

Decolonizing Our Food Systems: Narrative Inquiry Into the Barriers to Accessing
Foods That Reverse Chronic Disease

by

NICOLETTE RICHER

A Dissertation by Portfolio Submitted
to the College of Interdisciplinary Studies
in Partial Fulfilment of the Requirements for the Degree of

DOCTOR OF SOCIAL SCIENCES

Royal Roads University
Victoria, British Columbia, Canada

Supervisor: Dr. BRIAN WHITE
APRIL, 2023

 NICOLETTE RICHER, 2023
MA, BA

COMMITTEE APPROVAL

The members of NICOLETTE RICHER'S Dissertation Committee certify that they have read and reviewed the dissertation titled DECOLONIZING OUR FOOD SYSTEMS: NARRATIVE INQUIRY INTO THE BARRIERS TO ACCESSING FOODS THAT REVERSE CHRONIC DISEASE and recommend that it be accepted as fulfilling the dissertation by portfolio requirements for the Degree of Doctor of Social Sciences:

Dr. BRIAN WHITE [signature on file]

Dr. MARY BERNARD [signature on file]

Dr. SIOMONN PULLA [signature on file]

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to Royal Roads University. The dissertation supervisor confirms to have read this dissertation and recommends that it be accepted as fulfilling the dissertation requirements:

Dr. BRIAN WHITE [signature on file]

CREATIVE COMMONS STATEMENT



This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 2.5 Canada License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/2.5/ca/>.

Some material in this work is not being made available under the terms of this licence:

- Third-Party material that is being used under fair dealing or with permission.
- Any photographs where individuals are easily identifiable.

ACKNOWLEDGEMENTS

I am continuously grateful for:

Being able to research, learn, work, play and grow across the vast unceded and unsundered shared territory of the Skwxwú7mesh Úxwumixw (Squamish Nation) and the Lílwat7ul (Lil'wat Nation).

Creator; for proving us all with boundless healing foods, light, clean water and air, and the countless generous gifts of you bestow upon us daily.

My three inspiring, independent, beautiful inside and out, and wickedly smart girls; Jaden, Hazelle and Sadie. Thank you for your patience while I had my head buried in books and the computer for all these years. This portfolio is for you and the next seven generations.

My life partner; Pierre, for believing in me and this important topic, for your endless love and laughs, patience, and encouragement, and for always making sure my body and brain was fuelled with the most nourishing, fresh, clean and healthy meals.

My parents and brothers; thank you Mom, dad, Chris, Dan and Shane for your love, support, questions, listening ear and encouragement. And to Mom especially for the years of stories about food and our ancestors. This paper is an expression of our DNA.

My dear friend and doctoral colleague; Major Chelsea Braybrook; for lovingly kicking my butt army-style at the point where I could have easily thrown in the towel, and for all the nourishing meals, detoxes, saunas, and late-night editing.

My Richer Health and Green Moustache Family; Amelia, Jay, Vanessa, Princess, Lara, Becky and Marie-Lynn for playing huge roles in project managing me and this significant academic project, for all the editing, support and enthusiasm over this important subject matter.

My dear sweet friends; Laurie, Zoey, Paula, Kristin, Tracy, Erica, Jen, Kathe, BE, Diana, Vicky, Robyn, and I wish I could name all the cherished people in my life that played a part in

supporting and encouraging me on this research journey – I hope you know how important you are to me.

My supervisor; Dr. Brian White for your encouraging talks, youthful excitement, encouraging guidance, and endless patience and to my dissertation committee members; Dr. Mary Barnard and Dr. Siomonn Pulla for all your support as I expanded and contracted through this doctoral journey.

William Nasby; if you hadn't bravely chosen to turn to the Gerson Therapy (AKA – a decolonized food lifestyle) to reverse your stage IV cancer diagnosis, I wouldn't have learned about the true healing power of food as medicine, I wouldn't have the relentless drive to heal our broken food systems, and I wouldn't be doing this research.

The Gerson Family; Thank you Dr. Max Gerson, Charlotte Gerson, Howard Straus, Margaret Straus and Kathryn Alexander for dedicating your lives to teaching people that food heals and that advanced chronic diseases can be entirely reversed through restoring nutritional deficiencies and eliminating total body and environmental toxicities. I owe everything to all the research you did in this systemic and interconnected field.

And last but not least - the beautiful, wise, and kind participants of this research and all the giants whose shoulders I stand upon; your courage and diligence to observe, learn, study, reflect, challenge and work in these life and academic fields of food as medicine has nourished the soil upon which my research has grown, and I am forever grateful to you for saying yes.

DEDICATION

To Jaden, Hazelle and Sadie and our next seven generations.

To all those who are living with reversible chronic diseases, this work is inspired by your resilience and strength. Know these three things:

1. Your chronic illness can be reversed, no matter what anyone else may say.
2. Have hope, for your body and nature are interconnected, and your body is designed to heal itself when provided with the proper nutrients and kept free from toxins.
3. Finally, I encourage you to break free from oppressive systems and question everything, especially those who would call processed and refined ingredients "food."

May this work be a source of empowerment and inspiration for all those striving for better health and wellness.

To all the individuals who have lost their lives to chronic lifestyle diseases, a tragic consequence of the invisible and visible hands of colonization. May their stories inspire us to question and challenge the systems that perpetuate these diseases, and may their memory serve as a reminder of the urgent need for systemic change.

ABSTRACT

The purpose of this study is to highlight the barriers that Indigenous People and People of Colour face when accessing health care for chronic diseases. With the rise of diagnoses of chronic degenerative lifestyle diseases over the past sixty years, a disproportionate amount of these are people of BIPOC communities.

This study involved interviewing BIPOC people who have experience dealing with the healthcare system in relation to chronic illnesses. It was made very clear by these discussions that not only is there a lack of education for indigenous health, but also a huge injustice relating to food for chronic disease reversal.

The root causes of these diseases are not due to what Canadian and USA agencies have identified as age, race, gender, obesity etc. but much more complex and systemic issues. This study indicates that these diseases stem from a history of colonization and trauma and the displacement of BIPOC people from their lands, ancestors, culture and knowledge.

The findings of this study emphasize the importance of adopting a holistic, systemic approach to chronic disease prevention and management. Instead of relying on individual-level risk factors, it is crucial to identify and address the complex historical and ongoing processes attributed to chronic diseases in the first place. By doing so, this study outlines the possibility of reducing the rise of these diseases and promoting health equity for BIPOC communities.

Keywords: BIPOC, Indigenous Peoples, Chronic Disease, Food as Medicine, Plant-strong Wholefoods, Reversible Chronic Diseases, Colonization, Risk Factors

Table of Contents

COMMITTEE APPROVAL 2

CREATIVE COMMONS STATEMENT 3

ACKNOWLEDGEMENTS 4

DEDICATION 6

ABSTRACT..... 7

DISSERTATION BY PORTFOLIO SYNTHESIS 9

 STATEMENT OF THE PROBLEM AND CONTEXTUALIZATION OF THE RESEARCH 9

 THEORETICAL OR CONCEPTUAL FRAMEWORK 11

 LITERATURE REVIEW 13

 METHODS AND METHODOLOGY 16

 FINDINGS AND DISCUSSION..... 19

 FORMAT RATIONALE..... 23

 IDENTIFICATION OF EACH PORTFOLIO PIECE 24

 CONCEPTUAL LINKAGE 24

 KNOWLEDGE DISSEMINATION AND TRANSFER PLAN 26

REFERENCES 29

APPENDICES 34

DISSERTATION BY PORTFOLIO SYNTHESIS

Statement of the Problem and Contextualization of the Research

The purpose of this research was to uncover the barriers that Black, Indigenous, People of Colour (BIPOC) community members face in accessing the quality and diversity of clean, fresh, nutrient-dense, unrefined, whole-foods. In addition, this research highlights the impacts these foods have on preventing, arresting, and reversing chronic degenerative diseases such as type 2 diabetes, autoimmune disorders, mental health disorders, coronary heart disease and other lifestyle chronic illnesses that are claimed to have reached epidemic rates across Canada. This research is crucial for many reasons including:

- Diabetes rates and food insecurity are two conditions that continue to grow at alarming rates and their relationship is inextricably linked (Christian, 2020). 30% of Canadians currently live with diabetes or prediabetes (Statistics Canada, 2018), and 12.7 % or 1 in 8 Canadian households are food-insecure which represents 4.4 million Canadians of which 1.2 million are children (Tarasuk, 2016, pg. 27).
- Plant-strong lifestyles like many traditional diets are historically known to prevent and reverse diabetes and other chronic lifestyle conditions (Campbell, 2004; Ornish, 2010; & Williams, 2017).
- Canada's food guide was recently updated in 2019 and surveys show that less than 30% of Canadians consume an adequate daily quantity of plant-strong foods (Charlebois, 2021; Health Canada, 2019). According to the Agri-Food Analytics Lab at Dalhousie University

in Halifax which surveyed 10,000 Canadians, only three out of 10 Canadians consume enough plant foods each day to prevent or maintain health, let alone, reverse chronic lifestyle conditions (Charlebois, 2021).

- It is unknown how many Canadians, including health professionals, know that diabetes is reversible, and more research needs to be done to better understand this number. Even though several mainstream media outlets have recently announced that “type 2 diabetes is no longer an incurable disease” (Tellier, 2021), and even though plant-based physicians have been successfully reversing diabetes for more than one hundred years, and even though diabetes was a rare disease in Indigenous populations prior to 1940, diabetes rates continue to rise.
- Savvy and deceptive food labelling strategies used in advertising, marketing and branding efforts of the processed and refined food industry make it challenging for individuals to differentiate between healthy and unhealthy foods.
- Government health websites claim that the risk factors for lifestyle chronic diseases are age, race, gender, genetics, poor diet and lack of exercise. However, this type of individual blaming is oppressive and is a blatant act of ageism, ableism, sexual discrimination, and racism. It does not consider the long and complex history of colonization which has brought with it systemic racism, oppression, poverty, intergenerational trauma, disenfranchisement from the land, limited access to healthy foods and quality healthcare, and poor living conditions and other social determinants of health which are all linked to poorer health outcomes for BIPOC communities.

- Several studies including Bharath et al (2020) and the National Healthcare Quality and Disparities Report (2018) show that BIPOC communities are known to experience 4 to 8 times higher rates of chronic diseases compared to non-BIPOC populations highlighting the need for targeted interventions to address these health disparities.

Theoretical or Conceptual Framework

“Indigenous Peoples have worldviews and means of relating to the world. Stemming from this worldview comes the understanding that ‘we are all related’” (Absolon, 2010, p. 74). Within this tenet, Indigenous Wholistic Theory (IWT), the theoretical framework that guides this research, shares that Indigenous worldviews are “wholistic and multi-layered, which encompasses the *spiritual, emotional, mental, and physical* elements of being” (Absolon, 2010, pg. 74). As interconnection is the key tenet of Indigenous worldviews and epistemologies and posits that everything in the universe is interconnected; past, present and future is also acknowledged.

This reference called the *Seven Generations Principle* was first documented in the Great Iroquois Confederacy, ca 1200-1500 CE. (Absolon, 2010; Dean, 2014). Kincentric ecology is another Indigenous philosophy that also holds that humans and nature are in continuous relationship and are part of a larger ecological family with a shared origin and ancestry (Salmón, 2000). Many Indigenous Peoples from all areas of the world hold a similar worldview of the interconnectedness of everything including the Mauri in New Zealand, Aboriginals in Australia, African communities across the continent, South Asians, Indian tribes of South American and more. IWT creates “a framework to *Indigenize* our thoughts and actions into

active healing processes that simultaneously decolonize and Indigenize” (Absolon, 2010, pg. 74).

From this worldview of interconnectedness, I chose Indigenous research methods that recognizes, honours, learns from and shares with BIPOC Peoples – which is both an act of reciprocity and decolonization (San Pedro and Windchief, 2019). While BIPOC Peoples are uniquely individual from unique communities, they have a shared history of systemic racial injustices, societal, cultural, linguistic and health oppression, and comparatively face similar barriers to basic resources such as fresh food, clean water, and healthcare compared to non-BIPOC individuals. As the recent COVID pandemic has shown, BIPOC members equally faced similar levels of comorbidity risk factors and death as the result of disproportionate rates of chronic disease (Kader and Smith, 2021).

Throughout this paper I refer to BIPOC Peoples that live within Canada and the United States. The reason I focus on BIPOC members and communities versus all North Americans is because BIPOC individuals are those that have been most oppressed since European contact and suffer from chronic disease at higher rates than non-BIPOC Peoples. By using Indigenous research methodologies (IRM) and IWT as my theoretical framework to inform my dissertation research while addressing and honouring all BIPOC communities, I am acknowledging myself, my ancestry, and my own knowledge and epistemologies that have been built upon the research giants before me.

My research is also guided by who I am as a whole and integrated being made up of many cultures and origins: African, South Asian, Austrian, yet raised in Canada. San Pedro and

Windchief (2019) write that to be Indigenous minded in your research means “to be truly honest about where I truly am coming from, but that my heart is grounded in the well-being of all Native Peoples and, you know, all humanity” (p. 44). For this dissertation and because of my own ancestry, I choose to be BIPOC-minded in service of BIPOC members and in service to humanity.

Literature Review

Rising incident rates of T2DM in BIPOC communities imply that the current societal structures that address and manage this important issue are not working. An anthropological investigation into BIPOC communities reveals a time before European contact when there were minimal cases of non-communicable disease within a culture that held ‘interconnectedness’ as a key tenet in its worldviews and practices (Windchief & San Pedro, 2019). From colonization onwards, communities experienced cultural assimilation and were forced into a Western culture founded on reductionism from which all societal structures have stemmed. (Turner & Spalding, 2013). This requires endorsing Traditional Ecological Knowledge (TEK) as a valid way of knowing and as “a cumulative body of knowledge and beliefs handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (Berkes, 1993, p. 1).

Evidence-based case studies and clinical trials show that food is medicine and other TEK practices are capable of reversing chronic lifestyle diseases. Clinicians practicing nutritional medicine for disease reversal have succeeded in reversing diabetes, heart disease,

autoimmune disorders, mental health conditions, infertility and even cancer using traditional, whole foods as medicine (Satija, 2016; Hever & Cronise, 2017; McMacken & Shah, 2017; Vodovotz, 2020; Bye et al., 2021). In addition to using Traditional Whole Foods (TWF), plant medicines have been used for centuries by Indigenous Peoples across Canada to manage and reverse diabetes (Kuhnlein, 2006).

As part of a larger group looking at plant-based diets and cardiovascular disease, Hever and Cronise (2017) found that plant-based diets are beneficial to health throughout their lifespan but may be of increased importance as people age. Their study found that “a diet rich in vegetables, fruits, whole grains, legumes, nuts, seeds, herbs and spices is associated with a significantly lower risk of cardiovascular disease” (Hever & Cronise, 2017, pg. 19).

Vodovotz et al., (2020) present results showing that lifestyle factors, such as poor diets lacking in fresh wholefoods, increase the risk of cardiovascular disease, cancer, diabetes, autoimmune diseases, hormonal conditions, brain health and neurological conditions and renal disease. The study also states that there is emerging evidence to support that a plant-based diet approach is particularly effective in addressing and reversing health concerns related to cardiovascular disease and T2DM (Vodovotz et al., 2020).

“Unhealthy diets are associated with an increased risk of morbidity and mortality in Canada” (Bye et al., 2021, p. 2132). A 2021 scoping review on the role of plant-based diets in the health of Canadians found that these diets when compared to omnivore diets, are effective at increasing nutritional value and reducing chronic diseases such as obesity, T2DM, osteoporosis, cardiovascular disease and select cancers (Bye et al., 2021).

This research considers how knowledge is constructed to be one of the predominant barriers to resolving this systemic issue. The myth of separation in mind-body dualism lies at the heart of reductionist philosophy, underpinning Western knowledge that informs modern, allopathic medicine (O’Leary, 2021). This has created a linear trajectory that continues to divide, neglecting the wisdom of TEK that indicates everything is interconnected. For example, the current labelling of processed foods includes a breakdown of only a few nutrients contained in the product. However, we do not eat pectin because it is good for us, we eat the whole apple in which pectin only one of up to 25,000 nutrients present in the apple (Pollan, 2009). By decolonizing how knowledge is constructed, people will be enabled to consider eating their food in a whole way, connected to their health, environment and more.

If the human diet can reverse chronic disease as nutritional studies indicate, then the medical school curriculum must be redesigned. Currently, medical students receive less than 4 hours on average in nutrition (Collier, 2009; Vogel, 2018). The education of physicians on traditional ecological knowledge (TEK) and metabolic nutrition presents a promising avenue for capacity building, with the potential to yield positive outcomes in reducing the rates of chronic diseases globally. By increasing physicians' awareness of TEK, healthcare providers can better understand and address the unique health challenges faced by Indigenous and other marginalized communities. As well, a greater focus on metabolic nutrition can equip healthcare providers with tools to address the rising incidence of chronic diseases that disproportionately affect BIPOC populations. The integration of these areas into medical education can provide a

valuable opportunity for the development of more effective approaches to disease prevention and management.

Disenfranchisement from the land that grows traditional whole foods that heal has acted as a catalyst for subsequent barriers and risk factors. Urbanization has physically removed individuals from original food production systems. Before industrialized farming and food processing, people ate whole fresh foods directly from the land which contained minimal synthetic chemicals, such as glyphosate, the commonly used pesticide otherwise known as Round UP, and which were rich in nutrients because of bio-available soil. As well, Indigenous Peoples only pulled from the land what they needed and never more than fifty percent (Kimmerer, 2013). This act of reciprocity was the foundation of sustainable food production that sustained Indigenous Peoples and the planet for centuries (Turner and Turner, 2008).

The current climate change crisis is an example of just how far-removed humans are from being in reciprocity with the land, with food production and distribution being the most significant contributor to greenhouse gas emissions (Pollan, 2009; Smith, 2012; Smith et al., 2013). In addition, to be able to transport foods long distances, produce is often picked before it has had the chance to ripen by the sun, minimizing its quality and nutrient density, resulting in a malnourished society (Pollan, 2009).

Methods and Methodology

Using Indigenous Research Methods, this research co-created collaboration, shared learning, and relationship building with multiple voices via one set of qualitative interviews with nine participants in the set. Since we can never include the entire story (Clandinin, 2006),

this research sought to enable the stories that needed to be told, carefully weaving the narratives of individual voices, so that they resembled the whole. In addition to the literature review above, this dissertation also generated knowledge through my own reflexive lens. Reflexivity, a critical component of Narrative Inquiry (NI), frames this research, insofar as my story as the researcher is inextricable from both methodology and method.

Indigenous worldviews orbit a paradigm of interconnectedness, where “remembering” is understood as the bringing together of all universal members, physical and non-physical, past, present and future (Absolon, 2010; San Pedro & Windchief, 2019). Through NI and Indigenous Research Methodology (IRM), my research aims to center the voices and experiences of the individuals and communities experiencing the disproportionate health disparities. Together, NI and IRM gave me the opportunity, space, and time to listen to, collect and analyze the participant’s individual and collective stories and to gain a deeper understanding of the participant’s lived experiences. This allowed me to gain insight into the complex social, historical, environmental, economic, and cultural factors that contribute to the health disparities seen amongst BIPOC communities and which may not be captured in traditional quantitative research methods. Hence, narrative inquiry (NI), as both the phenomenon and the method, was the most appropriate methodological framework for this type of research (Clandinin, 2006).

Overall, Indigenous epistemologies use listening and stories as well as other ways to acquire knowledge (Battiste, 2002). Using these methodologies provided a more holistic and nuanced understanding of the risk factors of chronic diseases and barriers to accessing foods

that prevent and reverse chronic diseases which can result in more effective and culturally sensitive interventions and policies to address these health disparities.

For the research interviews, I met with nine participants that all had life, work, and/or academic experience in chronic disease reversal, nutritional health, BIPOC health and food security to learn about how traditional, clean, natural whole foods reverse chronic lifestyle diseases and what unique barriers are present that prevents BIPOC members from accessing clean, fresh, healing, whole foods in their communities. The study used purposeful sampling with the above specific strategy for criteria sampling to ensure that the research produced decolonized results that can be accepted as a valid ways of knowing by the community members the research intends to serve.

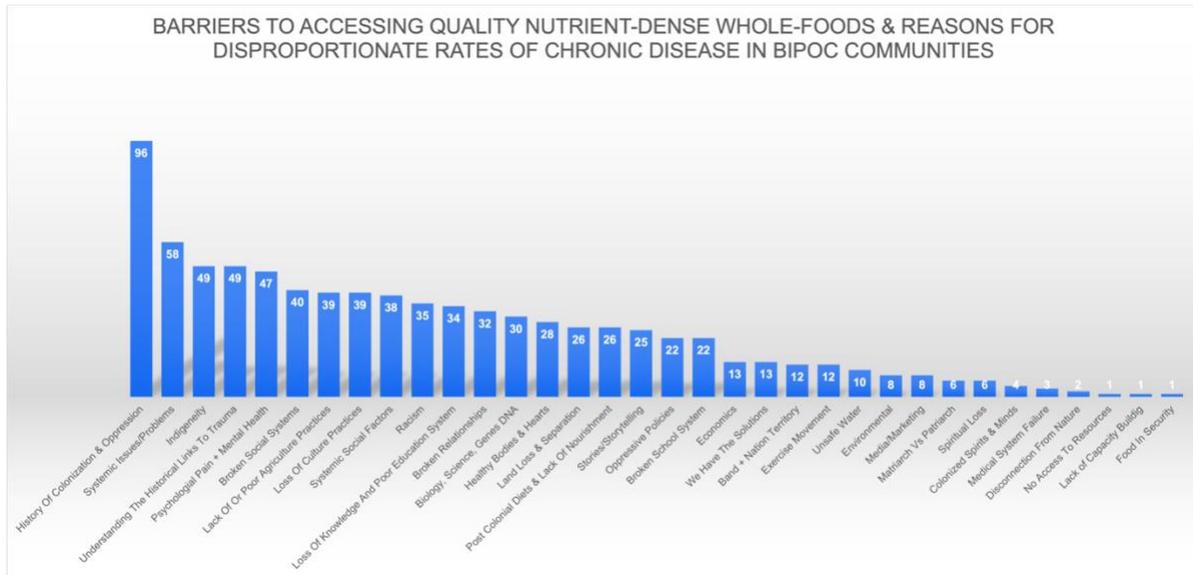
The open ended, storytelling interviews each lasted approximately 90 minutes and were designed to form the basis for the *Eat Real to Heal* podcast portfolio dissertation output. Interviews were conducted over Zoom and were both audio and video recorded. This enabled the interviews to be conducted remotely allowing access to participants from all over North America.

By addressing the cultural, social, environmental, and economic challenges BIPOC members face as they relate to using traditional whole foods to heal from reversible chronic diseases like diabetes, mental health, and other lifestyle illnesses, our discussions also resulted in harvesting culturally appropriate solutions that could lead to healing and food sovereignty.

Findings and Discussion

The Canadian and USA health agencies have identified age, genetics, obesity, race, and gender as key risk factors for lifestyle chronic diseases. However, the results from this research study challenges these risk factors and suggests that chronic diseases, particularly those affecting BIPOC communities, are not solely attributable to these individual-level factors. Participants in the study reported that the root causes of these diseases are much more complex and systemic and must be addressed to meaningfully reduce the incidence of chronic diseases. Overall, the participants identified 35 different barriers to accessing healing foods and matters that first need to be addressed in managing and treating chronic diseases in BIPOC communities. Table 1 below presents a clear and concise overview of the themes extracted from the narrative inquiry interviews with participants from BIPOC communities. The chart displays how often the participants mentioned the various reasons for the disproportionate rates of chronic diseases and the barriers to accessing quality nutrient dense foods in their communities.

Table 1 Frequency of Themes Mentioned Regarding Barriers to Accessing Quality Nutrient-Dense Whole-Foods & Reasons For Disproportionate Rates Of Chronic Disease In BIPOC Communities.



The table's layout allows for easy comparison of the frequency of each theme, making it simple to identify the most mentioned reasons and barriers. The information presented in this table provides valuable insight into the experiences and perceptions of individuals from BIPOC communities regarding chronic disease and food access disparities.

The findings of this study suggest that chronic disease risk is intimately linked to historical and ongoing processes of colonization and oppression, and that healing from these diseases is a multifaceted problem that cannot be solved through individual-level interventions alone. Participants emphasized the importance of recognizing and respecting Indigeneity, starting first and foremost with addressing the intergenerational trauma associated with the systemic racism and oppression experienced directly through colonization. As well as addressing the loss of indigeneity and instilling culturally appropriate methods for healing from trauma, participants noted that making space for the re-emergence of lost social and cultural practices that were taken

away from BIPOC communities is critical to successfully managing and treating chronic diseases.

In addition, participants reported that addressing mental, emotional, psychological, spiritual health is a critical component of chronic disease prevention and treatment. By prioritizing mental health and well-being and recognizing the ways in which chronic diseases intersect with mental health and spiritual oppression, it may be possible to mitigate some of the systemic causes of these diseases.

The interviews were analyzed by thematic analysis using line by line open coding to allow patterns, concepts and ultimately themes to emerge from the qualitative data set (Parameswaran, 2019; Corbin and Strauss, 2015; Chilisa, 2019). Following all analysis, the themes relevant to my research question were retained and provide the framework for the discussion and results. (Clarke et al., 2015). As is often touted, “a picture is worth a thousand words”, Image 1 presents the results of the themes extracted from the narrative inquiry interviews with participants from BIPOC communities in the form of a word cloud. The size of each word in the cloud represents the frequency with which it was mentioned by the participants and the layout of the word cloud makes it easy to identify the most salient themes at a glance, providing a useful tool for researchers and policymakers seeking to better understand the experiences and perspectives of individuals. Overall, the word cloud in Image 1 offers a compelling and insightful illustration of the key themes and issues identified in the narrative inquiry interviews.

Image 1. Frequency of Themes Mentioned Regarding Barriers to Accessing Quality Nutrient-Dense Whole-Foods & Reasons For Disproportionate Rates Of Chronic Disease In BIPOC Communities.



The study findings indicate a significant gap in the responses of participants regarding the commonly cited risk factors for chronic diseases, including age, race, gender, ability, genetics, and exercise, which are frequently highlighted by government health authorities. This discrepancy points to the inadequacy of current policies and interventions that primarily concentrate on these risk factors for chronic disease management and treatment. The absence of these factors suggests that the root causes of chronic diseases in BIPOC communities are more intricate and multifaceted than what policymakers currently recognize.

This knowledge gap undermines the development and implementation of effective solutions to address health disparities experienced by BIPOC communities. These observations emphasize the need for adopting a holistic, systemic approach to chronic disease prevention and management that addresses the complex historical and ongoing processes that contribute to the development of these diseases. Such an approach can reduce the incidence of chronic diseases and promote health equity for BIPOC communities.

Format Rationale

The decision to undertake a portfolio-based dissertation was motivated by my knowledge mobilization plan. Knowledge mobilization is a multifaceted, interdisciplinary activity that aims to transform research into actionable outcomes to enhance the likelihood of achieving desired results (Bennet, 2007, p. 24; Levin, 2008). The primary objective of this research is to reduce the incidence of Type 2 Diabetes Mellitus (T2DM), mental health (MH) conditions, and other chronic diseases prevalent in Canadian BIPOC communities.

To achieve this objective, the study aims to decolonize diets and bridge disciplinary silos to raise awareness among the public and support BIPOC communities re-Membering that decolonized traditional whole foods is medicine and that the management and reversal of lifestyle chronic diseases are embedded in a multitude of complex systemic issues that must also be addressed if we want to see chronic diseases rates decline in our lifetime. This goal necessitates collaboration among diverse stakeholders, including academics, policymakers, and the public. A portfolio-based approach to this research provides a flexible, multi-faceted platform for effective knowledge mobilization, enabling a wider

dissemination of research findings to diverse audiences and encouraging collaboration among different stakeholders to achieve the desired outcomes.

Identification of Each Portfolio Piece

To achieve accessibility, I selected the following portfolio outputs. These will be promoted through social media engagements on my existing business platforms and other professional social media accounts:

- Sole Authored Journal article titled: *Decolonizing Our Food Systems: Narrative Inquiry Into the Barriers to Accessing Foods That Reverse Chronic Disease* for the International Journal of Indigenous Health.
- Audio presentations: Nine podcasts, hosted on the *Eat Real to Heal* podcast for academic and non-academic audiences that currently has a reach in 187 different countries with thousands of downloads each month.
- Audio-visual presentation: “TED” Talk™ presentation for both academic and non-academic audiences.

Conceptual Linkage

The potential uses and users of the knowledge presented from a narrative inquiry study that identified 35 root causes of chronic diseases among BIPOC communities are numerous and diverse. The findings of this research have the potential to inform policy, practice, and advocacy efforts aimed at promoting health equity and reducing health disparities among BIPOC communities.

Firstly, policymakers at the local, state and federal levels could use the findings of this research to inform the development of policies and programs that address the root causes of chronic diseases among BIPOC communities. By prioritizing the six root causes identified in the study, policymakers could take a more holistic and systemic approach to chronic disease prevention and management, rather than focusing solely on individual-level risk factors.

Secondly, healthcare practitioners and public health professionals could use the findings of this research to develop more effective interventions for chronic disease prevention and management among BIPOC communities. By addressing the root causes of chronic diseases, healthcare practitioners could better tailor their interventions to the specific needs and experiences of BIPOC patients.

Thirdly, community-based organizations could use the findings of this research to develop culturally sensitive and responsive interventions that promote healing and well-being among BIPOC communities. By making space for the re-emergence of social and cultural practices that were taken away from BIPOC people, community-based organizations could empower BIPOC communities to take control of their health in ways that align with their cultural traditions and practices.

This research can be used to further explore the complex interplay between historical and ongoing processes of colonization and oppression, trauma, mental health, and chronic disease among BIPOC communities. Researchers can deepen our understanding of the root causes of chronic diseases among BIPOC communities, and develop more effective interventions for promoting health equity and reducing health disparities.

Overall, the findings of this research have the potential to inform and shape policy, practice, and advocacy efforts aimed at reducing health disparities among BIPOC communities and promoting health equity. Stakeholders could take a more holistic and systemic approach to chronic disease prevention and management, and work towards promoting health equity and social justice.

Knowledge Dissemination and Transfer Plan

This research will contribute to several social, environmental, and economic changes across Canada, including BIPOC communities:

1. **Social change.** The portfolio outputs outlined above will enable knowledge mobilization by extending global reach to information and evidence of disease reversal using food as medicine while calling individuals to take action in overcoming the barriers identified in accessing disease-reversing foods. The culmination of the research will be returned to the communities of the BIPOC members where it was originally generated. This regenerative knowledge process mirrors the regenerative spirit of farm-to-table practice, recycling, and disease reversal, while contributing towards societal change through reciprocity and decolonizing research methodologies (Windchief and San Pedro, 2019).
2. **Environmental Change.** By decolonizing our food systems and utilizing our existing knowledge, resources, and technologies, we can heal people and the land, ultimately, affecting climate change positively (Smith, 2013). Overall, more localized, and sustainable farm-to-table food practices will ensure improved human and environmental health.

3. **Economic Change.** Managing chronic degenerative diseases in Canada costs the government billions of dollars each year, with numbers of cases still rising (Liefers, 2018). When people eat well, they are stronger contributing members of society, and their mental health and productivity increase while sick days and medical expenditures decrease (Toumpanakis et al., 2018). Ideally, the Canadian healthcare system can divert budgets to bettering acute healthcare systems, research and development, and supporting those with genetic and rare diseases which cannot be managed by food alone.
4. **Bridging the gap Between Different Academic Disciplines.** The current mainstream medical curriculum teaches medical doctors and other healthcare practitioners that chronic degenerative diseases cannot be reversed but only managed through drugs, surgery, or a ‘wait and see’ approach (Storz, 2020). However, extensive research demonstrates that chronic diseases can be reversed using unrefined, traditional whole foods as medicine (Vodovotz, 2020). This knowledge is siloed as functional medicine, integrative health, or whole food medicine research.
5. **The General Public.** Humans are predominantly 95% visual and auditory learners (Jawed, 2019). By sharing through our four company’s social media channels, podcasting, public speaking, and publishing studies, I will ensure this co-created research lives beyond its academic conclusion and can reach our global online community while educating our staff, customers, and community members locally.
6. **BIPOC Communities.** Knowledge is socially constructed (Welch, 2011). Using IRM will bring Indigenous values, attitudes, and practices to the heart of this research, empowering

BIPOC communities in their own education and healing (Smith, 2012). Data analysis will be shared with research participants in an iterative process, honoring their accurate portrayal.

REFERENCES

- Absolon, K. (2010). Indigenous Wholistic Theory: A knowledge set for practice. *First Peoples Child & Family Review: An Interdisciplinary Journal Honouring the Voices, Perspectives, and Knowledges of First Peoples through Research, Critical Analyses, Stories, Standpoints and Media Reviews*, 5(2), 74-87.
- Agency for Healthcare Research and Quality. (2018). National Healthcare Quality and Disparities Report. Rockville, MD: U.S. Department of Health and Human Services. Retrieved March 6, 2023 from:
<https://www.ahrq.gov/research/findings/nhqrdr/nhqrdr18/index.html>
- Bharath, T., Martin, C. L., & Kaufman, C. E. (2020). Prevalence of diabetes and associated factors among Navajo women. *Journal of Health Disparities Research and Practice*, 13(4), 65-72.
- Battiste, M. (2002). *Indigenous knowledge and pedagogy in First Nations education: A literature review with recommendations* (pp. 1-69). Ottawa: National Working Group on Education.
- Bennet, A., et al. (2007). *Knowledge mobilization in the social sciences and humanities*. Frost, WV: Mqi Press.
- Berkes, F. (1993). Traditional ecological knowledge in perspective. *Traditional ecological*
- Bye, Z. L., Keshavarz, P., Lane, G. L., & Vatanparast, H. (2021). What role do plant-based diets play in supporting the optimal health and well-being of Canadians? *A Scoping Review. Adv. Nutr.*

Campbell II, T. M. (2004). *The China Study: The Most Comprehensive Study of Nutrition Ever Conducted and the Startling Implications for Diet, Weight Loss and Long-term Health*. BenBella Books, Inc.

Charlebois, S., Music, J., & Faires, S. (2021). The impact of COVID-19 on Canada's food literacy: results of a cross-national survey. *International Journal of Environmental Research and Public Health*, 18(10), 5485.

Chilisa, B. (2019). *Indigenous research methodologies*. Sage publications.

Christian, V. J., Miller, K. R., & Martindale, R. G. (2020). Food security, malnutrition, and the

Clandinin, D. J. (2006). Narrative inquiry: A methodology for studying lived experience. *Research studies in music education*, 27(1), 44-54.

Collier, R. (2009). Canadian medical students want more nutrition instruction. *Canadian Medical Association. Journal*, 181(3/4), 133.

Corbin, J., & Strauss, A. (2018). *Basics of qualitative research*. Thousand Oaks, us.

Health Canada. (2019). *Canada's dietary guidelines for health professionals and policy makers*.

Hever, J., & Cronise, R. J. (2017). Plant-based nutrition for healthcare professionals: implementing diet as a primary modality in the prevention and treatment of chronic disease. *Journal of geriatric cardiology: JGC*, 14(5), 355.

Jawed, S., Amin, H. U., Malik, A. S., & Faye, I. (2019). Classification of visual and non-visual learners using electroencephalographic alpha and gamma activities. *Frontiers in behavioral neuroscience*, 13, 86.

Kimmerer, R. W. (2013). *Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants*. Milkweed Editions.

knowledge: Concepts and cases, 52(5).

Kuhnlein, H., Erasmus, B., Creed-Kanashiro, H., Englberger, L., Okeke, C., Turner, N., ... & Bhattacharjee, L. (2006). Indigenous peoples' food systems for health: finding interventions that work. *Public health nutrition*, 9(8), 1013-1019.

Levin, B. (2008). *Thinking about knowledge mobilization: a discussion paper prepared at the request of the Canadian Council on Learning and the Social Sciences and Humanities Research Council*. Canadian Council on Learning.

Lieffers, J. R., Ekwaru, J. P., Ohinmaa, A., & Veugelers, P. J. (2018). The economic burden of not meeting food recommendations in Canada: The cost of doing nothing. *PLOS ONE*, 13(4), 1-17.

McMacken, M., & Shah, S. (2017). A plant-based diet for the prevention and treatment of type 2 diabetes. *Journal of geriatric cardiology: JGC*, 14(5), 342–354.

microbiome. *Current nutrition reports*, 1-5.

O'Leary, D. (2021). Medicine's metaphysical morass: how confusion about dualism threatens public health. *Synthese*, 199(1), 1977-2005.

Ornish, D. (2010). *Dr. Dean Ornish's program for reversing heart disease: The only system scientifically proven to reverse heart disease without drugs or surgery*. Ivy Books.

Parameswaran, A. (2019). Enabling data science for the majority. *Proceedings of the VLDB Endowment*, 12(12), 2309-2322.

- Pollan, M. (2009). *In Defense of Food*. Penguin.
- Satija, A., et al. (2016). Plant-Based Dietary Patterns and Incidence of Type 2 Diabetes in US Men and Women: Results from Three Prospective Cohort Studies. *PLoS medicine*, 13(6), e1002039.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples*. London, UK: Zed Books.
- Smith, P., & Gregory, P. J. (2013). Climate change and sustainable food production. Proceedings of the *Nutrition Society*, 72(1), 21-28.
- Statistics Canada (2018). Health Fact Sheets – Diabetes, 2017. Retrieved June 19, 2022 from: <https://www150.statcan.gc.ca/n1/pub/82-625-x/2018001/article/54982-eng.htm>
- Storz, M. A. (2020). Will the plant-based movement redefine physicians' understanding of chronic disease?. *The New Bioethics*, 26(2), 141-157.
- Tarasuk, V., Mitchell, A., & Dachner, N. (2016). *Household food insecurity in Canada: 2011*. Toronto: Research to identify policy options to reduce food insecurity.
- Tellier, C. (2021, August 19). *Can type 2 diabetes be reversed?* Retrieved July 2, 2022 from: <https://www.sunlife.ca/en/tools-and-resources/health-and-wellness/preventing-and-treating-illness/can-type-2-diabetes-be-reversed/>
- Toumpanakis, A., Turnbull, T., & Alba-Barba, I. (2018). Effectiveness of plant-based diets in promoting well-being in the management of type 2 diabetes: a systematic review. *BMJ Open Diabetes Research & Care*, 6(1).

- Turner, N. J., & Turner, K. L. (2008). "Where our women used to get the food": cumulative effects and loss of ethnobotanical knowledge and practice; case study from coastal British Columbia. *Botany*, 86(2), 103-115.
- Turner, N., & Spalding, P. R. (2013). "We might go back to this"; drawing on the past to meet the future in northwestern North American Indigenous communities. *Ecology and Society*, 18(4).
- Vodovotz, Y., et al. (2020). Prioritized Research for the Prevention, Treatment, and Reversal of Chronic Disease: Recommendations From the Lifestyle Medicine Research Summit. *Frontiers in medicine*, 7, 585744.
- Vogel, L. (2018). Most doctors lack adequate training to give informed diet advice. *Canadian Medical Association. Journal*, 190(31), E945-E945.
- Welch IV, James. "The emergence of interdisciplinarity from epistemological thought." *Issues in Integrative Studies* 29 (2011): 1-39.
- Williams, K. A., & Patel, H. (2017). Healthy plant-based diet: what does it really mean? *Journal of the American College of Cardiology*, 70(4), 423-425.
- Windchief, S., & San Pedro, T. (2019). *Applying Indigenous research methods*. New York, United States: Routledge.

APPENDICES

APPENDIX A: PODCAST SERIES

Below is the additional Multi-media Production Portfolio Requirement for the **Podcast Series**. The link to the 9-episode Podcast series can be found here:

Podcast #1: Dr. Adrienne Lickers Xavier, DSocSci

<https://www.seatoskythivers.com/dr-adrienne-lickers-xavier>

Podcast #2: Dr. Psyche Williams-Forson, Ph.D

<https://www.seatoskythivers.com/dr-psyche-williams-forson>

Podcast #3: Dr. Breeze Harper, Ph.D

<https://www.seatoskythivers.com/dr-amie-breeze-harper>

Podcast #4: Suzanne Methot

<https://www.seatoskythivers.com/suzanne-methot>

Podcast #5: Dr. Warren Bell, MD

<https://www.seatoskythivers.com/dr-warren-bell>

Podcast #6: Dr. Milton Mills, MD

<https://www.seatoskythivers.com/dr-milton-mills>

Podcast #7: Dr. Nana Kwaku Opare, MD

<https://www.seatoskythivers.com/dr-nana-kwaku-opare>

Podcast #8: Dr. Marie Milalicz, DSocSci

<https://www.seatoskythivers.com/dr-marie-milalicz>

Podcast #9: Alison Pascal, Traditional Knowledge Keeper

<https://www.seatoskythivers.com/alison-pascal>

The podcast series is also part of the final knowledge mobilization website portfolio which can be found here: <https://www.seatoskytrivers.com/research-journey-nricherdocsocsci>

APPENDIX B: TED™ -Like Talk

Below is the additional Multi-media Production Portfolio Requirement for the **TED™ -Like Talk**.

The link to the TED™-like talk and video presentation can be found here:

<https://www.youtube.com/watch?v=6B4K3g6FYbw>

The video is also part of the final knowledge mobilization website portfolio which can be found here:

<https://www.seatoskythivers.com/research-journey-nricherdocsocsci>

APPENDIX C: JOURNAL ARTICLE

Below is the additional Portfolio Requirement for the **Journal Article Submission**.

The journal article is the third component of the final knowledge mobilization website portfolio which can be found here: <https://www.seatoskythrivers.com/research-journey-nricherdocsosci>

International Journal of Indigenous Health, Volume, Issue, 2023_Journal Article Submission – Title Page

Decolonizing our Food Systems: Narrative Inquiry into the Barriers to Accessing Foods that Reverse Chronic Diseases.

Authors

Name: Nicolette Richer|
Title: MAEEC, DSOCSCI
Institution/Organization: Sea to Sky Thrivers Society
Email: [REDACTED]

Corresponding Author

Name: Nicolette Richer
Institution/Organization: Sea to Sky Thrivers Society
Telephone: [REDACTED]
Email: [REDACTED]

**Authorship Statement**

I, Nicolette Richer, hereby confirm that the author listed above has contributed significantly to the research, analysis, and development of the article enclosed in this journal article submission. Furthermore, I confirm that I am the sole author of the article and have granted permission for the final version to be published.

Original Submission Statement

I, Nicolette, hereby confirm that to the best of my knowledge, the work presented in the manuscript has not been published elsewhere and is not currently being considered by another journal.

Potential Peer Reviewers

All submissions require the authors to suggest four potential peer reviewers – two that are university based and two that are community based.