realized wow, we are really dependent on the superstore for our food.

In essence, it seems Covid provided an unexpected opportunity to question prescriptive behaviours surrounding food and participants chose to try to do things and think about things differently.

Diet and Education

Is it Important for Young People to Know about Food?

When participants were asked, “Do you think it is important for young people to know about food?”, the universal response from all participants was, “Yes”. Most cited that it was important for their individual future health and wellbeing as a reasoned response. Ella (15) said,

> Because I don't feel good after I eat anything gross or super fatty or unhealthy. And I feel like when kids enjoy foods like that when they're little they're going to grow up to eat it, and then they're just going to grow up to have a bad, unhealthy, unbalanced diet that is definitely not good for you.

Luke (17) said,

> I would say yeah, it is pretty important to know what you're eating or at least be aware that these are the effects, and this is what it could do. And that just because you eat now and you're not putting on weight, you can still put that weight back on in the future and it might still affect you way harder in the future. Those habits will affect you.

Raya (18) shared the struggle she experienced during middle school as a result of her parent's divorce as a rationale for why young people need to know about food.

> During middle school, my parents got divorced. So, my relationship with food at that time when I was going back and forth every week was awful. I would come to my mom's and we would have home-cooked meals because she cooked all the time. And then I would go to my dad's for a week and he didn't know how to cook very well at the time. So, we were eating out and not having proper food and a proper diet and then I was getting sick and going back to my mom's. It was a constant cycle of trying to figure things out. I find during middle school it was a very hard time for me. I was just eating whatever and I didn't know how to take care of myself. And then at the end of grade eight, I moved in full with my mom and that's kind of where it switched, and my mom was constantly feeding me good food and I started looking at food differently.

Everyone I interviewed provided a rationale for why it was important for young people to know about food. Yet, interviewees had different ideas about what form of education this should take and generally agreed that there is a void in information about diet and nutrition available to them in the current education system.

Nutrition Education and Foods Classes

For the most part, participants acknowledged that they could benefit from more education when it comes to health, nutrition, and preparing foods. They stated that there was little opportunity in schools to attain information specifically on diet and its relationship with the body. Many said that Health was a topic they had touched on to some degree in Junior High School (for example one class a week was devoted to it) but it was not a significant portion of their curriculum in High School. Jamie (17) said, "We're not really learning food sustainability in

school. We mostly focus on academic classes like math and French and stuff like that. So, there's not much nutritional stuff or food-related talk". Cori (16) added, "I haven't really learned too much about diet in school at all. I mean, there's some basic stuff. You should eat healthy; you should eat natural. But that's about it. Nothing really in depth".

In reference to health classes, Jane (14) said, "Normally they talk about your mental well-being and depression and stuff like that, but I don't hear too much talk about food". Raya (18) talked about how she doesn't think there are enough opportunities at school to learn about health.

> Not really, unless you're taking a foods class. And that's basically it. I've had no education on food at all. I just had to teach myself and I had the opportunity with my mom being a foods teacher to get that help that way but there are no opportunities unless you're actually taking a specific class for it.

Kevin (16) said,

> I think most people assume that you have a mother or father figure that [who] allows you in the kitchen and teaches you how to cook but I think schools must look more at the people that [who] don't have people like that in their lives. And they need to teach more about life necessities. I would say cooking is far more important than biology or math or social or LA because if you can't cook for yourself or eat…you can't really thrive in life.

Another individual was able to provide a perspective as an 18-year-old, who had recently started a nursing program at the local college. She talked about how impactful a required nutrition course was to her own health. Aria (18) said,

> I didn't know much about food until I took that nutrition class. And it changed a lot. Also, with watching a ten-minute TED talk on how much food can impact your life. I

> don't think we're properly taught about being healthy, as much as we should be, especially in high school. This is so important because that's when you start becoming independent. That's when you start fending for yourself in a way, making your own meals and you might have a job so you might be able to buy your own meals. I think it's really important for teenagers especially going into post-secondary as well because I find that's where a lot of poor eating habits kind of arise.

Foods Classes are Not as Important as Other Subjects

A few other participants countered that in the hierarchy of classes, foods class, in its current state, was not deemed as important as other core classes and listed a variety of reasons. One student said that he thought schools assumed cooking was something you could teach yourself through experimentation whereas guidance was needed to learn the core subjects of biology or math. John (18) said, “They [schools] put this importance on the idea that people will go and try and do it on their own because they can, but I think in reality that's not what happens”. Jake (16) rationalized,

> If it's just cooking, I'd say it's only as important as an art class, or something. You're just doing it for fun? Just to fill time and earn your credits and get out. It's not an experience that's going to be essential for you later. If it's (the class) something to do with diet and overall health, I'd say it depends on the person how much they appreciate that education that they're getting but for me personally, I'd put it sort of in the middle rank because the information you learn will help you stay healthy throughout your life.

Marin (16) also talked about the hierarchy of foods class saying,

> It's pretty low to the bottom considering it's not mandatory. It's more of an option for you to take. I feel like it's not really encouraged to take it. It's a very select few people

> that [who] are interested in it. I feel like it's kind of low on the hierarchy of importance in school subjects.

Where Does One Learn About Nutrition? When the focus group was asked, “Where does one learn about nutrition?” John (18) rationalized,

> It's a mix. Schools are going to take you through health courses and teach you about the basics of nutrition, but I think it's largely up to the individual to learn and I feel it's a lot like managing your money. Because if you have an incentive to manage your money, you'll get more money. I think the same thing goes with nutrition because the more you know about nutrition, the more you can impact your diet and what you're eating and therefore can impact how your body functions throughout the day.

All participants acknowledged that it was important to know about food but there was some debate about how important foods classes were in their current state. In addition, several participants felt that schools were not providing enough opportunities to learn about nutrition and make connections between diet and health. The young people who were interviewed felt that there are important connections here that are being missed in our current system that we should be addressing. There were no clear ideas presented as to what this may look like in the current system. But one student did talk about what it should not look like and cautioned that he would not like to see Health or Nutrition classes occur as an ‘add on’ to an already limited [timewise] PE curriculum. He professed to be an active young man and really enjoyed the physical challenges of PE. Zach (17) related this story.

> I remember in grade seven I think we had gym twice a week, and every third class you would do health instead of gym. And that was always sort of, oh shoot, we have to do

> health now. We can't go running. I don't know exactly how to phrase it. You have to be careful with how you present it to the students.

The young people in this study believe that it is important for young people to know about food, but there appears to be some confusion about where this knowledge should come from; whether they should be learning about it at school or at home.

The Future of Food

Similar to the earlier question about fear of foods, when asked, “Are you concerned about the future of food in any way?” participants interpreted this question in many different ways. One participant commented on how much easier technology was making it to access food with the advent of Skip the Dishes and ordering online from the grocery store. Another person was concerned with excess packaging and the way that many fruits and vegetables that come in a natural package (like apple peel) are packaged in additional plastic. Other concerns included: the affordability of food, food waste, the prevalence of fast-food places, and loss of cooking skills.

A few young people commented on the future of food in terms of availability and it is worth noting that one participant, with a self-identified interest in physics, expressed that he felt hopeful for the future of food. This hopefulness was expressed as confidence in society’s ability to solve food issues when Zach (17) said,

> I am hopeful for the future of food. I'm interested in what it will become. Is it going to be a pill or some lab-grown food? That would be interesting. But I am hopeful for the future of food. I think there will be lots of good things, but more problems too. But I think it will change just because the consensus is that it needs to change.

There is Cause for Concern

Several participants demonstrated concern for the welfare of humanity and referenced the current state of our food supply as prompting these concerns. Jada (18) offered a unique perspective in that she was one participant who had already graduated from high school and entered the workforce. Jada has also had experience working several jobs throughout her life and has experience working in agriculture. She demonstrated innate empathy and understanding for the lower-income population in the face of the rising cost of food. Jada (18) said,

> Food prices are going up. If you have a job and you can barely afford everything as it is right now. If food prices go up, your rent's not going lower. House prices are going up. What do you do when you can't afford food anymore? You know what I mean? And then people start buying the crappy food, which is all just factory made, which makes your body function less which makes you not want to go to work which makes you die and then you're done.

Nikki (18) said, "I should adopt a more optimistic mindset, but a lot of the time I get pretty frustrated and feel disappointed and don't have a lot of hope in the way the world is headed".

Several participants expressed concern that corporations are cooking our food and our food is toxic as a result because they [companies] are only concerned with how much money they make.

Jada (18) agrees,

> Everything is getting more expensive. But food is getting less healthy and nutritious, and it's got less vitamins in it. Because everything is becoming factory made. They're just throwing chemicals into everything. And they say, "Yeah, that'll fuel you". There

> are so many people and there's only so much land, and we're only growing. There's no way for us to all eat healthy, because there's just not enough. There's no possible way.

Jada (18) also described how she is concerned about food waste.

> I don't know the meaning of throwing food in the trash. Who does that? You know what I mean? It's literally like, "Oh, I couldn't eat all my mashed potatoes. I guess, I'll throw it in the garbage". Food in the garbage? That's crazy. You know what I mean?

Jada (18) also commented on how she views society's current approach to consumption.

> We're so lucky with how things are. We don't even know how it used to be where people have to farm their own food and it would take months to grow. And they'd be, well I'm hungry for carrots and they think, don't worry the garden is going to grow the carrots pretty soon. Or "Oh man, I wish I could have watermelon". But, "Oh no, we need to wait in the summer for that". Nowadays it's just, "Oh, I'm hungry for it". Okay, five minutes away. Grocery store. Got it. Done.

Chris (17) also acknowledges the ease with which we can attain foods in North America compared to other parts of the world.

> In North America we're so populated, we have a lot more food and we kind of just eat what we want if you can buy it. Yeah, it's kind of like there's not really anything missing for food or anything. You just kind of go to a store, pick it up, boom done. In third-world countries it's a lot harder to get food. You either have to farm it on your own or pay a lot of money to buy it from a store.

Chris (17) is concerned with the future availability of food and that we aren't feeding our population even though we could be.

> It kind of scares me a bit whether we're going to have enough food to feed everyone. We have enough food in the world to feed everyone on this planet, but we don't. There's not really a good reason for that. Why don't we feed people who are starving other places? We could easily ship them food or water, but we don't for no reason.

Amy's (15) vision of the future is, "I believe that in the future, foods will likely become something that's very quick, and there won't be much thought into what we're making. People will probably have things like McDonald's or Burger King for dinner a lot more than what we do now".

Summary of Themes

In reference to the sunflower metaphor, we have come full circle. The petals of the sunflower represent the initial conversations about food experiences that were had. At this level, participants were thinking about food and making above-ground connections to some of the more common themes associated with food such as food as nourishment and food as a social activity.

As participants left the first interview, I reviewed the expectations of the research and asked them to take photos and fill out the corresponding SHOWED document for each of them. The next time we met (in our second interview), the pictures and rationale that the participants shared with me prompted more reflective conversation and turned to a little more thoughtful responses supported with examples and stories. I refer to these conversations as the stalk. In essence, these conversations were the channel between surface realizations and making deeper connections, getting to the root of their individual food experiences.

In the middle of our research process, participants reflected on their food experiences and carefully selected the most meaningful to share in their SHOWED document. From there, the

most meaningful one or two concepts were selected to share in our focus group discussions. Participants were acknowledging how important food was in their lives and made connections to rich food experiences and sharing food with friends and family. Conversations took place about how food is acquired, the planning process, and who was doing the majority of the cooking in each of their homes. We discussed fears, anxieties, and concerns with the quality of food available in schools and in the community. At that stage, participants made connections between food preferences, allergies, and dietary influences, and began to talk about food in relation to their bodies.

As the conversations continued, participants began to realize and acknowledge their relationship with food in their lives. They began to talk about how influential they felt social media was in shaping their food choices and additionally their self-esteem. This became an oft-repeated conversation and manifested itself in different ways. Participants commonly talked about how they struggled with diet and a desire to look a certain way and how they often felt themselves coming up short. Even though they realized that it wasn't healthy, and they had a role in creating these experiences, they didn't feel like they had the power to do anything about it. This was not a universal experience felt by everyone on a personal level, but it was universally acknowledged that social media could [and did] have that power on many friends and acquaintances if not on the individual themselves.

Few Remained Untouched by Social Media's Impact

According to the participants in this study, only a few of them remained untouched by social media's massive impact, and these tended to be the older females who had previously struggled with their weight and body image and made a conscious decision to live and think differently. They also had a sound nutritional foundation and a dietary plan in place. These

individuals provided a thoughtful rationale for their paradigm shift and were able to articulate a vision of their food philosophy. Additionally, a few participants (generally male) who identified as athletes and had nutrition training spoke about feeling confident with their bodies and weight.

While some participants talked about the negative impact of social media, a few pointed out that it could also be positive and provided examples of different healthy role models who were influential in inspiring them to lead healthier lives. In terms of education, most participants indicated that they did not know enough about our food systems and that they did not learn enough about this topic in schools.

Chapter Five: Discussion

Methodological Effectiveness

After CRs had an opportunity to participate in Photovoice and a second interview, the responses tended towards a more in-depth analysis of their food experience than the responses provided in their first interview. Almost without exception, when asked, "Did anything in your food experience change because of participating in this study over the past few weeks?", participants responded with a resounding, "yes" and went on to share stories of how their perspectives had shifted and they looked at food and their diet in a much more critical light. For instance, some young people commented on how they and their families were now making a point of having the young people participate in meal preparations once a week. Other changes that were reported included actively researching gardening, considering sustainable practices, making changes in their diets and exercise patterns, and thinking critically about the current education system and the path of food from farm to table.

The combined methods using phenomenology and Photovoice supported with the SHOWED document allowed participants time to refocus their thoughts on food experience over

an extended period; usually around two to three weeks between interviews. The act of thinking about what they wanted to include, taking pictures, and responding to the SHOWED questionnaire, heightened individual awareness of their food experience and they returned to the second interview able to offer deeper and more meaningful feedback than they were initially able to provide in the first interview. For example, in the first interview, participants did not identify the food system in place as something that they felt fearful or anxious about. Yet, when they revisited the topic in the second interview, they were far more critical of the current food system and able to articulate how it related to their individual lives.

In addition, the use of *Otter* to transcribe each interview was invaluable in conducting this research. It allowed me to play each of the recordings of the interviews, simultaneously transcribing each of them into a text document. When I went back to the text document, I simply had to hit play, to hear the original author saying the words once again. This allowed me to re-listen to sections of each interview in the original participant's voice to ensure I had accurately interpreted the conversation. I was then able to go through each interview and take notes about important themes. Later when I went back to compare themes across multiple interviews, I simply added a keyword to *Otter's* search engine, and it quickly highlighted all of the conversations and focus group discussions containing that word, so it was easier to track down and connect themes across several interviews at once and jump back and forth between conversations for comparison purposes. *Otter* has other helpful functions as well such as highlighting, copying text, and the ability to add comments throughout.

Revisiting the Patchwork Quilt Analogy

The patchwork quilt analogy set out in Chapter Two is referenced here to compare the results of the research into food experience in youth conducted with my co-researchers to try to

determine what is known and what conclusions have come about because of our research together. The idea that critical food system education is important was identified throughout our conversations and the young people who were interviewed came to realize that there were various aspects of our patchwork quilt that they knew very little about and that there was significant room for improvement in their food experience journey being as it has proven to be so valuable to each of us in all areas of our lives.

From Food Literacy to Critical Food Pedagogy

After having multiple layered conversations with each of the twenty-five participants, it was apparent that there was room for continued growth and education in this area. Earlier in this paper, I talked about the concept of critical food literacy and the evolution of knowledge surrounding food. It seems that this knowledge is currently present in academia, but it is not yet present in our school systems. In an earlier example, Sumner and Weaver (2016), point to critical food pedagogy as a "pedagogical approach that discourages acceptance of the status quo and encourages critique of our unsustainable food system and the creation of alternatives that are more environmentally, socially, and economically sustainable" (p. 322). If this study is an accurate reflection of young people on a larger scale, they are not demonstrating that they feel empowered and educated about their choices. As Sumner (2011) suggests, "Given that food literacy is a fairly new term, its meaning remains fluid as various stakeholders maneuver to control its' meaning and thus mold policy that will serve their interests" (para. 1). The research my co-researchers and I have undertaken here, affirms that there is still much work that needs to be done in defining critical food literacy.

As mentioned in Chapter One, Kaplan (2012) suggests the following categories to consider when discussing the philosophy of food and specifically, the metaphysics of food: food as

nutrition, food as nature, food as culture, food as a social good, food as spirituality, food as a desideratum, food as aesthetic object, and other possibilities as well. Understandings that I can add to Kaplan's criteria as an outcome of this study include food as it relates to our bodies and our self-image and the impact of social media on the psyche of our young people.

Food Systems Knowledge

Food systems refer to knowledge of the interconnected nature of our food supply. The knowledge exists on the world stage (Food Secure Canada, 2021; Global Alliance, 2021, Pera, 2018-present; United Nations, 2021) but this knowledge has not yet filtered down to our current education systems. Canada is considered a first-world country with state-of-the-art education systems, but according to my participants, we are not prioritizing food system knowledge in our schools. Of the participants interviewed in this study, only a few could talk with some authority about the interconnected nature of food production and these individuals had a background in agriculture, and/or experience in gardening. Individuals who felt confident in their dietary choices had been specifically educated about dietary requirements for their specific sport, had parents who participated in high-level sports and could share nutrition knowledge with them, or in one case was a self-educated vegetarian.

True Cost Accounting

When asked directly if they had heard the term 'true cost accounting' the participants in this study had not. In general, they are not thinking about the notion that there are hidden costs to producing cheap food. For example, although the notion that people who are producing our food may not be treated fairly was mentioned, it was mentioned vaguely in passing; it did not surface as meeting the defining requirements as established by van Kaam's Modified Method of Analysis (Moustakas, 1994). For the most part, participants in this study did not articulate

specific concerns about how additional costs are incurred such as costs to the environment or to the people who work in the fields producing the food. Yet, they are voicing concerns in a general way as is evident in this statement by Nikki (18) who, when referencing the future of food said, “I should adopt a more optimistic mindset, but a lot of the time I get pretty frustrated, and I feel disappointed, and I don't have a lot of hope in the way the world is headed”. In this way, she seems to be pointing to food as a metaphor for geopolitical unrest.

Sense of Helplessness

There were other comments of a similar nature where participants were upset and concerned with what they see going on in the world and spoke with a general sense of frustration and helplessness. Jada (18) shared her frustration with her lack of knowledge, and it was clear she felt a certain sense of powerlessness.

> I have no clue what to do. I feel like I don't know any information [about our food system]. In my opinion, researching is not fun. Like this [taking pictures and preparing the SHOWED document] was fun. Just writing about what I experienced. That was fun. But looking at so many documents, and all the facts and proof. It's just going to make me sad. And I'm going to tell people, “Guys, the world is dying”. Everyone. We're just all so sad. This generation is just not very happy because of everything. We've got it rough; you know. I'm sure people think about it. But at the same time, there's so many people that think everything is fine – [They think], We still have water for another 100 years.

Other participants expressed similar concerns about the state of the world in terms of our environment and food supply. The general response from participants suggests a sense of being

overwhelmed by competing information and messaging and a general sense of helplessness that there is very little that they can do on a personal level.

Food Experiences in Youth

Food Enhances Connections

Most participants spoke about food as having a significant role in their lives. They talked about the incomparable taste of the food prepared by their grandmothers and how they could taste the love. Participants shared the significance of going for a drive and sharing an iced coffee with their mom; ordering Skip the Dishes on Friday nights, sitting down at home or a restaurant as a family, and eating food they gathered from their backyards. Young people talked about sharing cookies, growing apples, gathering in large groups for festive occasions, and learning from loved ones. En masse they acknowledged that food made them feel special and helped forge connections with friends and family and has the potential to be very meaningful.

Comfort Food

Interestingly, only a few foods stood out as providing comfort. Yet, baked items (and the act of baking itself) did come up in conversation as being particularly comforting. A few CRs reflected on making a certain kind of cookie at Christmas time as being a memorable experience. In addition, there were a few foods that received notable mentions in that a couple of participants talked about perogies being their favourite food and connected the meal with the act of preparation (as an activity to do as a family) and that they were a food specifically associated with their cultures. These participants were also familiar with some of the Polish and Ukrainian heritage and traditions of their families; they attributed to learning this at the hand of their grandmothers who taught them how to prepare perogies.

Intercultural Connections

Food has the potential to cross cultural barriers and is used to communicate inter-culturally in movies, food programming, recipes, and present-day literature (Beck, 2014). The world is expanding due to globalization and young people are open to trying new foods but feel that they don't have the opportunity to do so. Only a few participants strongly identified with a culture and could name foods that they prepared regularly and were typical of their culture. For instance, one participant identified as being Egyptian and acknowledged that she ate food inspired by her heritage every day. A second identified as Mexican Mennonite and provided examples of meals specific to her culture and included images of them in her SHOWED document. A third participant mentioned that she was part Japanese and consequently enjoyed sushi and that they sometimes had Japanese food prepared at home. Most of the participants did not identify with any one culture, and several did not know the cultural background of their family. As previously stated, the majority of the participants in this study were homogenous, Caucasian, long-time residents of Southern Alberta.

Appreciation of Ethnic Foods

Most of the participants expressed an appreciation for ethnic foods and talked about eating in cultural restaurants as a treat and as an enjoyable pastime to spend time with their family. They also shared how some ethnic foods agreed with them on a physical level and they felt healthy and satisfied after eating them, rather than bloated or uncomfortable. Occasionally, families would attempt to prepare ethnic foods at home. Yet, there was a theme of uncertainty and lack of information when it came to feeling confident enough to prepare these foods regularly. CRs talked about a lack of opportunity to learn about preparation methods and

ingredients. Young people indicated they are willing to try ethnic cuisines and are interested in learning more about them.

Social Media can be Negative and Positive

In the Negative

Many of the participants said that they felt that social media was influencing their food choices and their lives; some to greater degrees than others. While technology provides many opportunities, it provides many challenges as well. For instance, the increased exposure to it means that youth are inundated with commercial messaging via smartphones, video games, the Internet, and television (Moss, 2021). The young people in this study indicated that they (and/or their peers) are anxious and struggling with negative body image and self-worth every day. They struggle with the omnipresent power of the Internet and the realization that their every movement can be monitored online. There appears to be a fear of the image of themselves that they put out in the world of the Internet and the awareness that this image will never go away. That is an awesome responsibility for young people in the formative stages of development when they are still trying to figure out who they are and where they stand on issues.

In many cases, young people are being mentored by a source outside of the family unit that represents society's most extroverted and outlandish people competing for attention. These are the people ascending to stardom with the most 'likes'. Perhaps these influencers are not the most educated, the most diligent, the most philanthropic, or the most compassionate individuals who are acting as role models for our youth.

In the Positive

As some CRs have mentioned, there are good people on social media too. There are change-makers, and those with altruistic ambitions and the task is to sort the two and know for

oneself where you want to spend your limited time. While many participants spoke about ways they felt negatively pressured by social media, a few pointed out that they had made connections and followed people who inspired them, including people who celebrated their body's abilities in their current state, not for what they should become. In reference to an online personality Jenna (18) admires, she said,

> Her whole philosophy is clothing is made for you. You weren't made for clothing. It needs to work for you. She makes these videos where she'll show her body before she eats and then after she eats. She'll say it's the same, except now my body is happy and nourished and now I'm ready for a day of fun. I really love how she normalizes that, because that's definitely something you see. You feel pretty or whatever, and then you eat and notice, now I have a bit of a belly. And so, for someone to go online, who's normalizing - you get bloated after you eat, and that just means that your body is happy and nourished and now you're ready for fun. I think is phenomenal. And that's the kind of thing that you wouldn't see without social media.

In general, the sentiment surrounding social media seemed to be that negative messaging was predominant and readily available for consumption in most social media accounts. Positive messaging was seen to exist on social media as well, but participants felt that the positive messages about foods were not as widely available, and one could and should consciously seek it.

Being Female and Taking up Space

The notion of taking up space was a theme that arose in connection with self-image concerns stemming from social media influence. As stated in Chapter Four, this was a largely female concern. Many of the young girls in this study felt pressure to take up less physical space

(by being small in stature) and less vocal (being demure and withholding commentary). In the process of clustering and identifying themes (step three of the modified van Kaam method of analysis) (Precision, 2019), I began to see this topic surface repeatedly in our conversations.

Photovoice as a Tool for Praxis

As mentioned, Sutton-Brown (2014) says, "Photovoice was born out of three distinct theoretical frameworks: empowerment education for critical consciousness, feminist theory, and documentary photography" (p. 170). Although the concept of taking up space was not represented specifically in many of the photographs, the concept arose following the discussion and reflective process that the method provided. One girl's inclusion of covering up the numbers on a scale opened a deluge of pent-up feelings and stories that many of the female participants were anxious to tell.

Most of the young females interviewed in this study spoke articulately and passionately about the conflicting messaging they were receiving about their bodies and that they were trying to navigate. Most acknowledged that they experienced incredible pressure to be small (and/or had many close friends who shared the sentiment). They felt that this is both a result of and contributing factor to, the current fashions available to them. When questioned on the topic, young males acknowledged that while they may not personally feel subjected to the same pressures, they did feel they were expected to bulk up, and they were aware that such expectations existed for their female peers.

Interestingly, there appeared to be mixed messages when it came to female fashion. Young women sought to defend their right to dress in close-fitting, athletic-inspired clothing (and not be judged for their choices). At the same time, these young women acknowledged the pressure they felt when wearing clothing that revealed their [perceived] imperfections.

Knowledge and Support is a Powerful Tool

The few participants who claimed to be unscathed by the influence of social media in this study tended to be male athletes with an education in nutrition. A few females spoke with the same level of confidence demonstrated by the males but had gone through a process of extreme self-doubt and food deprivation to emerge confident and assured of their self-control. In addition, participants with a background in agriculture, and a self-educated vegetarian, demonstrated more knowledge about the production of their food sources and were more comfortable that the foods they were consuming were good for them. There was also a small female contingent who claimed they simply did not use social media and had a great deal of nutrition education and parental support.

Young People Often Work in Fast-Food Establishments

There is a cost to the work that youth are doing in fast food restaurants. They talked about the guilt they feel in contributing to the problem of litter in our environment that will impact our collective futures. They noted that they realize fast food itself is not healthy and should only be eaten in limited amounts. One participant talked about the additional stress she experienced as a fast-food employee during Covid and the responsibility she felt for the health of the public in continuing to serve during uncertain times.

Nutrition – Our Bodies Can Tell Us What We Need

In conversation with participants an overarching theme of awareness of how they felt in conjunction with the different foods they ate arose. Young people may not always know what they should be eating. Most were not familiar with contemporary terminology surrounding food such as probiotics and antioxidants. Yet, they could identify foods that they should not be eating, because their bodies were talking to them. There were several examples shared in the

conversations where CRs said that they only ate certain foods in moderation [fast food, sugar, dairy] or not at all because of the adverse effects it had on them physically. For instance, Ava (15) said, “My brain won’t turn on when I have consumed too much sugar”. Jess (15) (when commenting on why she loves her Grandma’s cooking) added, “Grandma doesn’t use preservatives”.

Food Allergies and Intolerance

The depth and breadth of food allergies is growing. It has only been since the last rendition of the Canadian Food Guide in 2019 that milk and dairy products haven’t had a section of their own on our national health guide (Health Canada, 2019). Yet, most of the participants in this study experienced intolerance for dairy and other foods that are widely available and generally accepted as healthy. This speaks to the importance of learning about the process that our food undergoes during production and the effect that it has on our bodies. It is essential to question why so many people are being affected by a product readily available on our store shelves and that, up until three years ago, was being recommended as a substantial part of a healthy diet.

Further Education Is Important To Develop Critical Thinking. Many of the young people I spoke to, arrived at their own consensus through a process of elimination in their diets. Again, many of the participants in this study have easy access to food and a choice in the foods available to them. This is not true for many in our society who live in lower-income homes and struggle with getting enough to eat. They cannot afford to be as discerning. Education is needed about healthy food choices and options available that are healthier, economical, and better for the environment than heavily packaged high fat, sugar, salt, and low fibre foods widely available in our restaurants, grocery stores, and schools.

Many Teens are not Cooking at Home

As stated previously, many of the participants in this study are not learning how to cook at home. In addition, they were unsure of what the future of food looks like for them and their families. In some respects, the concept of cooking still suffers from a time when it was widely unappreciated work and it served to hold women back from other potential occupations and opportunities (Slater, 2013). As mentioned in Chapter Four, there appears to be some confusion amongst young people as to what constitutes homemade food (from scratch) and food prepared at home.

Not Simply Following a Recipe

As a lifelong cook and red seal chef, I recognize that cooking well is more than following a recipe. Dewey (2018) says,

> To cook is to utilize heat and moisture to change the chemical relations of food materials; it has a bearing upon the assimilation of food and growth in the body. The utmost that the most learned men of science know in physics, chemistry, physiology is not enough to make all these consequences and connections perceptible. (p. 223)

I appreciate that cooking is complex and should be celebrated as such. It is paying attention to the details, knowing how much oil to add to a pan [or questioning whether to use oil at all], how much heat, and for how long. What seasonings complement the product being prepared? What dishes go together? How much money do you have to work with and what is available? What order should everything be prepared in so that you can sit down as a family to enjoy the meal without having items dry out or lose their appeal? Where is the best place to source the healthiest ingredients that will have the least impact on our environment and the people who are charged with producing the food we eat?

If our young people are not cooking at home and they are not learning how to cook at school, they have indicated they will resort to letting corporations cook their food. This is exactly what Mark Bittman (2007) warns us against in his Ted Talk, What's Wrong with What we Eat? He says, "We can make food more important, not less, and save ourselves by doing so. We have to choose that path" (Bittman, 2007, 19:38).

Lack of Time Emerged as a Possible Rationale for Not Cooking

For the most part, participants in this study are not expected to cook at home. Instead, they are taking part in extra-curricular activities, working at part-time jobs, and doing homework. A portion of their time is spent in online interactions, often with friends. I did not arrive at a clear understanding as to why young people are not being asked to participate in cooking at home. A few possible reasons may be that parents enjoy cooking themselves, they don't want to expend the energy to recruit help (and teach their children to cook), or that cooking is not as important or prioritized as much as other activities that their children are doing.

Home Cooking Versus Food Prepared at Home

Participants in this study indicated that their families had different methods of attending to nutrition needs in their households. A few families preferred extensive planning a week in advance. Others operated more on a day-to-day basis pulling items out of the freezer, stopping by the grocery store that day or ordering out as needed. Most indicated that their families used convenience or processed foods to some extent regularly. However, I did not get a clear indication as to the cooking methods being employed at home (for example, whether families were preparing their meals entirely from scratch or to what extent they were utilizing processed products was unclear). For many participants, there seemed to be little distinction between meals

that were prepared using convenience products (i.e., powdered bouillon) or homemade soup stock in the final product.

The understanding I arrived at following conversations with the young people in this study affirms research conducted by Slater (2013) who said,

> Teachers reported many students coming from homes with dual-income parents, one-parent or blended families, and many were in extracurricular activities and had jobs. This contributed to family food norms, which centre on greater use of convenience and fast foods; decreased time spent preparing foods; fewer family meals; and decreased mentoring of children in food skills. (p. 618)

Cooking Methods

As this was a phenomenological study, I was mindful of trying to let the participants lead the discussion. One of the topics that did not surface readily was the notion of cooking methods. I did ask a few cooking-related questions such as, "What does your family do with the carcass of a chicken or turkey after consumption?" and received varied responses. A few responded that it was used to make stocks, but many simply did not know. This study did not focus on specific cooking terminology and cooking methods. It is important to note there is potential for further exploration to determine knowledge of cooking methodologies employed in present-day households.

The Family Meal

Most of the families in this study had regular or semi-regular family meals. The participants stated that their families prioritized the family meal, and they sat down together for dinner most days of the week. This varied for young people who held jobs and they felt that work interfered with their ability to participate in meals with their families.

Recognizing the importance of the family meal, it would be beneficial to expand on this study to include a broader cross-section of Canadian youth to determine the status of the family meal. Elgar (2012) says,

> Indeed, regular social contact within the family facilitates parental monitoring and helps parents set boundaries and expectations for adolescent behavior. Family dinners are a measurable signature of these social exchanges in the home that support socio-emotional development and mental health (pp. 1-2).

Similarly, Kaplan et al. (2006) found,

> Families with effective communication strategies, e.g., having frequent food-related conversations with children, effectively managed to avoid conflict in their food-related discussions and decision-making process by actively involving children in the process of meal planning, food shopping and meal preparation. (p. 303)

Unexplored Potential

Perhaps it's time to start celebrating the endless possibilities contained in preparing the daily meal. Cooking well takes time and energy, but it can also be fun and very rewarding. We are counting the cost, but not the enormous benefit and satisfaction that comes from being able to prepare a meal. It seems we do not value and appreciate the people who produce our food in the kitchen or the field, and that lack of value is being transmitted to our children.

Cooking can be Therapeutic

Individuals who practised cooking/baking regularly talked about how therapeutic the act of cooking was for them. They discussed how they enjoyed the process especially when they were preparing a recipe they had made previously that was very familiar. A reoccurring theme emerged in our research indicating that if young people are more familiar with the process of

cooking, they are more apt to find it enjoyable and do it more frequently. There was not necessarily a personal connection with the recipe (i.e., belonging to a family member) but simply a recipe they knew well – some by heart.

With the growing anxiety we are seeing in young people in our communities, it is worth exploring cooking and baking as a form of stress relief and comfort. Discussion with individuals in this project indicates that it could be a very productive and effective means of dealing with stressful situations.

School Gardens

This research indicates that only a couple of the 25 participants I spoke to had experienced what it would be like to have a school garden. Many had a limited amount of gardening exposure while working with their families at home, but only two talked about having gardens in their schools. We know that school gardens are good for student health and have the potential to teach so many concepts (Matsumura, 2016; Schmutz, Lennartson, Williams, Devereaux, & Davies, 2014). Many areas of Canada are beginning to recognize and support the value of school gardens (School Food Gardens, n.d.). Yet, this is not happening on a wide scale. Many factors prohibit schools from taking on this seemingly daunting task such as lack of funding, teacher time, and space (Landry & Logue, 2017).

As Jake (16) pointed out when discussing growing apples at home, “If we grow some of our food, there's no pesticides, it doesn't need to be shipped. There are no questionable labour farming practices used or involved in getting the food to us”. In this excerpt, we see how following the growth of an apple from seed to table offers multiple opportunities for making interconnected observations. Participants in this study who did have the opportunity to garden

spoke with enthusiasm about their experiences and indicated that it would be something they would like to continue to do in their future lives.

Ecotherapy and Nature Deficit Disorder

Louv (2008) argues that today's children are experiencing nature deficit disorder as a result of not spending enough time outdoors. Matsumura (2016) suggests that human beings benefit from ecotherapy (submerging oneself in nature). She also suggests it is an elitist pursuit and not available to many who cannot afford to do so. Her research also showed that placing flowering plants in high-traffic areas in colleges helps to alleviate stress, depression, and anxiety. Providing gardens in schools has the potential to be a relatively simple way to provide ecotherapy opportunities for all. Kevin (16) said,

> When I was a little kid, I had my own little rainforest in the greenhouse and the caraganas [local shrubs]. You could get away and it was in the shade and smelled good. It was humid, but it was nice. I just loved the experience and I think a lot more people should have that experience.

The School Garden as a Tool

Due to the capacity to connect food with growth, biology, and wellness, there has been much research done to determine the benefits of using gardens in schools (Coveney, Begley, & Gallegos, 2012; Koch, Contento, & Crabtree, 2008; Malcata, 2014; Surman & Hamilton, 2019; School Food Gardens, n.d.). Discussion surrounding gardening, wellness, food production, and the environment provides opportunities to discuss sustainability and look to methods of improved production and product. As an educator, I see great potential for using food production and preparation as a teaching tool. Dillafruz, Anderson, and Park-Robbins (2015) say, "If we consider eating to be a "cultural act" (Montanari, 2006), then gardens at school sites provide a

practical entry point to address the growing cultural diversity encountered in schools" (p. 26). In one phenomenological study, Surman and Hamilton (2019) illustrate the importance of gardens for children to learn.

> Through our empirical observations we have demonstrated that it is not just tasting that is important: digging, touching and playing with materials are deeply significant as sensory experiences to secure understandings of methods of production and the incremental stages between germination and consumption. It is this important sensory learning which helps children to challenge dominant forms of rational decision making about food (by adults).

The Hands-on Nature of Cooking and Gardening as a Tool for Learning

Expanding cooking classes and school gardens provides opportunities to learn about foods from different cultures and could provide a bridge to enhance intercultural understanding for individuals who do not identify with a specific culture. In addition, Dilafruz et al. (2015) demonstrate how the act of gardening can serve to provide opportunities for people of various cultures new to Canada to learn English in a non-threatening environment and develop confidence in their language skills.

> At the Learning Gardens, several of the students felt comfortable being themselves, speaking in their native languages and using English, investigating questions, and demonstrating skills in front of their classmates. They were no longer shy and quiet for words. Garden-based approaches to learning can be a source of relief for English Language Learners from the stress they face from high-stakes testing and the difficulties of communication in the traditional classroom (p. 40).

Cooking together provides a similar opportunity for hands-on learning to occur and gives participants a chance to share their knowledge and be the authority on a subject and thereby gain confidence in a new environment. I witness the same passion and experiential learning taking place in the foods classroom while students use their hands to combine basic ingredients in such a way that they are transformed into delectable products.

School and Community

Looking at the food experiences of youth has the potential to impact education on many levels and notably turn one's gaze within to think critically about our food philosophies. In considering the conversations I have had with participants in this study, I believe there is much work to be done. This view was echoed by Yamashita and Robinson (2015).

> Despite this recognition of the importance of educating students to grapple with diverse perspectives, values, and beliefs that underlie food systems, however, there is currently little research on the types of learning experiences, pedagogical strategies, and the roles of educators that contribute to the development of critical food literacy. (p. 274)

Many Schools are Not Modeling Healthy Food Practices

Many schools are not modeling the availability of healthy, sustainable foods in their cafeterias. In one fashion or another, they allow commercial products to reign over healthy choices (Rocha et al., 2015). In addition, as a society, we are not looking critically at what we eat and we are consuming unrecognizable products such as chicken nuggets as food (Rocha et al., 2015). This view was reiterated by participants in this study who felt that school food should only be eaten occasionally to supplement real food choices and that most school foods were high in salt, fats, and sugars, which is supported by the findings of other researchers (Classens &

Sytsma, 2020; Spencer et al., 2019). Participant responses to questions surrounding foods found in their schools showed the same concerns.

School Food

The participants in this study recognized that the food available in schools is much the same as what is being mass-produced for restaurants and should only be eaten in moderation if at all. The irony that schools, our educational institutions that are responsible for teaching our leaders of the future, are not demonstrating care in food offerings is not lost on young people. Slater (2013) says, "We teach them about sex, how to drive safely, and obscure mathematical principles precious few will ever use. But everyone eats. How do we help citizens, not consumers, engage positively with their food systems?" (p. 18) As noted in Chapter Four, participants found the school food to be mostly unhealthy.

Ethnic Foods

In addition, most participants indicated that they liked eating ethnic foods and enjoyed trying new foods. Many ethnic foods tend to be prepared with a few key ingredients and can be much healthier than many of the highly processed foods readily available in society today, yet this is not what is being served in many schools.

Students Do Not Hold Schools Accountable

For the most part, students did not hold schools accountable for the quality of foods available to them. This was also supported by Spencer et al., (2019), who said, "Some participants thought there was a perception by adults that youths only wanted to eat unhealthy foods and that speed, convenience, and profit were prioritized over quality and taste" (p. 1017). The response I received by participants in this study supports the notion that youth want healthy

[and variety/ethnic] foods available, but do not feel empowered to participate in making these choices.

Once again, it is important to keep in mind that for the most part, the participants in this study had choices about what kind of lunch they were to eat each day. They acknowledged that they had healthy foods available to them and many packed their lunches or had parents prepare them so perhaps they could afford to be less concerned with the industrial types of foods available in their schools.

Foods Curriculum in Schools

Similar to the findings of Slater (2013), most participants felt that food courses in their current form are not treated on par with other core classes such as math(s), science(s), and social studies. Only one student, Kevin (15), said that food courses should be considered more important than core classes, not less. Interestingly, Kevin also comes from a rural area and his family produces much of their own food on their small family farm. Yet, all participants talked about knowledge of food as being very important in their lives presently, and most indicated it would be even more so in the future in terms of their individual cooking skills and with regard to their long-term health.

Foods Class Gets Mixed Reviews

There were mixed reviews as to how valuable food classes are. Students felt that learning about foods in schools is not deemed as important as other areas of study. In part, foods classes (in their current state) are viewed as fun classes and a kind of a time waster for less serious students. One participant pointed out that the reason food courses weren't emphasized at school was because it was something that they could learn at home (which was not the same for other core classes). In general, this study indicates that learning about cooking at home is not taking

place. There seems to be a disconnection between what students feel is important [knowledge about foods] and learning about foods in schools [taking a course in related programming]. This dichotomy points to a curriculum [and delivery] that appears to be irrelevant and missing connections with the lives of young people today and relevant to current food systems knowledge.

Compartmentalization of Subjects does not Teach Systems Thinking Approaches

The problem in thinking that one subject area trumps another is that compartmentalization of topics doesn't teach about the ways that everything is interconnected. As referenced by Sumner (2011), it is important not to consider the food system in one-dimensional ways, because society will not be encouraged to think critically of companies that are controlling our food supply. This is the real shortfall of our current education system. It takes a divisive approach and encourages teachers and classes to operate as separate entities and look out for themselves, their programs, and their students. It is a missed opportunity on every level to teach about the cyclical nature of our food systems, and their impact on our environment, communities, and the world. Connections can be found to all areas of life if we value our food systems. We will look for them, talk about them, teach about them, and celebrate the diverse nature of our world. If we can do this (or work to improve in this area) we celebrate the complex nature of our society in all its multi-diversity. Key observations that have great potential to improve the world and serve as a road map for the future are being 'missed' because society is overlooking the importance of food system knowledge and its impact on our collective health rather than teaching about how everything is interconnected.

What Society Values

If we do not value food and cooking our society and our budgets are not supporting it either. I believe that cooking knowledge is so important. It provides the confidence one needs to take less expensive products and convert them into nourishing, tasty, and satisfying meals. I suggest this is an important area deserving of as much financial support (if not more) as other programs that we provide in public education. In many ways, the present system is not valuing and practising critical food pedagogy and in essence, we are punishing those who cannot afford to take optional classes, when they may benefit from them the most. In addition, we know that well-nourished children do better in school and that a well-nourished society has less disease and health costs associated with it (Block et al., 2011).

No Specialization Required

A problem with treating foods as a 'just for fun course' is that food classes may be an 'add on' for teachers who specialize in other course areas. The societal undervaluing of foods related programming across the educational board leads to having inexperienced foods teachers who may focus on asking students to follow recipes but not necessarily teach slow food cooking methods, how food systems are interconnected, and how knowledge about food can lead to healthier, happier lives, and better environments for all (Sumner, 2015).

Treatment of Food as a Social Construct in a Post-Modern World

We know that students need to feel that the work they are doing is relevant and will be useful to them (Bernard, 2010). Society communicates what we value by supporting certain ideologies thereby constructing our reality.

> The sociological perspective involves recognizing and evaluating the effects of social relationships and social structures and forces, considering the present day in historical context and takes for granted that society is socially constructed and thus changeable. It

> is a perspective that fosters critical thinking, the posing of critical questions, and the pursuit of solutions. (Cole, 2018, para. 1)

Food in some capacity has been a requirement for human survival since time immemorial. Therefore, it is necessary to consider the anthropological influences of food on our diet.

> Food is adaptive and cultural foods were initially connected to the lands from whence they came. It has adapted over the years as cultures have moved and new foods have become available. In discussing food in contemporary times, it is important to look at the evolution of food and how it has evolved from its earliest iteration to the present (Muckel & Gonzales, 2016, p. 236).

As noted in Chapter Two by Freire, as included in Shor (1992),

> Politics is in the subjects chosen for the syllabus and in those left out. It is also in the method of choosing course content, whether it is a shared decision or only the teacher's prerogative, whether there is a negotiated curriculum in the classroom, or one imposed unilaterally. Politics also resides in the discourse of the classroom, in the way teachers and students talk to each other, in the questions and statements from teachers about the themes being studied, in the freedom students feel when questioning the curriculum, in the silences typically surrounding unorthodox questions and issues in traditional classrooms. (p. 26)

Agribusiness/Marketing

There was some discussion about the impact of big business and marketing on our food and the availability of food, but this was not a major consideration for most of the participants in this study. As discussed, several participants admitted to feeling susceptible to messages received through social media, but there was not a lot of discussion about direct marketing strategies. A

few individuals, who had first-hand knowledge of growing their food, initiated conversations about agribusiness and the way that food is marketed. This finding corresponds with the findings of Moss (2021) who points out that the general public is targeted by the food industry and is largely unaware of the many unscrupulous practices that they use. In one example, Moss (2021) talks about how cigarette maker Phillip Morris applied the same principles to promote the addictive consumption of their food products as they did to entice the public to smoke cigarettes. Marion Nestle (2002) discusses how companies are targeting younger children all the time.

> Marketers have long known that children make attractive customers, but attention to this group (and to younger and younger members within it) has increased sharply in recent years. The reasons are easy to understand; Children control increasing amounts of money, and society has granted them increasing responsibility for purchasing decisions. (p. 382)

Young People Believe Food Needs to be Mass Produced to Meet Demand. The young people in this study did talk about corporations producing our food [with the use of pesticides] and many acknowledged that this was necessary to provide the food the world needs for sustenance. Some participants shared images and talked about food that they believe represents homemade but were purchased in processed form. This study took place in a historically agricultural area of Southern Alberta, Canada. Aside from a small portion of their diets [attained through limited gardening, fruit trees, and purchased locally at farmer's markets, etc.], many of the young people living here don't feel connected to what is grown and produced in this region. Many of the participants I spoke with accept that this is our food reality. They recognize and appreciate that food grown close to home is fresh, tasty, and more nutritious than processed

foods available on supermarket shelves. Yet, most believe that corporations must grow our food, or we would not have enough to eat otherwise.

Young people are particularly susceptible to marketing (Coates et al., 2019). Habits established as young people will carry forward throughout their lives (Moss, 2021; Nicklaus & Remy, 2013) so instruction in food marketing practices is essential to their learning.

Post-Modern Implications. My post-modern mind suggests that it is industry writing the discourse that young people will not eat or try new foods as they continue to formulate new products at an ever-increasing rate. The industry sells the notion that young people want chicken nuggets and pizza pockets [and makes it monetarily inviting for sellers to take up this refrain] (Surman & Hamilton, 2019). This is a small-scale study. However, the resounding response from young people in this study points to a willingness and desire to be adventurous in life and their food choices. Allowing industry to control the discourse surrounding this key piece of our evolutionary puzzle has great implications for the future health of our people and our planet. If we do not value food-system education then this is what we are communicating to our young people, because once again, we teach by EVERY word and action.

Sustainability: From the Field to the Table

Young people with close ties to agriculture demonstrated reflective thinking in terms of food systems. They are apt to talk about water shortages, ethical farming practices, and the implications of pesticide use. For instance, one young man who helped on his family farm suggested that everyone should know food and the way that it is produced. He felt it would be very beneficial and as a society, we would appreciate our food more and waste less with such knowledge. Kevin (16) said,

> I think people should know that if you buy romaine lettuce from the grocery store, and you chop off the end and plant it, boom, you have another romaine lettuce. First of all, that will cut down emissions and help with global warming. Also, I think people will stop wasting as much. They will see how much hard work goes into growing food. I think home grown stuff tastes a lot better, and they will learn to appreciate that.

Providing opportunities for more young people to experience growing their food and the satisfaction and pride that comes with self-sufficiency could help instil knowledge and passion for the way that our food is produced. It is important to reconsider our collective knowledge about our food systems and the story we are allowing our society to tell.

Sustainable Practices are not the Norm

At this time, sustainable practices are not prioritized and articulated in the current food curriculum of the target jurisdiction. Due to my philosophy, I am continually integrating sustainable lessons into my practice. However, it is often more of an 'add on' and I believe that there is considerable evidence to suggest that sustainability should be the focus. Sterling (2010) acknowledges the need to teach from a sustainable paradigm in mainstream education and asks,

> How do we ensure that education for these extraordinary times can manifest a culture of critical commitment—engaged enough to make a real difference to social–ecological resilience and sustainability but reflexively critical enough to learn from experience and to keep options open into the future? (p. 212)

From a sustainability perspective, I am captivated by the concepts presented by Sterling (2011), who said,

> Learning for responsibility requires educational systems, institutions, and educators to acquire response-ability—the ability to meet the challenge and opportunity that

> sustainability presents. It necessitates a deeper, more empathetic response to people and to the non-human world. It means putting heart, soul, and spirit back into our thinking and practice. (p. 19)

The participants in this study appreciated the opportunities [albeit nominal] they have had to eat foods grown at home. This is substantiated by the enthusiasm for home grown apples, fruits from their grandparent's gardens, and purchasing vegetables at local farmers' markets. These young people collectively demonstrated pride in producing their food and an appreciation for food that was grown closer to home that had not been chemically treated and these themes became very prominent in this study. This study indicates that young people who have experience with food production in some capacity are more likely to make deeper connections with their food supply and talk about how important it is to buy foods grown locally. These realizations are key in moving forward to a sustainable food supply in the future. A better understanding of sustainable food production practices could have widespread benefits for individual health and the collective health of our planet.

Sustainability, Slow Food, and Regenerative Farming Practices

Yet, most of our food is being mass-produced and taste and quality are suffering as a result (Moss, 2021). Petrini (2001, 2005), the father of the Slow Food movement, elucidates a vision for a world where food is produced and enjoyed on a deep and meaningful level. He points to the consumption of fast-food and the devastating impact this has on our environment and population as a critical concern and suggests we all need to get back to the basics in terms of our methods of production and the ability to enjoy the simplicity of good food thoroughly. There is a growing acceptance of the importance of regenerative farming practices to produce better quality foods and reduce emissions leading to global warming (Barber, 2014). The Slow Food Movement and

the notion that food should be good, clean, and fair has laid the groundwork for an improved and viable means of producing and appreciating food (Petrini, 2005; Slow Food, n.d).

Youth Voice

Conversations with young people indicate that there is continued room for growth and development in critical food literacy and critical food pedagogy. In these conversations, participants indicated that they expected society to do a better job of preparing them for the future. In shared conversations, many of the co-researcher/participants in this project concluded that they did not know enough in terms of how to select food, prepare meals, and critically evaluate the source of their food considering such factors as the health and wellbeing of the people and the treatment of the land that is being used to produce it. They are being misled by social media campaigns that are sending confusing messages and leading to dietary struggles and serious issues with self-esteem.

Ava (15) said,

> I'd say that in the past couple of years, I think we're kind of in a period of realization. And we've also been trying to make amends and address racial injustice. I think we could start to do the same thing with food. I think that lately it's been a lot of looking at things that need to be changed, but we haven't quite gotten there yet as a society. We could work harder to get there.

Food as a Fundamental Right

Once again it is important to note that participants in this study were generally from Caucasian middle-income families with two working parents. For the most part, they were not minorities, from lower-income homes, and they had no experience with food shortages. As such, there was not a lot of discussion concerning the affordability of food. Individuals commented on

being concerned about the uneven distribution of food throughout the world, but this was not a widespread concern experienced on a personal level.

I refer once again to this passage by Food Secure Canada (2021),

> We all have the right to feed ourselves, our families, and our communities with dignity. The federal government has an international legal obligation to ensure the full realization of the right to food for all those living in Canada, in light of its engagement to *respect* (to not infringe upon), *protect* (prevent third parties from infringing upon), and *realise* (put in place programs), this right when it ratified the International Covenant on Economic, Social and Cultural Rights in 1976. (p. 8)

When asked if they had ever experienced hunger, most of the participants I spoke to had never known what it was like to be truly hungry. One young lady in a single-parent family, who holds a full-time job at 18, did speak very passionately about the struggle that people with low-income are experiencing with the challenges of rising costs today. Jada (18) said, "The world needs a wake-up call. But it's the people that have it the worst that are being woken up. And they're like, "Dang. This is rough!"

Jada's comments correspond to what I have seen in my classroom as I try to address hunger issues daily by trying to provide opportunities for students who are hungry to eat. As noted earlier by Yasmeen and Field (2020), food insecurity "disproportionately affects Black and Indigenous households, a reflection of systemic racism and the ongoing impacts of colonialism" (para. 9). While a commendable target, food security has not been achieved in Canada (Food Secure Canada, 2021). There is research being done to determine the impact of lack of proper nutrition as it relates to growth and development and the importance of conserving food to ensure that there is enough for everyone (Jyoti, Frongillo, & Jones, 2005; Soma, 2018; Thomas

& Irwin, 2011). Support for our foods programs, in-school gardens, and critical food pedagogy would help make this goal a reality so that everyone might enjoy the privilege of being free from hunger like the participants in this study. Going forward, it would be beneficial to recreate this study with different participants from different socio-economic and ethnic backgrounds to compare findings.

Concerns for the Future of Food

For the most part, our young people are very concerned about the future of food in terms of a lack of knowledge about how to prepare food and the quality of the food available to them. This is not without just cause. Food presented in most restaurants is being supplied by corporations and is arriving in-store frozen to be reheated for use. In essence, there is a take-it-or-leave-it approach and the consumer has no say in the ingredients used in the product because the ingredient was included at a factory and impossible to remove at the restaurant level. The food available in supermarkets is similar in that much of it is a rendition of the same cheaply grown, subsidized products, heavily packaged so they may be frozen and reheated (Nestle, 2002). This is convenient. But in the process of preparing it, nutrients are lost, and preservatives are added (Moss, 2021).

Only one participant of the 25 who were surveyed suggested that he was not concerned about the future of food in a significant way and justified this by saying that he has faith in science and the way that society is moving towards awareness. Jake (16) admitted to feeling more hopeful.

> I'm not quite as worried about the future. We see a sort of modern, new-agey approach and a push towards healthy eating and I feel like that's a positive influence. This idea is only growing. The idea of taking care of yourself and giving yourself the fuel that you

need. I feel that this message is becoming more prominent in society. And I feel like that will help in the future.

Outcomes Established Through this Study

These findings are the result of this small-scale study. As with all empirical research, this study and its results are bounded and contextualized by location, social context, and sample size. The findings should therefore be considered both tentative and exploratory, but they provide a strong basis for further research in this area. Outcomes from the current study include:

- The research method used in this study (phenomenology in conjunction with Photovoice) provided an opportunity for participants to reflect on their food experiences and this facilitated deeper cognitive responses and assisted them in thinking about their food philosophies. The value of this combined research approach is worthy of further exploration.
- Food experience is a complex and evolving topic. Many contemporary researchers are in the process of formulating the language necessary to encapsulate the breadth of understanding required to articulate this topic. Therefore, over the years, there has been a shift in language usage and focus towards a more all-encompassing definition from food experience to food literacy, and most recently, critical food pedagogy. This is an area requiring further study.
- In terms of considering sustainability, there are important considerations for the health of society and the health of our planet. For example, this change in language use shifts our collective understanding to a more complex and integrated perception of our food system where society is asked to consider all aspects of production from the source to the table.

- Young people feel that they are being negatively influenced by social media surrounding their dietary choices and some are experiencing extreme anxiety and confusion surrounding their personal dietary choices as a result. This leads to a notion of taking up space and the notion that females feel inclined to take up as little space as possible both in physical stature and personal voice. Males, to a lesser extent, feel obligated to take up more space physically in terms of lifting weights and gaining body mass.
- Young people are not fully aware of the lengths to which the food industry goes to monopolize their food choices. In addition, they express ambivalence and demonstrate a lack of empowerment when discussing processed foods on supermarket shelves, in restaurants, and in their school cafeterias.
- Young people are not familiar with the evolving language and knowledge surrounding the contemporary food experience. For example, they are (mostly) unfamiliar with terms such as "true cost accounting" and the understanding that the production of seemingly cheap food comes at extreme costs to our health, environment, and the people charged with producing this form of food.
- Among many in this set of study participants, there is a general sense of helplessness and impending doom, as a result of competing information, seemingly diverse dietary choices required, and an underlying message of world malaise imparted by various forms of media.
- Healthy, homemade food was perceived by participants to be timeless and can provide nourishment and comfort in times of duress.

- Some participants, demonstrated confusion about the differences between homemade and processed foods, as some SHOWED documents displayed a mixture of processed foods served in the home (i.e., eaten at home) as a homemade meal. In addition, some participants described foods that they made using processed ingredients as homemade without differentiating the cooking methods used in the process. For example, the use of a purchased teriyaki sauce versus making one from scratch was considered interchangeable as was the use of commercial soup stocks versus preparing one from scratch ingredients.
- Food can link generations and cultures. Participants in this study indicated that they are adventurous and eager to learn about the cultures of the world through food. Some of their favourite foods (and celebrations) include taking part in eating and exploring cultural foods that are new to them.
- Participants discussed how they did not have opportunities to learn how to prepare these foods at home.
- Knowledge and support are powerful tools. Young people who had specific guidance (from parents, teachers, or coaches), (or were self-educated in their food choices) tended to make healthier dietary choices and indicated that they were not as likely to be influenced by social media in making decisions and were less anxious about their body image as a result.
- Females in this study entered the conversation at various stages in their food experience development. A few of the participants talked about struggling with their diet and feeling extremely anxious about their body image and linked it to what they were 'consuming' on social media.

- Others had experienced an ‘awakening’ and could articulate the process they had undergone from feeling extremely anxious about their body image (and struggling with eating disorders) to gaining knowledge about healthy food choices and practising a healthy lifestyle that included participating in sports and working out with friends.
- Individuals with parents who were able to encourage healthy, homemade meals, and accurate dietary information spoke with confidence about their dietary choices and body image.
- Similarly, athletes with constructive dietary training demonstrated a positive self-image.
- Sports may also have negative effects on one’s body image. In one case, an athlete discussed how participation in a specific sport (Judo) led to her having a very difficult relationship with her body before she experienced an awakening and was able to transform her notion of how a healthy body looks and behaves.
- Working in fast-food establishments may cause internal ideological conflict for young people in terms of their dietary choices, but also for their role in contributing to producing a lot of garbage leading to a destructive future for themselves and the planet.
- The ideological conflict was heightened during Covid when fast-food workers felt additional responsibility for preventing the spread of the disease.
- The majority of participants discussed either an intolerance of, or allergy to, dairy products and described various bodily discomforts they experienced after consuming dairy.

- The majority of the participants are doing little to no cooking at home for their families. A few participants acknowledged a propensity for occasional cooking and baking, but this was done as a means of entertainment or a hobby, rather than an expectation to participate in family meal preparation.
- Some individuals expressed various degrees of concern (ranging from concern to fear) that they would not be prepared to cook for themselves in the future.
- In this study, I was unable to ascertain the rationale as to why so few youths were cooking at home. Some possible reasons that arose included: participation in extra-curricular activities, homework, part-time work, and parents who enjoy doing the cooking themselves.
- The act of baking may be therapeutic. A few participants indicated how they turned to baking in times of duress (especially during Covid) and found solace. They discussed how it allowed them to enter a reflective and peaceful state. This state occurred when participants were working with recipes they had made previously and attained a certain amount of comfort in executing.
- There appears to be a little delineation between what was classically termed home cooking and processed foods that are prepared at home.
- Due to the parameters of this study and the requirement to listen to co-researchers' voices in describing their food experience rather than directing the conversation, I was unable to determine the extent of participant knowledge of cooking methods.
- Similarly, the results of this study do not address specific details about the extent of youth nutrition knowledge. However, results did indicate that young people

were unfamiliar with some of the common, contemporary, dietary terminology and their role in nutrition (e.g., as antioxidants, probiotics, etc.).

- Individuals with a background in gardening and agriculture demonstrated more awareness than the other co-researchers in this study about potential challenges faced by the food system. The range of ideas that was expressed by those with some level of experience with gardening and/or agriculture included:

  - Time spent in the act of producing food is beneficial to attain a sustainable perspective of our food system.

  - Time spent in food production may provide benefits due to the act of being in, or surrounded by, nature and the biological process of growth.

  - The act of cooking and gardening share many similarities in that successful results [and a sense of wellness and purpose] are achieved by working with one's hands.

  - A societal penchant for overlooking the roles of cooking and gardening leads to the lost potential for learning about the interconnected nature of our world and food systems.

- The vast representation of processed foods in our grocery stores, restaurants, and schools, demonstrates societal acceptance of corporate renditions of food. This is evident in this research because young people do not question or hold schools accountable for the foods available to them in school.

- Similarly, many young people are not demonstrating critical thinking and questioning the vast array of processed foods stocking grocery store shelves.

- Food classes in schools are not required at any point in attaining a high school education.

Elevate the Importance of Food in all Areas of Our Lives

If we value healthy, sustainable food, this is the message we need to be communicating at home, in our communities, and in our schools. Moving forward, food-system education needs to be elevated in our society and our school curriculum. It seems like a simple solution. If we know better, we do better. Similar to the experience of 'awakening' referenced in Chapter Four, it is only through awareness that making change is possible. We need to teach our young people to empower themselves and use the Internet for good and alleviate the stress they experience when they are subjected to incredible and unattainable standards. The desperation apparent in the voices of many of the youths I spoke to pointed to the frustration and uncertainty that they experienced every day. There is a great deal of potential for further exploration. There are still many unknowns when it comes to our food systems and food sources.

If education has the power to change dietary and lifestyle habits in the lives of a few individuals, perhaps society could benefit from major reform of our current education system in terms of how important food and nutrition information is. Critical Food Pedagogy has the power to inspire people to make healthy and educated food choices for themselves.

Critical Food Literacy and Pedagogy as an Opportunity for Cross-Curricular Learning

The ability to create a better understanding of the food experience of today's youth can provide opportunities for cross-curricular connections and heightened real-life learning experiences. Nanayakkara, Margerison, and Worsley (2018) advocate for teaching food literacy as a theme that runs through other course content. The more we look at the cross-curricular integration of all course content, the more we create a curriculum that is viable and relevant to

society. Students [all people] can have fun and learn about the interconnectedness of the foods they are preparing literally from their source to the connections it has on their bodies now and into the future, thereby taking back control from the agriculture/food industry that has come to dominate the food scene in most parts of the world (Deardon, et al., 2016; Hyman, 2021; Standage, 2009). The results from this study have the potential to expand to a phenomenological study of individuals crossing economic, and cultural divides. In addition, studying the food experience at different life stages may help us learn, in conjunction with our elders, what is important to carry forward to the future.

Closing Remarks

Qualitative phenomenological design with a Photovoice model was used to elicit rich descriptions (Moustakas, 1994) and provide an instrument for participant reflection and voice (Wang, 2008). In keeping with a phenomenological study, the overall question surrounding food experience was determined by the results of the conversations with each participant. Consistent with the purpose of phenomenology, the themes that arose from the conversations form the findings of this study.

I believe that key observations that have great potential to improve the world and serve as a road map for the future are being 'missed' because society is overlooking the importance of food system knowledge and its impact on our collective health rather than teaching about how everything is interconnected. Connections can be found to all areas of life if we value our food systems. We will look for them, talk about them, teach about them, and celebrate the diverse nature of our world. If we can do this (or work to improve in this area) we celebrate the complex nature of our society in all its multi-diversity.

I side with Dan Barber as he stresses the importance of everyone doing a personal check-in and evaluating their own food experience to arrive at an educated personal philosophy of food as being one of the most effective things we can do in, and for, our society. Barber (2014) contends

> These are important considerations in terms of sustainability because the power to identify and think about your personal food philosophy has the power to change your life; If we follow the food chain and ask ourselves to be considerate of what we put in our bodies and how that food is produced, we as a society, have the potential to positively influence the world in powerful ways. (p. 22)

Citizens and young people with a developed philosophy of food and food system knowledge can make educated choices about what they choose to view and eat and how influential that information is in their lives; informed individuals can effectively quiet some of the peripheral "noise", lead their own lives, and make conscious choices about where their food is coming from, rather than succumbing to commercial or social influences. Knowledge gained from these explorations has the potential to impact classroom curriculum, all areas of society, and ultimately lends itself to guiding more sustainable and thoughtful practices that lead to healthier individuals and a healthier planet.

References

Abdolalipour, S., & Mirghafourvand, M. (2021). Effect of education on preventive behaviors of osteoporosis in adolescents: A systematic review and meta-analysis. *International Quarterly of Community Health Education*, *41*(3), 325–347. https://doi.org/10.1177/0272684X20936833

Alberta Education, (2021). *Program of study*. https://www.alberta.ca/programs-of-study.aspx#jumplinks-2

Alberta Goverment, (2021). *Isolation and quarantine requirements*. https://www.alberta.ca/isolation.aspx

Anderson, H., & Falkenberg, T. (2016). The role and status of food and nutrition literacy in Canadian school curricula. *Alberta Journal of Educational Research*, *62*(1), 87-109.

Asamoah, T. (2020, April 17). Digital overload: What is it and how is it affecting our mental and physical health? *GoodRX Health*. https://www.goodrx.com/well-being/healthy-mind/what-is-digital-overload-definition-symptoms-how-to-manage

Ayton, A., & Ibrahim, A. (2020). The western diet: A blind spot of eating disorder research?; A narrative review and recommendations for treatment and research. *Nutrition Reviews*, *78*(7), 579–596. https://doi.org/10.1093/nutrit/nuz089

Barber, D. (2014). *The third plate; Field notes on the future of food*. Penguin Press.

Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit*. UBC Press.

Beck, B. (2014). Gifts of the magi: Chef, million dollar arm, and cultural mixtures. *National Association for Multicultural Education, 16* (4), 219-222. https://doi.org/10.1080/15210960.2014.956603

Bernard, S. (2010, Dec. 1). Science shows making lessons relevant really matters. Edutopia. https://www.edutopia.org/neuroscience-brain-based-learning-relevance-improves-engagement.

Berry, T. (1999). *The great work of the new millennium: Our way into the future*. Harmony/Belltower.

Berry, W. (2009). *Bringing it to the table: On farming and food*. Counterpoint.

Bittman, M. (2007). What's wrong with what we eat? [Film]. TED Conferences. https://www.ted.com/talks/mark_bittman_what_s_wrong_with_what_we_eat

Bittman, M. (2013). VB6: Eat vegan before 6:00: To lose weight and restore your health for good. Clarkson Potter.

Baker, L., Castilleja, G., De Groot Ruiz, A., & Jones, A. (2020). Prospects for the true cost accounting of food systems. *Nature Food*, *1*(12), 765–767. https://doi.org/10.1038/s43016-020-00193-6

Benazzo, M. & Benazzo, Z., (Directors). (2021). *The Wisdom of Trauma* [Film]. Science and Nonduality.

Block, L., Grier, S., Childers, T., Davis, B., Ebert, J., Kumanyika, S., Laczniak, R., Machin, J., Motley, C., Peracchio, L., Pettigrew, S., Scott, M., & Van Ginkel Bieshaar, M., (2011). From nutrients to nurturance: A conceptual introduction to food well-being. *Journal of Public Policy and Marketing*, *30*(1), 5-13. https://doi.org/10.1509/jppm.30.1.5

Bloor, M. , & Wood. F. (2006). *Keywords in qualitative methods*. Sage Publications.

Brendtro, L., Brokenleg, M., & Van Bockern, S. (1990). *Reclaiming youth at risk: Our hope for the future*. National Educational Service.

Brett, B. (2011). *Trauma farm: A rebel history of rural life*. Greystone Books.

Brundtland, G. (1987). Our common future: Report of the world commission on environment and development. United Nations. https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/brundtland-report.html

Bryman, A. (2004). *Social research methods*. Oxford University Press.

Blakey, T. R. (2021). *Bush Pilot History.* Omar Aviation. https://www.omaraviation.ca/history/

Byron, E. (2021, May, 25). Is Baking's Pandemic Popularity Just a Flash in the Pan? *The Wall Street Journal*. https://www.wsj.com/articles/is-bakings-pandemic-popularity-just-a-flash-in-the-pan-11621951200.

Çakır, E. (2014). *Let's cook together: Empowering intergenerational communication through cooking.* Oxford University. https://doi: 107346/-fei-XII-02-14_18

Canada Food Guide. (n.d). Government of Canada. https://food-guide.canada.ca/en/.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014.

Classens, M., & Sytsma, E. (2020). Student food literacy, critical food systems pedagogy, and the responsibility of postsecondary institutions. *Canadian Food Studies / La Revue Canadienne Des Études Sur L'Alimentation, 7*(1), 8-19. https://doi.org/10.15353/cfs-rcea.v7i1.370

Coates, A., Hardman, C., Halford, J., Christiansen, P., & Boyland, E. (2019). Food and beverage cues featured in YouTube videos of social media influencers popular with children: An exploratory study. *Frontiers in Psychology, 10*, 2142. https://doi.org/10.3389/fpsyg.2019.02142

Creswell, J., & Creswell, J. D. (2018). *Research design; Qualitative, quantitative and mixed methods approaches*. Sage Publications, Inc.

Coveney, J., Begley, A., & Gallegos, D. (2012). 'Savoir fare': Are cooking skills a new morality? *Australian Journal of Adult Learning, 52*(3), 617-642.

Cunningham, M., & Rious, J. B. (2015). Listening to the voices of young people: Implications for working in diverse communities. *American Journal of Orthopsychiatry, 85*(6), S86-S92. https://doi.org/10.1037/ort0000132

Dearden, P., Mitchell, B., & O'Connell, E., (2016). *Environmental change & challenge: A Canadian perspective*. Oxford University Press.

Dewey, J. (2018). *Democracy and Education*. Myers Education Press.

Dib, K., Donaldson, I., & Turcotte, B. (2008). Integration and identity in Canada: The importance of multicultural common spaces. *Canadian Ethnic Studies, 40*(1), 161-187. doi:10.1353/ces.0.0078.

Dilafruz, W., Anderson, J., & Park-Robins, A. (2015). Tongue Tied No More: Diversity, Pedagogy and Sense of Place in the Learning Gardens. *Canadian Journal of Environmental Education*, *20*, 25-45.

Dodson, E. (2014, February 22). *Heidegger in twelve minutes*. [Video]. YouTube. https://www.youtube.com/watch?v=A04RhtR0imY&t=2sers

Edwards, A. R. (2005). *The sustainability revolution: Portrait of a paradigm shift*. New Society Publishers.

Ellerton, N. F. (2017). An outsider's examination of the insider's perspective. *Mathematics Education Research Journal, 20*(1), 127-136. https://doi.org/10.1007/BF03217472

Elgar, F. J., Craig, W., & Trites, S. J. (2013). Family Dinners, communication, and mental health in Canadian adolescents. *Journal of Adolescent Health*, *52*(4), 433-438. https://doi.org/10.1016/j.jadohealth.2012.07.012

Expect to pay a lot more for groceries next year, thanks to climate and COVID-19. (2020, December, 8). CBC News. https://www.cbc.ca/news/business/food-price-report-1.5832370

Feed Opportunity, (n.d). *What is Food Insecurity?* Maple Leaf Centre for Action on Food Security. https://www.feedopportunity.com/understanding-food-insecurity/

Flax, J. (1987). Postmodernism and gender relations in feminist theory. *Signs, 12*(4), 621–643. https://doi.org/10.1086/494359

Food Secure Canada, (n.d). *What is Food Sovereignty?* https://foodsecurecanada.org/who-we-are/what-food-sovereignty

Food Secure Canada, (2021). Growing resilience and equity; A food policy action plan in the context of Covid 19. https://foodsecurecanada.org/food-policy/sustainable-development-goals

Foster, A. (2007). Roots of diversity: Growing culturally significant plants in the classroom. *Green Teacher (Toronto), (81)*, 24-28. https://greenteacher.com/roots-of-diversity-growing-culturally-significant-plants-in-the-classroom/

Frost, A. (2022, May 16). *Building the themes of digital citizenship into instruction and business planning: –K-12 students are online more than ever, and they must understand digital citizenship to conduct themselves safely and responsibly in the virtual world*. EdTech: Focus on K-12. https://edtechmagazine.com/k12/article/2022/05/building-themes-digital-citizenship-instruction-and-business-planning-perfcon

Fulkerson, J., Story, M., Mellin, A., Leffert, N., Neumark-Sztainer, D., & French, S. A. (2006). Family dinner meal frequency and adolescent development: Relationships with developmental assets and high-risk behaviors. *Journal of Adolescent Health. 39*(3), 337-345. https://doi.org/10.1016/j.jadohealth.2005.12.026

Freire, P. (2018). *Pedagogy of the oppressed; 50th anniversary edition*. Bloomsbury.

Gardening Organic and Sustain, Schmutz, S., Lennartsson, M., Williams, S., Devereaux, M., & Davies, G. (2014). The benefits of gardening and food growing for health and well-being. https://www.gardenorganic.org.uk/sites/www.gardenorganic.org.uk/files/GrowingHealth_BenefitsReport_0.pdf

Gartaula, H., Patel, K., Shukla, S., & Devkota, R. (2020). Indigenous Knowledge of Traditional Foods and Food Literacy Among Youth: Insights from Rural Nepal. *Journal of Rural Studies. 73*, 77–86.

Glesne, C. (2016). *Becoming qualitative researchers: An introduction (5th Edition).* Pearson.

Global Alliance for the Future of Food, (2021). *Seven calls to action: Ingredients of food systems transformation*. https://futureoffood.org/insights/seven-calls-to-action-ingredients-of-food-systems-transformation/

"The Global Risks Report 2021." *World Economic Forum*, 2021, www.weforum.org/reports/the-global-risks-report-2021.

Glover, D., & Sumberg, J. (2020). Youth and food systems transformation. *Frontiers in Sustainable Food Systems, 4*. 1-15. https://doi.org/10.3389/fsufs.2020.00101

Goldman-Hasbun, J., Nosova, E., DeBeck, K., Dahlby, L., & Kerr, T. (2019). Food insufficiency is associated with depression among street-involved youth in a Canadian setting. *Public Health Nutrition*, *22*(1), 115–121. https://doi.org/10.1017/S1368980018002574

Greger, M. (2015). *How Not to Die; Discover the Foods Proven to Prevent and Reverse Disease*. Flatiron Books.

Greger, M. (2020, October 26. *The optimal B12 dosage for adults*. NutritionFacts.org. https://nutritionfacts.org/video/the-optimal-vitamin-b12-dosage-for-adults/?gclid=Cj0KCQiA2uH-BRCCARIsAEeef3mCWqhDj12pGcwdUdeMhVuj3LfQbtG6HFODXZdz2bPrLhKoG-O237caAjkTEALw_wcB

Guthman, J. (2008). Bringing good food to others: Investigating the subjects of alternative food practice. *Cultural Geographies, 15*, 431–447.

Harris, M. (2014). *The end of absence: Reclaiming what we've lost in a world of constant connection*. Harper Collins Publishers Ltd.

He, M., Tucker, P., Gilliland, J., Irwin, J. D., Larsen, K., & Hess, P. (2012). The influence of local food environments on adolescents' food purchasing behaviors. *International Journal of Environmental Research and Public Health, 9*(4), 1458-1471. https://doi.org/10.3390/ijerph9041458

Health Canada. (2019). *Eating well with Canada's food guide*. http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php

Heidegger, M., (2010). *Being and time*. State University of New York Press.

Holden, P., (2016, November, 16). The true cost of food. *Resilience*. https://www.resilience.org/stories/2016-11-15/the-true-cost-of-food-1/

Hui, A. (2022, September 15). Tik Tok is transforming how and what we eat. *The Globe and Mail*. https://www.theglobeandmail.com/life/article-looking-for-the-next-big-food-trends-follow-foodtok/

Hyman, M. (2021). The pegan diet: 21 practical principles for reclaiming your health in a nutritionally confusing world. Little Brown and Company.

Impey, C. (2020, July 23). Massive online open courses see exponential growth during Covid 19 pandemic. *The Conversation*. https://theconversation.com/massive-online-open-courses-see-exponential-growth-during-covid-19-pandemic-141859

Jamieson. (1998). Sustainability and beyond. *Ecological Economics, 24*(2-3), 183–192. https://doi.org/10.1016/S0921-8009(97)00142-0.

Jyoti, D. F., Frongillo, E. A., & Jones, S. J. (2005). Food insecurity affects school children's academic performance, weight gain, and social skills. *The Journal of Nutrition*, *135*(12), 2831-2839. https://doi.org/10.1093/jn/135.12.2831

Kamkar, K. (2019, August, 7). Burnout latest 'occupational phenomenon'. Canadian Occupational Safety. https://www.thesafetymag.com/ca/news/opinion/burnout-latest-occupational-phenomenon/187496

Kaplan, M., Kiernan, N. E., & James, L. (2006). Intergenerational family conversations and decision making about eating healthfully. *Journal of Nutrition Education and Behavior, 38*(5), 298-306. https://doi.org/10.1016/j.jneb.2006.02.010

Kaplan, D. (Ed). (2012). *The philosophy of food*. University of California Press.

Kirbyson, R., (Ed)., Bain, C., Dreyer, P., McCutcheon, K., & Skeoch, A., (1983). *Discovering Canada: Shaping an identity*. Prentice-Hall.

Kivunja, C., & Kuyini, A. B., (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education, 6*(5), 26-41. https://files.eric.ed.gov/fulltext/EJ1154775.pdf

Kingsolver, B. (2007). *Animal, vegetable, miracle: A year of food life*. Harper Perennial.

Klassen-Bolding, S. (2018). A qualitative investigation of preteen girls' experiences in a mindfulness-based eating disorder prevention program. *Counseling Outcome Research and Evaluation, 9*(1), 42-54. https://doi.org/10.1080/21501378.2018.1424533

Koch, P., Angela, C. B., Contento, I., & Crabtree, M. (2008). Farm to table and beyond: Helping students make sense of the global food system. *Science Scope (Washington, D.C.), 31*(9), 36-39.

Lam, V., Romses, K., & Renwick, K. (2019, June 16). Exploring the relationship between school gardens; Food literacy and mental well-being in youth using photovoice. http://dx.doi.org/10.14288/1.0379703

Landry, A., & Logue, B. (2017). Survey of principals regarding perceived benefits and barriers of school gardens. *The Journal of Child Nutrition and Management. 41*(1), 5-6.

Little, D., (2014, December, 18). Defining sustainability in meaningful ways for educators. *The Journal of Sustainability Education*. http://www.susted.com/wordpress/content/defining-sustainability-in-meaningful-ways-for-educators_2014_12/

Louv, R. (2008). *Last child in the woods; Saving our children from nature-deficit disorder*. Algonquin Books of Chapel Hill.

Low, W., & Davenport, E. (2007). To boldly go…exploring ethical spaces to re-politicise ethical consumption and fair trade. *Journal of Consumer Behaviour, 6*(5), 336-348. https://doi.org/10.1002/cb.226

Malcata, F. X. (2015). Some thoughts from a food science and technology educator. *Journal of Food Science Education, 14*(1), 5-6. https://doi.org/10.1111/1541-4329.12052

Mallett, G. (2004). *Last chance to eat: The fate of taste in a fast-food world*. W.W. Norton & Company.

Matsumura, J. L. (2016). Ecotherapy as a tool for mental wellness. *Vermont Connection*, *37*, 103–110.

Moss, M. (2021). *Hooked: Food, free will, and how the food giants exploit our addictions.* Penguin Random House Canada.

Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications.

Mull, A., (2020, May 12). Americans have baked all the flour away; The pandemic is reintroducing the nation to its kitchens. *The Atlantic.* https://www.theatlantic.com/health/archive/2020/05/why-theres-no-flour-during-coronavirus/611527/

Murphy, L. (2020, April 22). The consumer psychology behind comfort food. LRW Resources. https://lrwonline.com/perspective/the-consumer-psychology-behind-comfort-food/.

Nanayakkara, J., Margerison, C., & Worsley, A. (2018). Senior secondary school food literacy education: Importance, challenges, and ways of improving. *Nutrients; Nutrients, 10*(9), 1-16. https://pubmed.ncbi.nlm.nih.gov/30227683/

Nestle, M., (2002). *Food politics. How the food industry influences nutrition and health*. University of California Press.

Nguyen, H., (2018). Sustainable food systems: Concept and framework. *Food and Agriculture Organization of the United Nations*. https://www.fao.org/3/ca2079en/CA2079EN.pdf

Nicklaus, S., & Remy, E. (2013). Early origins of overeating: Tracking between early food habits and later eating patterns. Current Obesity Reports. (2), 179-184. https://doi.org/10.1007/s13679-013-0055-x

Oliver, P. (2013). Writing your thesis, SAGE Publications. ProQuest Ebook Central. http://ebookcentral.proquest.com/lib/oculnu-ebooks/detail.action?docID=1534973.

Ormiston, H., Nygaard, M., & Apgar, S., (2022). A systemic review of secondary traumatic stress and compassion fatigue in teachers. School Mental Health. Advanced online publication. (1-9), https://doi.org/10.1007/s12310-022-09525-2

Orr, D. W. (2006). Framing sustainability. *Conservation Biology, 20*(2), 1-8. https://ocul-nip.primo.exlibrisgroup.com/permalink/01OCUL_NIP/lrs5o/gale_ofa152363833

Otter Voice Meeting Notes. (2020, October 22). https://otter.ai/

Otto, C. (2021, November, 19). Food systems hold the key to eating more ethically. https://sentientmedia.org/food-system/

Parr, M. (2019), *Aligning axiological, ontological, and epistemological approaches at the intersection of theoretical constructs.* [infographic]. Created for course work for EDUC 6126, Nipissing University.

Pennell, M. (2015). Community food literacies: An introduction. *Community Literacy Journal*, *10*(1), 1-3. https://dx.doi.org/10.25148/CLJ.10.1.009271

Pera, R., Executive Producer. (2018-present). UN food system champions panel three – The hidden costs of food systems [Audio podcast]. Food talk with Dani Nierenberg. Food Tank https://podcasts.apple.com/us/podcast/245-food-system-champions-panel-3-hidden-costs-food/id1434128568?i=1000512661170

Petrini, C. (2001). *Slow food: The case for taste*. Columbia University Press.

Petrini, C. (2005). *Slow Food Nation: Why our food should be good, clean, and fair*. Random House.

Photovoice. (2007). *Photovoice hamilton; manual and resource kit*. Hamilton Community Foundation. http://photovoice.ca/?page_id=179

Pinhas, L., Morris, A., Crosby, R. D., & Katzman, D. K. (2011). Incidence and age-specific presentation of restrictive eating disorders in children: A Canadian pediatric surveillance program study. *Archives of Pediatrics & Adolescent Medicine, 165*(10), 895-899. https://doi.org/10.1001/archpediatrics.2011.145

Pollan, M. (2007). *The omnivore's dilemma: A natural history of four meals*. Penguin Books.

Pollan, M. (2008). In defense of food: An eater's manifesto. Penguin Books.

Pollan, M. (2013). *How Cooking can change your Life*. [Video]. YouTube. https://www.youtube.com/watch?v=TX7kwfE3cJQ

Precision. (2019, December 19). Qualitative analysis approaches: An overview. http://precisionconsultingblog.com/qualitative-analysis-approaches-an-overview/.

Pruden, J., & Kirkup, K. (2021, June 1). Indigenous leaders say discovery of children's remains at Kamloops residential school is beginning of national reckoning. *The Globe and Mail*. https://www.theglobeandmail.com/canada/article-indigenous-leaders-call-for-national-reckoning-after-childrens-remains/.

Ranahan, P., & Kutcher, S. (2020). *Introduction to mental health for child and youth care*. Canadian Scholars.

Reconciliation Canada (n.d). https://reconciliationcanada.ca/.

Red seal certification: 8 frequently asked questions. (2022, March,10). Vocational Schools and Colleges. https://www.vocationalschools.ca/articles/red-seal-chef?utm_medium=301&utm_source=direct&utm_campaign=tsnet/ca/articles/red-seal-chef#:~:text=After%20acquiring%20the%20required%20amount,apply%20to%20challenge%20the%20exam.

Reissig, C., Strain, E., & Griffiths, R. (2009). Caffeinated energy drinks—A growing problem. *Drug and Alcohol Dependence; Drug Alcohol Depend, 99*(1), 1-10. https://doi.org/10.1016/j.drugalcdep.2008.08.001

Renwick, K., (2017) Critical Health Literacy in 3D. *Frontiers in Education. 2*(40), 1-5., https://doi.org/10.3389/feduc.2017.00040

Rockström, J. (2015). Bounding the planetary future: Why we need a great transition*, Great Transition Initiative. http://www.greattransition.org/publication/bounding-the-planetary-future-why-we-need-a-great-transition.*

Romero,M., M. Y., & Francis, L. A. (2020). Youth involvement in food preparation practices at home: A multi-method exploration of Latinx youth experiences and perspectives. *Appetite*, *144*(Complete). https://doi.org/10.1016/j.appet.2019.104439

Rojas, A., Kemshaw, M., Mansfield, B., & Orrego, E. (2018). Food + Schools. Faculty of Environmental Studies, University of Waterloo.

Rowe, B., & Rocha, S. (2015). School lunch is not a meal: Posthuman eating as folk phenomenology. *Educational Studies, 51*(6).482-496. https://doi.org/10.1080/00131946.2015.1098643

Sbicca, J. (2015). Solidarity and sweat equity: For reciprocal food justice research. *Journal of Agriculture, Food Systems, and Community Development, 5*(4), 63-67. https://doi.org/10.5304/jafscd.2015.054.004

School of Life. (2015, July 10). *Philosophy - Hegel*. [Video]. YouTube. https://www.youtube.com/watch?v=H5JGE3lhuNo

School food gardens-benefits to students. (n.d). Healthy eating at school. http://healthyeatingatschool.ca/research-and-reports/school-food-gardensbenefits-to-students

Sharif, M., Zahari, M., Nor, M., & Muhammad, R. (2013). How could the transfer of food knowledge be passed down? *Procedia, Social and Behavioral Sciences, 105*, 429-437. https://doi.org/10.1016/j.sbspro.2013.11.045

Shepherd, G. (2012). *Neurogastronomy; How the brain creates flavor and why it matters*. Columbia University Press.

Shilling, C. (2017). Body pedagogics: Embodiment, cognition and cultural transmission. *Sociology, 51*(6), 1205–1221. https://doi.org/10.1177/0038038516641868

Shor, I. (1992). Education is politics: Paolo Freire's critical pedagogy. In P. Leonard., & P. McLaren., (Eds.), Paulo Freire: A critical encounter, (24-35). ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/oculnu-ebooks/detail.action?docID=166704

Singer, P., & Mason, J., (2006). *The Way We Eat: Why Our Food Choices Matter*. Rodale.

Slater, J. (2013). Is cooking dead? The state of home economics food and nutrition education in a Canadian province. *International Journal of Consumer Studies, 37*(6), 617-624. https://doi.org/10.1111/ijcs.12042

Slow Food. (n.d). *Our history*. https://www.slowfood.com/about-us/our-history/

Smith, M. (2011). *Healthy starts here!; 140 Recipes that will make you feel great*. Whitecap Books.

Smith, J., (2007) Hermeneutics, human sciences, and health: Linking theory and practice, *International Journal of Qualitative Studies on Health and Well-being, 2*(1), 3-11, https://doi.org/10.1080/17482620601016120

Soma, T. (2018). Closing the loop on Canada's National Food Policy: A food waste agenda. *Canadian Food Studies / La Revue Canadienne Des études Sur l'alimentation*, *5*(3), 273–278. https://doi.org/10.15353/cfs-rcea.v5i3.314

Standage, T. (2009). *An edible history of humanity*. Bloomsbury.

Stasik, S., & Vrbat, P., (2022, May 26). What is a content creator? *State of Digital Publishing* (SOPD)., https://www.stateofdigitalpublishing.com/content-strategy/what-is-a-content-creator/

The South African College of Applied Psychology. (2020, February 28). Existentialism vs essentialism: The psychology of existence. https://www.sacap.edu.za/blog/applied-psychology/essentialism/.

Spencer, R. A., McIsaac, J. D., Stewart, M., Brushett, S., & Kirk, S. (2019). Food in focus: Youth exploring food in schools using photovoice. *Journal Of Nutrition Education And Behavior*, *51*(8), 1011–1019. https://doi.org/10.1016/j.jneb.2019.05.599

Stanford Encyclopedia of Philosophy. (2022, July 6). Necessary and sufficient conditions. https://plato.stanford.edu/entries/necessary-sufficient/

Sterling, S., (2010). Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education. *Environmental Education Research*, *16*(5-6), 511-528. https://doi.org/10.1080/13504622.2010.505427

Sterling, S. (2011). *Sustainable education: Re-visioning learning and change*. Green Books.

Sterling, S. (2016). A commentary on education and sustainable development goals. *Journal of Education for Sustainable Development, 10*(2), 208–213. https://doi.org/10.1177/0973408216661886

Sumner, J. (2013). Food literacy and adult education: Learning to read the world by eating. *The Canadian Journal for the Study of Adult Education, 25*(2), 79-91.

Sumner, J. (2011). Serving social justice: The role of the commons in sustainable food systems. *Studies in Social Justice, 5*(1), 63-75. https://doi.org/10.26522/ssj.v5i1.992

Sumner, J. (2015). Reading the world: Food literacy and the potential for food system transformation, *Studies in the Education of Adults, 47*(2), 128-141. https://doi-org.roxy.nipissingu.ca/10.1080/02660830.2015.11661680

Sumner, J. (2018). Eating our way to sustainability? Leisure, food, and community economic development. *Sustainability,10*(5), 1-9. http://dx.doi.org/10.3390/su10051422

Sumner, J., & Weaver, C. (2016). Pedagogical encounters: Critical food pedagogy and transformative learning in the school and community, In C. Anderson, J. Brady, & C. Levkoe, (Eds.), *Conversations in Food Studies*. 322-341. University of Manitoba Press.

Surman, E., & Hamilton, L. (2019). Growing consumers through production and play: A phenomenological exploration of food growing in the school foodscape. *Sociology, 53*(3), 468-485. https://doi.org/10.1177/0038038518789542

Sutton-Brown, C. (2014). Photovoice: A methodological guide. *Photography & Culture, 7*(2), 169-185. https://doi.org/10.2752/175145214X13999922103165

Tan, F., (2013). Flavours of thought: Towards A phenomenology of food-related experiences. *Interdisciplinary Description of Complex Systems, 11*(4), 400-414. https://doi.org/10.7906/indecs.11.4.5

The World Bank. (n.d). World Development Report 2021: Data for better lives. https://www.worldbank.org/en/publication/wdr2021.

Thomas, H. M., & Irwin, J. D. (2011). Cook it up! A community-based cooking program for at-risk youth: Overview of a food literacy intervention. *BMC Research Notes, 4*(1), 1-7. https://doi.org/10.1186/1756-0500-4-495

Torchia, R., (2022, April 29). *Pandemic-Era tech continues to add value to K-12 classrooms*. EdTech: Focus on K-12. https://edtechmagazine.com/k12/article/2022/04/pandemic-era-tech-continues-add-value-k-12-classrooms

Treasure, J., Duarte, T. A., & Schmidt, U. (2020). Eating disorders. *Lancet. 395*(10227), 899–911. https://doi.org/10.1016/S0140-6736(20)30059-3

Truman, E., & Elliott, C. (2019). Barriers to food literacy: A conceptual model to explore factors inhibiting proficiency. *Journal of Nutrition Education and Behavior, 51*(1), 107-111. https://doi.org/10.1016/j.jneb.2018.08.008

Ulrichsen, H. (2006, September 21). Residents don't want Lily Creek School. Sudbury.com. https://www.sudbury.com/local-news/residents-dont-want-lily-creek-school-214690.

United Nations. (n.d)., Sustainable development goals. https://unfoundation.org/what-we-do/issues/sustainable-development-goals/?gclid=Cj0KCQjw5ZSWBhCVARIsALERCvyJWnYlzPjCVnVMqYetsFtsDgqcaw4o8RceCjmb8rP9vhDh3S7SJpAaAt1tEALw_wcB

Utter, J., Fay, A., & Denny, S. (2017). Child and youth cooking programs: More than good nutrition? *Journal of Hunger & Environmental Nutrition*, *12*(4), 554–580. https://doi.org/10.1080/19320248.2015.1112758

van Manen, M., (2014). *Phenomenology of practice: Meaning giving methods in phenomenological research and writing*. Routledge.

van Manen, M., (2015). *Researching lived experience*. Routledge.

Velardo, S. (2015). The nuances of health literacy, nutrition literacy, and food literacy. *Journal of Nutrition Education and Behavior, 47*(4), 385-389. https://doi.org/10.1016/j.jneb.2015.04.328

Vidgen, H., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite, 76* (1), 50-59. https://doi.org/10.1016/j.appet.2014.01.010

Vygotsky, L. (1978/1997). Interaction between learning and development. In M. Gauvin & M. Cole (Eds.), Readings on the development of children (29-36). Freeman and Company.

Wang, C. C. (2008). Youth participation in photovoice as a strategy for community change. *Journal of Community Practice, 14*(1-2), 147-161. https://doi.org/10.1300/J125v14n01_09

Wang, C., & Burriss, M., (1997). Photovoice: concept, methodology, and use for participatory needs assessment. *Health Education & Behaviour, 24*(3), 369-387. https://www.jstor.org/stable/45056507

Weaver-Hightower, M. B. (2011). Why education researchers should take school food seriously. *Educational Researcher, 40*(1), 15–21. https://doi.org/10.3102/0013189X10397043

What is the food system? (n.d). University of Oxford. https://www.futureoffood.ox.ac.uk/what-food-system.

Widome, R., Neumark-Sztainer, D., Hannan, P. J., Haines, J., & Story, M. (2009). Eating when there is not enough to eat: Eating behaviors and perceptions of food among food-insecure youths. *American Journal of Public Health, 99*(5), 822-828. https://doi.org/10.2105/AJPH.2008.139758

Wilson, B. (2019, March 16). Good enough to eat? The toxic truth about modern food. The Guardian. https://www.theguardian.com/books/2019/mar/16/snack-attacks-the-toxic-truth-about-the-way-we-eat

Wincott, A. (2018). Treasure in the vault: The guardianship of 'heritage' seeds, fruits, and vegetables. *International Journal of Cultural Studies, 21*(6), 627-642. https://doi.org/10.1177/1367877917733541

WixBlog, (2020, July 13)., *TikTok 101: A Guide to Understanding the Latest Social Media Craze*. https://www.wix.com/blog/2020/07/what-is-tik-tok/?utm_source=google&utm_medium=cpc&utm_campaign=12188669214^114296906861&experiment_id=^^497047742397^^_DSA&gclid=CjwKCAjwp9qZBhBkEiwAsYFsbwkaRC13di73Hn8aCGZ_muQIKY1DMn78HSP12HdoezS9BCq8UcL3bRoCZAYQAvD_BwE

World Bank. (n.d)., https://www.worldbank.org/en/who-we-are

Yamashita, L., & Robinson, D. (2015). Making visible the people who feed us: Educating for critical food literacy through multicultural texts. *Journal of Agriculture, Food Systems, and Community Development, 6*(2), 269-281. https://doi.org/10.5304/jafscd.2016.062.011

Yasmeen, G., & Field, D., (2020, October 3). Time is right for a national school food program. Vancouver Sun. https://www.pressreader.com/canada/vancouver-sun/20201003/281762746710661

Yawney, D. (2011). *Sierra and blue*. Prairie Rain Publishing.

Yawney, D. (2012). *Sierra and blue go to town*. Prairie Rain Publishing.

Yawney, D. (2013). *Sierra and blue go to visit their cousins*. Prairie Rain Publishing.

Yawney, D. (2020). *Comprehensive exam question one*, and courses 6116, 6126, Nipissing University.

Zygouris-Coe, V. (2007). Family literacy: The missing link to school-wide literacy efforts. *Reading Horizons, 48*(1), 57-70. https://search.proquest.com/docview/236425583

Zimmern, A. (2017, November). *Processed foods are killing us.* https://www.youtube.com/watch?v=_btU99fsX5o