

The University of Maine

DigitalCommons@UMaine

Honors College

Spring 5-2020

The Effects of Food Insecurity on Indigenous Women in Maine

Sara Imam

University of Maine

Follow this and additional works at: <https://digitalcommons.library.umaine.edu/honors>



Part of the [Food Security Commons](#), [Indigenous Studies Commons](#), and the [Women's Health Commons](#)

Recommended Citation

Imam, Sara, "The Effects of Food Insecurity on Indigenous Women in Maine" (2020). *Honors College*. 598.
<https://digitalcommons.library.umaine.edu/honors/598>

This Honors Thesis is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in Honors College by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

THE EFFECTS OF FOOD INSECURITY ON INDIGENOUS WOMEN IN MAINE

by

Sara Imam

A Thesis Submitted in Partial Fulfillment
of the Requirements for a Degree with Honors
(Anthropology)

The Honors College

University of Maine

May 2020

Advisory Committee:

Darren Ranco, Associate Professor of Anthropology and Coordinator of Native
American Research, Advisor

Mimi Killinger, Rezendes Preceptor for the Arts in the Honors College

Lisa Neuman, Associate Professor of Anthropology and Native American Studies

Bonnie Newsom, Assistant Professor of Anthropology

Stefano Tijerina, Lecturer in Management

© 2020 Sara Imam

All Rights Reserved

ABSTRACT

Indigenous women have been affected by food insecurity due to historical and continued impacts of settler-colonialism, which include the stripping of traditional gendered roles and responsibilities, environmental degradation, and poverty that limit access to traditional foods and resources. As a result, Indigenous women remain among the most vulnerable to malnourishment and hunger, as well as chronic health conditions that arise in part from colonial diets. Despite the severity of this issue in Native North America, there has been little research carried out on the topic in the state of Maine. This thesis analyzes the connections between factors underlying food insecurity as it relates to Maine Indigenous women and communities. In addition, efforts by Maine tribes to address food insecurity and reclaim tribal food sovereignty are discussed. A Wabanaki case study is used to highlight Indigenous perspectives related to food access, personal health, and community concerns.

DEDICATION

This thesis is dedicated to my family, who have supported and guided me in all that I have done.

I also dedicate this to Wabanaki women and communities. Your voices breathe life into my work.

TABLE OF CONTENTS

Introduction	1
Chapter 1: Traditional Foods & Roles of Women	10
Chapter 2: Colonial Impacts on Gender, Health, and Food Security	24
Chapter 3: Contemporary Relationship between Indigenous Women, Health, and Food Security	34
Chapter 4: The Path Forward: Reclaiming Indigenous Health through Food Security	47
Conclusion	59
Bibliography	63
Appendix: IRB Approval	67
Author's Biography	68

INTRODUCTION

Since the first waves of European colonization of the Americas, a variety of changes have affected Indigenous people's participation in food cultivation and access to resources. In order to understand the issue of food insecurity, it is critical that we analyze it through a lens that does not separate the issue from a multitude of factors. Women in Indigenous communities, in particular, have been disproportionately affected by food insecurity due to their unique ties to cultural first foods, social location, and vulnerability due to the continuing effects of colonialism, which has played an immense role in the removal of their traditional roles (Vinyeta et al., 2015). Increasingly rapid environmental degradation further "exposes vulnerabilities, as it threatens to affect the range and distribution of culturally critical plants and animals as well as alter cultural landscapes, thereby compromising the ability of indigenous peoples to carry out traditional responsibilities and relationships" (Vinyeta et al., 2015, p. 18). Yet despite these threats to their identities, livelihoods, and land, Indigenous communities are demonstrating their resilience by responding with solutions of their own. This introduction provides a preliminary discussion of the connections between historical impacts of colonialism and both environmental and social barriers as they relate to food insecurity experienced by Indigenous women.

Chapter 1 provides a background on traditional foods in Maine, as well as traditional roles of Indigenous women in order to better conceptualize the degree of change experienced during colonization. Although Indigenous food systems historically varied by region, a common feature of traditional diets is nutrition and physical, mental, and spiritual wellbeing. Women's roles and responsibilities within their communities

were often linked to food and environmental sources, and important social bonds were created through the cultivation and sharing of food.

Chapter 2 focuses on the historical impacts of colonialism on gender, health, and food security. Gender has long been an important determinant in Indigenous peoples' social structure (Smith, 2005). Prior to the colonization of North America, gender roles within Indigenous communities differed significantly from European gender roles, as they were often gynocratic instead of patriarchal in nature. Females in gynocratic societies "have central sociopolitical roles, are figures of moral authority, have control over property, or some combination of these characteristics" (Vinyeta et al., 2015, p. 7). These positions of power were disrupted with the advent of colonialism.

When Europeans arrived, one of their methods of colonization and control was to strip Indigenous women of their traditional roles and rights, rendering them more vulnerable to various kinds of violence, which "has been a primary tool of colonialism and patriarchy used to undermine Indigenous women's place and power" (Saramo, 2016, p. 207). Europeans believed that the subjugation of women was needed to ensure a successful process of colonization and attempted to remove them from leadership positions and erase records of gynocratic systems prior to colonialism (Vinyeta et al., 2015). One method they used to accomplish this was the enforcement of gender inequality among Indigenous males and females, resulting in patriarchal gender roles (Vinyeta et al., 2015).

Many laws were intentionally instituted to remove power from Indigenous women. The Canadian government, for example, devalued Indigenous women with laws

such as the Indian Act of 1876, which forced Indigenous communities to abandon many traditional ways of life, including gendered practices. Canada enacted policies that aimed to integrate Indigenous people partially into Canadian society, but not enough to give them status equal to settlers. Indigenous women, in particular, were more subject to maltreatment and abuse, beginning with the Act's definition of them as "ungovernable sexual beings, appropriately treated as 'sub-humans'" (Eberts, 2014, p. 145). This constructed stereotype is behind these policies that "drive women into exile, separate them from their families and impoverish them and their children if they do not conform to the model of demure Victorian wife..." (Eberts, 2014, p. 145).

Women under the Indian Act lost their tribal status if they married a white or "non-status" man, which meant that they were barred from living on or visiting the reserve, inheriting reserve property, or participating in the political and cultural life of the reserve (Eberts, 2014, p. 152). This effectively robbed them and their children, who were also stripped of status, of their identities and nationhood. The only way of regaining status after even divorce or widowhood was by marrying an Indian status man (Eberts, 2014, p. 152). In this way, Indigenous women were properly acknowledged as such only to the extent that they were associated with an Indigenous male, and this removal of autonomy further displaced them from their communities. In the decades that followed the passage of the Indian Act, the number of women and children that were affected by this is still unclear (Eberts, 2014, p. 152). What *is* clear is that this not only led to the dysfunction of Indigenous women's participation and roles within their communities, but also the dysfunction of the communities themselves.

Chapter 3 focuses on the contemporary relationship between Indigenous women, health, and food security. Today, although some traditional gendered practices are still carried out, many, like food access and production, have changed altogether through the centuries of environmental and societal change brought on by colonial control. According to Vinyeta (2015), “Traditionally certain bush skills and knowledge were held by women, and their overall role and knowledge were considered as important as those of men. However, since settling into permanent villages, women have lost their role and some of their knowledge base.” For generations, Indigenous communities have depended on a wide variety of fungi, plant, and animal species for sustenance (Lynn et al., 2013). Water, with its vital role as a giver of life is also considered a traditional food by some tribes (Lynn et al., 2013). Therefore, anything that impacts these resources also affects traditional ways of life. For example, climate change affects traditional modes of food preparation and storage, because

...as temperatures rise, these are less likely to prevent pathogens that cause illness...pregnant women, infants, the elderly, and those with weakened immune systems are at higher risk for severe infections, such as those that result from eating wildlife diseased with zoonotic infections. (Vinyeta et al., p. 27)

With the destruction of ecosystems and natural resources as a direct result of colonial occupation - such as disease, pollution, invasive species and management actions - the availability of traditional foods and natural resources becomes limited (Lynn et al., 2013). Lifestyle processes related to food are also affected. For instance, if harvest times for crops or the presence of pollinators (i.e. birds and insects) change considerably, this can impact the food webs that Indigenous communities rely on (Lynn et al., 2013).

Several tribes along the Pacific Coast have been affected by sea level rise, which has resulted in the flooding of shellfish beds that provide sustenance for many species, including humans (Lynn et al., 2013). Historically, these tribes have sustained “clam gardens” by creating rock terraces (Lynn et al., 2013). However, due to sea level rise and changes in ocean chemistry (such as pH and temperature), this means of sustenance is threatened (Lynn et al., 2013). Additionally, in industrialized zones sea level rise can flood chemical pollutants to shore areas, contaminating shellfish beds (Lynn et al., 2013). Structures have been built as a colonial response, but these prevent the intertidal system from regulating itself naturally (Lynn et al., 2013).

Women in Indigenous communities hold close ties to specific aspects of the land, such as berry plants, for example. In Maine, berries serve many purposes for the Wabanaki, and act as “key cultural indicators” of an ecosystem (Lynn et al., 2013). They are especially important to Wabanaki women, who use them for reproductive health benefits, including birthing preparation, cyst formation, and menopause (Lynn et al., 2013). Berries are also “integral to customs and rituals and establish part of the cultural status of Wabanaki women” (Lynn et al., 2013). With access to these resources being affected by climate change, the preservation of Indigenous women’s ways of life is at stake.

For the Anishinaabe peoples of Canada, women have special “responsibilities” towards water, which is viewed with reverence for its role as a “supporter of life” in their creation story (Whyte, 2014, p. 605). Within the story, water has a responsibility to mediate interactions between living things and is considered a “relative” (Whyte, 2014). In return, humans have the responsibility to care for it. Anishinaabe women use water in

“Purification Lodges, in ceremonies of healing, rites of passage, naming ceremonies and especially in women’s ceremonies” (Whyte, 2014, p. 605). In addition, they are to protect its quality, pass on knowledge of it, and safeguard it for future generations (Whyte, 2014). Just as women bring forth life, so too does water.

Climate change, however, may impact Anishinaabe women’s ability to carry out these responsibilities, making it difficult, if not altogether impossible (Simpson, 2017). For example, bodies of water may not be as available for ceremonial purposes as they once were. Furthermore, because many Indigenous women do not have opportunities to actively participate in environmental policy decision-making, this interferes with their responsibilities of protection (Whyte, 2014). As the pollution of water is a “core existential concern” for them, certain related climate change concerns may affect them more than Anishinaabe men or non-Indigenous people (Whyte, 2014, p. 606).

According to a World Health Organization report, “among the chronically hungry people in the world, 60 percent are women” (WHO 2011). Indigenous women, in particular, are more likely to experience hunger and malnourishment, in part because of their lower socioeconomic status, which limits their access to food. They are also more prone to “nutritional deficiencies because of their unique nutritional needs, especially when they are pregnant or breastfeeding” (WHO 2011). For instance, chemical contamination near the Mohawk Reservation and Lawrence River in Massena, New York resulted in a high concentration of PCBs in land, water, and wildlife (Vinyeta et al., 2015). This in turn resulted in a 200% increase of PCBs in the breast milk of women who had consumed fish from the river (Vinyeta et al., 2015). The exposure proved avoidable by not consuming fish (Vinyeta et al., 2015). However, this further limitation of the

consumption of traditional foods proves to be a challenge for Mohawk people, as it interferes with their ability to use nourishment that is essential for their physical health, as well as the preservation of their culture.

Despite the disadvantages and hardships Indigenous women and communities have faced historically and in the present, it is important that we acknowledge their resilience and self-determinant answers to these problems. Chapter 4 changes focus by considering the reclamation of Indigenous health through food security, with an emphasis on food and land sovereignty. Indigenous people and tribal nations are responding to the effects of food insecurity by creating their own solutions and raising their voices against colonizing forces that abuse the land and body. The Nooksack Indian Tribe, for example, is responding to the impacts of glacier drainage into the Nooksack River, which is home to an abundant salmon population that has traditionally provided food for them. The tribe is working to combat the effects of climate change on the hydrology of the river and maintain adequate levels of salmon. One of the ways they are accomplishing this is by collaborating with the Environmental Protection Agency (EPA) to research the Total Maximum Daily Load (TMDL) standards for the river in order to create habitat restoration projects for the preservation of the salmon population (Tribal Climate Change Project).

In 2011, the Nez Perce Tribe created an adaptation plan for the Clearwater River Subbasin which “focuses on impacts to water and forestry resources, two areas of natural resource management that are both culturally and economically important to the Nez Perce Tribe. The adaptation plan includes an assessment of existing conditions in the

subbasin, and data on how changes in climate may impact forests, waters, and the local economy” (Tribal Climate Change Project).

In the face of colonial impacts, Indigenous communities are also taking an initiative in saving traditional foods (Vinyeta et al., 2015). One group of tribes in Oregon “have developed a ‘First Foods’ framework that serves to protect critical tribal food species” (CUITR 2010). First foods are traditional foods that Indigenous communities have relied on for sustenance for centuries (Vinyeta et al., 2015). The tribes’ plan includes a “Women’s Foods” category, aiming to address “the importance of gendered knowledge” (Vinyeta et al., 2015). It acknowledges that “there is a gendered knowledge and management gap,” stating that inadequate attention has been given to plants, which typically encompass women’s responsibilities. To address this gap, the tribes have carried out women’s food assessments, and tribal women have stepped up to assert their knowledge and involvement in management decisions (Vinyeta et al., 2015).

In order to ensure the inclusion of Wabanaki perspectives in this work, interviews were conducted with individuals - mostly women - from the Penobscot, Maliseet, and Passamaquoddy tribes. These case studies are intended to supplement the use of literature and provide glimpses into the Indigenous experiences of food security in Maine. While participants remain anonymous, each of them participates in at least one, if not multiple types of traditional food procurement or cultivation activities. Their voices are woven throughout each chapter, supplying social, cultural, and gendered insights into the topic of food security.

If we are to grasp the issue of food insecurity as experienced by Indigenous women in Maine, it must be viewed as one of a myriad of products that have resulted

from a cause-and-effect cycle perpetuated by settler colonialism. The enforcement of patriarchal gender roles led to the abuse of women's identities, bodies, and lands, which caused a displacement from their homelands. Continuing impacts have further extended the ramifications of colonialism, such as environmental violence and poverty, the effects of which include food insecurity. Still, Indigenous peoples have responded to and refused the capitalistic structure that has institutionalized the abuse of land and body, as well as taken away their right to the sustenance that has fed them both physically and spiritually for generations. We must view Indigenous women and communities as survivors and leaders, if we are to truly understand the impacts of the colonial structures that have destabilized the food systems that are sacred to them - and if we are to be allies in their solutions. This thesis is an exploration into all of these causes, effects, and responses.

CHAPTER 1

TRADITIONAL FOODS AND ROLES OF WOMEN

Traditional Indigenous foods consist of “native animals and plants considered culturally and geographically appropriate” (Gurney et al., 2015, p. 682). The vast array of traditional food sources includes everything from “wild meats to 8,000 varieties of corn and a myriad of other fruits and vegetables” (Gurney et al., 2015, p. 683). These foods were historically plentiful and varied by region, as lifeways were primarily place-based (Gurney et al., 2015). In addition, they play key roles in supporting wellbeing in individuals, communities, and cultures. As such,

Intricately intertwined with traditional foods, medicines, gathering practices, sites for gathering, and songs and rituals associated with harvests are the cultural and linguistic ties that link the spirit of the people to the earth, their heritage, and their lifeways. As these practices have been discontinued, cultural knowledge and language use have been dying. (Companion 2008, p. 4)

In this way, Indigenous cultures have developed as both a “place and plate-based experience,” where social ties and security were preserved through specific social and geographical spaces, and where individual and community health were secured with access to abundant, healthful foods (Gurney et al., 2015, p. 684). For instance, “food sharing by kin-based networks[...]worked to strengthen social bonds and continues to be an important traditional cultural strategy to maintain food security” (Gurney et al. 2015, p. 685). As one Penobscot woman states, “I think that one aspect of traditional foods is the sharing of it...people get moose and deer and all of that they're sharing with their

family members. When I pick blueberries, I'm picking extra to share with people. So, there's that element of the traditional diet as well.”

Indigenous ethnobotanist Enrique Salmón (Tarahumara) describes his identity as rooted in “an encoded library of cultural and ecological knowledge” that brought communities together through shared meals and recipes that linked them to the earth:

The knowledge I learned from my family was one aspect of a trove of culturally accumulated ecological knowledge. When they introduced me to individual plants, they also introduced me to my kinship to the plants and to the land from where they and we emerged. They were introducing me to my relatives. Through this way of knowing, especially with regard to kinship, I realized a comfort and a sense of security that I was bound to everything around me in a reciprocal relationship. (Coté, 2016, p. 10)

Traditional foods - including the processes of “obtaining, preparing, and sharing them” - are an essential part of Indigenous culture and heritage, and represent peoples’ close relationship with the land (Gurney et al., 2015, p. 685). As Elizabeth Hoover points out,

...indigenous food systems refer to specific collective capacities of particular indigenous peoples to cultivate and tend, produce, distribute, and consume their own foods, recirculate refuse, and acquire trusted foods and ingredients from other populations’... (Hoover, 2017, p. 13)

Indigenous identities are linked to sustenance. An Inuit saying in northern Alaska is, “I am what I am because of what I eat” (Coté, 2016, p. 10). Research on Arctic Indigenous whaling communities indicate that traditional foods such as whale are important in a number of ways, not just physically:

While a high value is placed on whales as a healthy food source, the tradition of whaling maintains community solidarity and collective security through the communal hunts and the processing, distributing, and consuming of whale products by community members. Whaling serves to link the Inuit materially, symbolically, and spiritually to their cultural heritage and ancestral knowledge. (Coté, 2016, p. 10)

Historically, diet was much more varied prior to European contact (Gurney et al., 2015). Following seasonal changes, Indigenous tribes typically migrated to acquire specific food sources that were available during different times of the year (Gurney et al., 2015). Often, these foods were “processed on-site and preserved for later consumption,” and “cultural customs and procedures were followed for the hunting, gathering, and preparation of food” (Gurney et. al., 2015, p. 685). Associated traditions were passed down to preserve resources and secure wellbeing for future generations (Gurney et al., 2015).

The Black River First Nation (BRFN) in the boreal region of Canada, for example, has traditionally relied on a wide variety of foods as part of its subsistence (CIER, 2007). These foods, which include “moose, sturgeon, whitefish, rabbit, wild rice, blueberries, pin cherries, wild plums, chokeberries, strawberries, raspberries and different ‘needle’ trees or conifers (white spruce, black spruce, balsam fir),” were customarily present at seasonal ceremonies and community events, and many of these also served medicinal purposes (CIER, 2007, p. 5). Spruce trees and berries, for instance, aid in the treatment of various illnesses, while moose and other mammal meat is valued for its ability to sustain much of a community (CIER, 2007). Rabbits “eat medicines and people acquire those medicines from eating the rabbits” (CIER, 2007, p. 6).

A major study of Wabanaki diets examined Maine’s major ecosystems and modeled three Wabanaki “lifestyle models,” each of which have diets associated with them: permanent inland residence on a river with anadromous fish runs,

permanent inland residence with resident fish only, and permanent coastal residence (Harper and Ranco, 2009). As a heuristic device, these diets assume that “a person lives solely within one of the three ecosystems and obtains most of his/her food locally,” and are subject to individual tribal location and application (Harper and Ranco, 2009, p. 46). This research on Wabanaki diets is based on “the availability of particular resources in known sequences and locations reflecting ecological information, the tangible remains of particular resources at individual archaeological sites, and the seasons in which those resources are known to have been obtained” (Harper and Ranco, 2009, p. 47).

Coastal archeological sites have been informative in determining traditional Wabanaki diets, and the investigation of shellfish sites on the Gulf of Maine is a good way to demonstrate this. Shellfish sites can be categorized according to season by examining species growth patterns, which give a better understanding of a marine foods-based diet on the coast (Sanger, 1996). An examination of shell middens in the Boothbay Harbor region revealed that the American oyster was a favored resource among coastal food sources (Sanger, 1996). Despite this, “in no case do these constitute procurement stations focused on the capture of a single species. At all sites the native peoples gathered shellfish, hunted land mammals and birds, caught finned fish...” (Sanger, 1996, p. 518).

A historical theory claimed that prehistoric Indigenous people of the Gulf of Maine were predominantly foragers, as “the evidence points to movement of

residence in response to seasonal availability of key resources” (Sanger, 1996, p. 519). However, inquiry guided by “seasonality indicators” like shellfish suggested settlement according to seasonal change, as opposed to that of a more permanent nature (Sanger, 1996). The “year-round hypothesis for coastal occupation” was tested using analysis of seasonality and species behavior, and Sanger ventures that there is a “warm water season” from May to November and “cold water season” from November to May (Sanger, 1996, p. 520). Upon archaeological site investigation in the Boothbay and East Penobscot Bay areas, remains from shellfish harvesting as well as hunting and fishing activities were found in the same “strata as discarded broken artifacts, lithic tool curation debris, tool manufacture, and hearth features” (Sanger, 1996, p. 521).

It was also noted that while seasonal shifts do take place in the Gulf of Maine, no significant signs of food shortage were observed in archaeological findings in the region, nor were they expected (Sanger, 1996). Some food sources are available on a seasonal basis, while others - like shellfish - were gathered year-round (Sanger, 1996). This process made it possible to compensate for any deficiencies in diet (Sanger, 1996). For example,

...fish remains range from very low counts in Passamaquoddy Bay sites (under 15 percent) to highs of over 80 percent in Penobscot Bay. The tendency for considerable disparity between cod and the flounder/sculpin group is evident. Cod fishing, especially for large specimens, is an offshore, line fishing activity undertaken from canoe. Flounders and sculpins, on the other hand, can be taken simultaneously by brush weirs set in intertidal mud flats. Continued disproportion of cod relative to flounder and sculpin would suggest site specific fishing strategies, and perhaps reflect seasonality. (Sanger, 1982, p. 202)

Excavations carried out between 1969-1970 in sites along the Passamaquoddy Bay revealed faunal assemblages consisting primarily of mammal remains, which included those of deer, beaver, moose, caribou, and two species of seal (Sanger, 1982). In addition, thirty species of birds were also found (Sanger, 1982). By contrast, finned fish remains seemed scarce (Sanger, 1982).

Excavations of Acadia National Park sites from 1974-1978 also contribute to the discussion surrounding subsistence (Sanger, 1982). At Frazer Point, the fish bones identified were winter flounder, longhorn sculpin, and cod, the mammal record was predominantly moose, deer, beaver, and seal, and the bird remains were identified as ducks, geese, and the extinct great auk (Sanger, 1982). The faunal collection at Fernald Point was extensive, with the species constituting the fish remains being highly comparable to that of Frazer Point (Sanger, 1982). Mammal remains present were identified as harbor seal, beaver, deer, and moose (Sanger, 1982). Site 3068 was made up of mostly fish remains of cod and flounder, and bird bones outnumbered mammal bones, “emphasizing the marine focus at this island site” (Sanger, 1982, p. 201).

Located on Naskeag Point on the coast of central Maine, the Goddard site is a non-shell midden site that was found containing a faunal assemblage with mostly seals, followed by moose, deer, and birds, with evidence of sturgeon fishing (Sanger, 1982). Turner Farm is the most widely excavated site in the Penobscot Bay region, and features “most of the named cultural taxa known in Maine from Late Archaic times onward” (Sanger, 1982, p. 201). Although the faunal remains reflect relatively little evidence of fishing, a multitude of moose,

deer, and seal bones were present (Sanger, 1982). According to Sanger, there is an increase in moose, seal, black bear, flounder, and (now extinct) sea mink numbers through time (1982). The Taylor site in the Boothbay Harbor region revealed a high number of cod remains, along with evidence of clam gathering (Sanger, 1982).

Other findings also suggest that groups of people spent winters by the coast, largely subsisting on animal meat like moose, bear, and small game, while congregating in villages during the spring, summer and fall (Harper and Ranco, 2009). Additionally, other evidence for winter habitation sites include the finding of birds that typically spend coastal winters - such as ducks and oldsquaw - as well as the bones of tomcod, which spawns in winter (Sanger, 2000). The remains found in interior Maine sites to support the hypothesis of summer inland occupation predominantly consisted of muskrat, beaver, shad, eel, and turtle (Sanger, 2000). These warmer seasons, where hunting trips along rivers were common, would be dedicated to the foraging of nuts and berries, as well as salmon and seafood fishing (Harper and Ranco, 2009). Most likely,

All peoples living along anadromous rivers would have to match their schedules to the sequential spawning runs and migratory bird schedules. At least 8 anadromous fish species are present in Maine (salmon, alewife, shad, smelt, sturgeon, striped bass, and white and yellow perch), along with one that is partially anadromous (tomcod) and one that is catadromous (eel)..Spring runs of smelt and spring waterfowl migration begin shortly after the ice has left the waterways (March-April). These are followed by herring, sturgeon, alewife, bass, and geese (April-May-June). In September to October the eel fishery was ready. (Harper and Ranco, 2009, p. 47)

The importance of fish as sustenance merits a discussion on the role of salmon rivers in Wabanaki lifeways. According to Harper and Ranco (2009, p. 40), Atlantic salmon historically flourished in eastern North America (including New England), with 875 rivers in total serving as home to these populations. In Maine, it is chronicled that “unheard of quantities” of salmon were caught at Indian Island for years, and early settlers also reported the abundance of fish (Harper and Ranco, 2009). A French merchant who married into a Mikmaq family recounted,

Fishing in deep pools in rivers after dark with torches and spears, a single Mikmaq could land 150 to 200 salmon or trout in a single night; large harvests were also attained using tidal weirs. There were great quantities of bass, which is a very good fish of two or three feet in length. ... in an hour they load a canoe with them, which means about two hundred of these fish. (Harper and Ranco, 2009, p. 40)

Another historical account from the eighteenth century details the diversity and access to fish and other wildlife on the Penobscot River:

The streams were full of them - salmon, shad and alewives were taken under Lover’s Leap, at the mouths of the Mantawassuck, Segeunkedunk, and Sowadabscook Stream and at Penobscot Falls...Game was found in great abundance along the banks of this river. There are those living who had the fine sport in hunting moose and the larger animals of the forest, as well as birds and smaller game. Besides the fish mentioned, bass were plenty in the Penobscot...(Harper and Ranco, 2009, p. 40)

Maliseet, Passamaquoddy, and Penobscot participants shared their knowledge of fish and the roles they continue to take in tribal community life:

“I know people in Sipayik...at that point their fishing communities were quite thriving and they had a thriving fish weir kind of system which was much more of a community-based fishing industry. Instead of now, they had to shift to more of a commercial-based fishing industry. So they talk a lot about fish. I didn't grow up with a fish weir in my backyard like (my husband) did. But I know that for them, that is something very important (to) the fishing community because it also represented prosperity. Not necessarily

financial prosperity, but for food security...they have stories that were like that. During the Depression, they didn't go hungry because their fishing industry was so thriving that they could walk and go get it themselves.”

“We're the Passamaquoddy so we're the people who spear pollack. So there's a tradition to fishing and seafood, shellfish, things like that...”

“The Penobscots really were a riverine culture that depended on the fisheries to survive. And there's all these stories about how at a certain time of year you could go to a certain place, so there was all that knowledge about where to go and at what time of the year. And then...you could catch enough fish and smoke it to last you the entire year...”

Records indicate that pre-contact and contact-period Wabanaki food security was overall quite stable due to the countless resources provided by land and water - which included substantial supplies of “smoked fish, dried meat, nuts, and dried berries,” along with “migrating flocks of ducks, geese, partridges, and wild turkeys” that were stored in cellars (Harper and Ranco, 2009). Storage methods were key to avoiding food shortages. For example, the preservation of meat, roots, shellfish, eggs, fats, and oils allowed foods to be saved for cold winter months (Harper and Ranco, 2009). Meat and fish were smoked and dried, and fruits and vegetables were also dried. (Harper and Ranco, 2009). Seal, moose, bear, and caribou oil was produced from fat and stored in cakes for later use (Harper and Ranco, 2009).

The main traditional Wabanaki resource utilization patterns were inland hunting and fishing, coastal fishing and hunting, and plant gathering (Harper and Ranco, 2009). Inland groups depended largely on hunting game such as beaver, muskrat, deer, moose, rabbit, and bear, as well as the fish, birds, and plants found

in habitats of non-anadromous bodies of water (Harper and Ranco, 2009). The lifestyle of coastal areas is described as “a combination of littoral foraging, land mammal hunting, and in-shore fishing,” containing a diet that included many types of fish, marine mammals, shellfish, land mammals, and birds (Harper and Ranco, 2009, p. 51).

Finally, plants had uses as food, medicine, and material (Harper and Ranco, 2009). Nuts were ground into flour and bread, and were also roasted and eaten whole (Harper and Ranco, 2009). “Fleshy fruits” like strawberries, raspberries, elderberries, and wild plum were also consumed and used as medicine in beverages and teas, as were a multitude of herbs including mint, witch hazel, and sassafras (Harper and Ranco, 2009). Other plant resources included seeds, greens, roots, fungi, and sweeteners like maple syrup and honey (Harper and Ranco, 2009). A major archeological site for native plants, Norridgewock contained many of those found elsewhere across Maine, including corn, wheat, beans, blueberries, and wild rye (Harper and Ranco, 2009).

Harper and Ranco (2009, p. 60) thus classify the traditional Wabanaki diets into the following food groups: “fish and other aquatic resources (resident and anadromous groups), large and small game, fowl and eggs, bulbs, berries and fruits, above-ground vegetables (including legumes), greens (including tea and medicinal leaves), roots/tubers, nuts/grains/seeds, and sweeteners.”

When asked to reflect on what they considered to be traditional tribal foods, Passamaquoddy, Penobscot, and Maliseet participants had commonalities in their responses - notably fiddleheads, with moose and deer as well.

“I’m a hunter from way back, so I’ve traditionally hunted moose and deer...fishing...Every May, usually by the first week in May we have fiddleheads...this past year I picked about 400 pounds myself...I give them out to the community (because) it’s something that I love to do.”

“I would say what we grew up with were fiddleheads...(they were) really big to get because they're so easy to pick...I don't know why fiddleheads had become such an important one. Maybe something about the first spring, the first green of the year - that’s why they stayed with us so long. So...fiddleheads, moose, deer, salmon we would have, and we would have oftentimes just go (and) get salmon...We’re not hunters, but we still get (meat) from other people. Moose meat and deer meat from a traditional sense.”

“I would say the first thing that comes to mind this time of year, especially, is fiddle-heading...And then of course, is berries, all different sorts of berries...we still very much go berry picking. We have our regular seasons for hunting...And then also just using herbs and things like that.”

“The ones we participate in specifically...are we do things like pick fiddleheads. Fiddleheads are only around during a very specific time of the year, so to go and pick them, you have to go and get them (yourself). Now that my son is two (years old) he went with me last year and it was his first time going...it made it that much more special that...he's kind of learning the experience... (Also) we go hunting in the fall - even if we're not successful, it's still part of you reorienting yourselves to the season.”

Historically, gender and gender roles played a significant part in shaping pre-contact Indigenous community structure and social responsibilities. It must be stressed that “every tribe and Native group is unique in its social dynamics, belief systems, and cultural practices,” and the gender dynamics described here are in general terms (Vinyeta et al., 2015, p. 7). In many cases, however, tribal cultures were described as being egalitarian or matrifocal in nature (Vinyeta et al., 2015). Key features included “egalitarian relationships between men and women and the leadership roles of women in various communities” (Vinyeta et al., 2015, p. 7). In addition, the “institutionalized presence” of multiple genders and lack of gender

violence were also notable (Vinyeta et al., 2015, p. 7). For example, the status of women in Iroquois society is described here:

The women of the Iroquois had a public and influential position. They had council of their own...which had the initiative in the discussion; subjects presented by them being settled in the councils of the chief and elders; in this latter council the women ' had an orator of their own (often of their own sex) to present and speak for them. There are sometimes female chiefs...The wife owned all the property...The family was hers; descent was counted through the mother. (Smith, 2005, p. 20)

Responsibilities to land, water, plants, and animals were frequently gendered (Vinyeta et al., 2015). Indigenous women were often responsible for harvesting plants and agricultural work, whereas men were often tasked with hunting and fishing activities (Vinyeta et al., 2015). For instance, “in aboriginal California, women were the ethnobotanists, testing, selecting, and tending much of the plant world...men were the ethno-zoologists, applying their intimate knowledge of animal behavior and skillful hunting, fishing and fowling” (Vinyeta et al., 2015, p. 14). Cherokee, Creek, Choctaw, and Chicksaw women in the southeastern United States “bore the primary responsibility for preparing fields, planting, weeding and harvesting” (Vinyeta et al., 2015, p. 14). Among the Ojibwe and Potawatomi Tribes in Wisconsin and Michigan, women carried out sugar maple sap harvesting as well as the production of maple sugar (Vinyeta et al., 2015). Women have also been intimately connected to water across many indigenous communities “in birth, ceremonies, and even cooking and cleaning” and have often had responsibilities as protectors of this resource (Vinyeta et al., 2015, p. 15).

Using her positionality as a Penobscot woman, Sherri Mitchell discusses her understanding of “the correlation between rights and responsibilities” (Mitchell, 2018, p. 87). This understanding is rooted in traditional wisdom that serves as a reminder of her place in a balanced world (Mitchell, 2018). Her tribal stories - particularly creation stories - trace inherent Penobscot rights and responsibilities back to “the agreement that was made with the Creator when we first emerged into this world” (Mitchell, 2018, p. 87). The agreement supplies “foundational authority” for these rights, and Mitchell writes,

Under this agreement, we have the right to live unencumbered on this land, with full access to the sources of our survival, such as food, water, and shelter, as long as we uphold our responsibility to live in balanced harmony with the rest of creation. We understand that these rights are not self-evident or self-generating. They are strengthened or weakened by the degree of responsibility that we take to uphold our agreement. (2018, p. 87)

For thousands of years, Penobscots have honored this agreement by maintaining respectful relationships with the land and water (Mitchell, 2018). This is evidenced in “tribal governance structures,” which have historically ensured the protection of these resources through both pre-colonial ways of life and post-colonial efforts (Mitchell, 2018).

According to Mitchell, men and women are considered equal in traditional Wabanaki societies, sharing “equal responsibility for tending to all aspects of life” (Mitchell, 2018, p. 129). In Penobscot culture, women have held specific responsibilities in food harvesting, hunting, and construction of shelters (Mitchell, 2018). In addition, they establish a link to water from a young age, and Mitchell says:

I was raised to view water as my relative. I have a deep kinship connection to the water of the Penawahpskek (Penobscot) River. I grew up in and around those waters, and the history of my people is tied to them. My life, and the lives of all those who live along those shores, are dependent on the health of those waters. Therefore it is my responsibility to care for them and ensure that those waters are healthy and safe from contamination and destruction. (2018, p. 200)

As relayed through this chapter, while physical health is an important part of consuming Indigenous foods, they are not limited to serving a nutritional purpose for women or communities. Traditional Indigenous food systems and roles are best understood through an intersectional lens that recognizes the linkage between identity, responsibilities, social ties, and sustenance. A Passamaquoddy participant reflects,

“I think overall community health, from a Wabanaki perspective - like food - is connected to all different forms of health. That's...spiritual health, like me going to pick fiddleheads - it's something really powerful that I like to do. So, when I was able to bring my son, it made that experience more rich...Sometimes my brother-in-law doesn't have fiddleheads. So then I get to share some with him that I picked. And the same thing - there're some years where I don't have any and he shares with me. So then there's the social component and food sharing as well...They tell these stories of people catching a bunch of fish in the seventies...people (would) go around and put a fish in everybody's mailbox as a way to kind of share the food. So it's really about the social rhythms as well.”

Understanding the intricate relationships that underlie traditional Indigenous foods and roles is crucial in examining the disruption of these cultural markers.

CHAPTER 2

COLONIAL IMPACTS ON GENDER, HEALTH, AND FOOD SECURITY

The countless impacts of colonization created and perpetuated vulnerabilities for Indigenous women through both food systems and roles. The contact era - the “initial period when an indigenous population first comes into contact with outsiders such as explorers, traders, or settlers” - initiated a long chain of repercussions that damaged Indigenous lifeways (Harper and Ranco, 2009, p. 27). It is thus essential to consider these historical factors, and by extension their effects on Indigenous women, health, and food security.

Among these is the colonial impact on Indigenous health. Contact with Europeans led to the spread of many “Old World” diseases to Indigenous populations in the Americas, leaving a devastating impact (Thornton, 1998). While America was not completely free of disease during the pre-contact era, these new diseases - which included smallpox, measles, cholera, typhoid, whooping cough, scarlet fever, and the bubonic plague, as well as venereal diseases - were introduced to communities that lacked any prior exposure to them (Thornton, 1998). Many of these diseases, such as measles and smallpox, confer lifelong immunity to those who recover; in this area of the world, however, they were introduced as “virgin soil epidemics, whereby a new disease spreads to virtually all members of a population (and may be particularly virulent)” (Thornton, 1998, p. 21).

There is no question that this contributed significantly to the widespread deaths that followed. In Maine, epidemics beginning in 1616 are reported to have killed up to

75% of the Wabanaki population (Harper and Ranco, 2009). These epidemics mainly affected coastal areas, but wiped out entire villages (Harper and Ranco, 2009). It should be noted, however, that while individual communities often experienced drastic effects, in general subsistence lifestyles were not yet hugely altered due to the role of Wabanaki leaders who “routinely regrouped” their communities after such calamities (Harper and Ranco, 2009, p. 28).

In many cases, we have seen that Indigenous women customarily held political, economic, and religious power - at least equal to, if not more than men (Miheuah, 1996). Their respective roles within communities often differed, but were valued equally (Miheuah, 1996). Like most other aspects of Indigenous communities however, traditional gender roles, relationships, and responsibilities were altered rapidly with the arrival of Europeans (Vinyeta et al., 2015). According to Miheuah (1996, p. 20),

If we look at tribal societies at contact and trace the changes in their social, economic, and political systems over time through interaction with Euroamericans and intertribal relations, we will find that women did have power taken from them and so did Indian males. Gender roles changed over time, and Europeans were among the catalysts for this change.

As women held positions of power and respect in many Indigenous communities, European colonists “believed that the colonization of indigenous peoples depended in large part on the subjugation of indigenous women” (Vinyeta et al., 2015, p.9). This “colonial strategy” began a centuries-spanning history that perpetuated the abuse and disenfranchisement of Indigenous women (Vinyeta et al., 2015). Vinyeta et al. (2015, p. 9, citing Allen, 1992, p. 3) states:

The colonizers saw (and rightly) that as long as women held unquestioned power of such magnitude, attempts at total conquest of the continents were bound to fail. In the centuries since the first attempts at colonization in the early 1500s, the invaders have exerted every effort to remove Indian

women from every position of authority, to obliterate all records pertaining to gynocratic social systems, and to ensure that no American and few American Indians would remember that gynocracy was the primary social order of Indian America prior to 1800.

Additionally, those who did not conform to Western gender binary norms - such as Two Spirits - were targeted early on for extermination (Vinyeta et al., 2015).

Indigenous women were forced to give up much of their autonomy and confined to more domestic roles as befitted a European ideal. Colonial resentment of this individual female power, coupled with their subsequent robbing of this power, lead to the dehumanization and sexual abuse of Indigenous women. European patriarchal structure was by nature inherently violent towards women (Smith, 2005). For example, witch hunts were common, and “the women targeted for destruction were those most independent from patriarchal authority: single women, widows, and healers” (Smith, 2005, p. 18). The very idea of female autonomy posed a threat to the agenda of colonist males, which is evident in their suppression of Indigenous women who were consequently perceived as hyper-sexual.

This toxic image in turn fueled a sexually violent attitude towards Indigenous women, as they were seen as subhuman: “In the colonial imagination, Native bodies are also imminently polluted with sexual sin” (Smith, 2005, p. 10). This seemed to be justification for abuse of all kinds, which was further justified because they were compared to Canaanites and other wrongdoers in the Bible. According to Smith, “Because Indian bodies are ‘dirty,’ they are considered sexually violable and ‘rapable,’ and the rape of bodies that are considered inherently impure or dirty simply does not count” (Smith, 2005, p. 10). Like African slave women and other colonized females,

Indigenous women were viewed as human enough to sexually abuse, but too savage to be recognized as fully human.

The very shift in gender performance was a catalyst for destabilizing female autonomy in Indigenous communities. Lowering women's social status resulted in easier access for abuse in the form of European males, who resented displays of female leadership and viewed them as animalistic because of this as well as biblical narratives. As a result, these hyper-sexual perceptions of Indigenous women were instrumental in forming laws that simultaneously alienated them from their tribes and colonial society, displacing them to occupy a vulnerable position that was neither here nor there.

The aforementioned "colonial strategy" was utilized to persecute and villainize Indigenous "forms of kinship, familial relations, and diverse sexuality as a social tool to advance the imperial agenda of the United States" (Vinyeta et al., 2015, p. 10). These alternate modes of living and identification were viewed as a challenge to United States sovereignty (Vinyeta et al., 2015, citing Rifkin, 2011). Thus, the employment of state power was validated based on the need to protect the social structure that formed the very core of "civilized" society (Vinyeta et al., 2015, citing Rifkin, 2011).

How was this accomplished? Laws such as the Indian Reorganization Act and the Dawes Allotment enforced patriarchal, heteronormative narratives that consequently promoted "individuality, privatization, and property-holding" while displaying Indigenous ways of life as deviant and delegitimizing kinship which was "clan and community-centered" (Vinyeta et al., 2015, p. 10). In addition to the criminalization of traditional lifeways, efforts were also made to do away with Indigenous justice systems

and incarcerate people as a way to diminish tribal sovereignty (Vinyeta et al., 2015). As Ross (1998, p. 14) states:

Precontact Native criminal justice was primarily a system of restitution—a system of mediation between families, of compensation, of recuperation. But this system of justice was changed into a shadow of itself. Attempts were made to make Natives like white people, first by means of war and, when the gunsmoke cleared, by means of laws—Native people instead became ‘criminals.’

There is yet another way that laws in the United States disrupted Indigenous gender roles and community structures - through the forcible attendance of Indigenous youth in boarding schools that further dispossessed them of their language, traditions, and culture, pressuring them to adopt Western cultural values and forfeit their own (Vinyeta et al., 2015). Children were separated from their families for years at a time and were often subject to physical, emotional, and sexual abuse, forced to abandon their traditional spirituality for Christianity, and “molded to fit patriarchal, nuclear family-oriented systems” (Vinyeta et al., p. 11). According to the United Nations, genocide can be defined to include “forcibly transferring children of the group to another group” and by this definition, in addition to the many records of Indigenous communities, Indian boarding schools were indeed “both in intent and nature” genocidal (Vinyeta et al., 2015, p. 11).

The intentional stripping of identity and cultural assimilation initiated by Indian boarding schools “led to the long-term devaluation of Indigenous women,” as well as increased rates of violence - especially against women and children - throughout Indigenous communities (Vinyeta et al., 2015, p. 11). In fact, according to Calhoun et al. (2007, p. 533), “Gender inequity for American Indian students began in boarding schools that valued men’s work and devalued women’s work.” As such, social changes that

occurred as byproducts of this experience affected community members' ability to carry out traditional responsibilities and pass down essential knowledge to younger generations, who were separated from their families at ages when they should have been learning these (Vinyeta et al., 2015, p. 17).

Additionally, youth were often underfed and malnourished at boarding schools (Hoover, 2017). They were coerced into giving up their tribal ties and consuming the staples that comprised a standard "Anglo" diet (Hoover, 2017). These diets mainly involved dairy and starches, which was very different for these children who were used to diets centered on fruits, vegetables, and fresh or dried meats in their own communities (Hoover, 2017).

As they had traditionally held critical roles in their communities, Indigenous women were particularly disempowered and forced to adopt European gender roles (Vinyeta et al., 2015). For example, an account of plans in relation to Navajo women's roles states, "Since the mid-nineteenth century, the Bureau of Indian Affairs had endeavored to transform Native societies by stripping women of their power as agricultural producers and hide processors and transforming them into good housewives" (Vinyeta et al., 2015, p. 9, citing Weisiger, 2007, p. 441). Following a similar pattern, the changes in maple sugar production in the Potawatomi and Ojibwe Tribes in Michigan and Wisconsin are described by Matthew Thomas:

It is my contention that the changes from women to men and from sugar to syrup that accompanied the abandonment of kettles and adoption of flat pans were not coincidental, but related to a larger process of westernization and masculinization of the Indian sugarbush. (2005, p. 321)

For centuries to come, Indigenous food systems were also disrupted by factors stemming from colonization. Like the impacts discussed above, much of this disruption

was intentional (Hoover, 2017). Interestingly, Kyle Powys Whyte discusses that while “many settler actions are tacit or involve ignorant moralizing narratives, when it comes to food sovereignty, U.S. settlers deliberately endorsed actions of erasure to undermine Indigenous collective self-determination” (Whyte, 2017). These were carried out with the goal of “erasing the capacities that the societies that were already there - Indigenous societies - rely on for the sake of exercising their own self-determination over their cultures, economies, health, and political order” (Whyte, 2017). This disempowerment occurred in many ways, from the deliberate destruction of food during war to interfering with the passing of traditional knowledge about food (Hoover, 2017).

A Maliseet woman discusses the issue of the permit system, which has been a major component in the obstruction of traditional lifeways in Maine:

“The perception of natural resource management is really different (compared to) how Indigenous people would manage an area. But yet, because this is the state or something, how they would manage it is seen as the way to do it. Oftentimes that gets used against Native people, this idea...So for example, my husband’s a basket maker, and we harvest brown ash and there’s three of us that harvest...the elder (that) showed us had been harvesting from his family. So, people have been harvesting it for over a hundred years, but we never deplete this resource...all three of us are there together at different times in the way we harvest and manage this area, and there's no tragedy of the commons, right? Nothing like that happens for us. We have this ethic that goes along with harvesting and a practice that is sustainable. But yet we still get (told) from an outside perspective that we need permits. A permit system is this idea that is based on lack of trust, right? That you can kind of control how many people are in there because you don't trust that they're going to manage it sustainably...so outside control. But that system doesn't really work for Native people. That permit system is a challenge. I always find that’s a challenge of...if non-Native people want to invite us to harvest on their land, they still want their system of management, but it actually degrades the way we culturally do things, because then you have to choose ten or five people from your community and say “you five can go”. It just...creates bad relationships. It creates friction...”

Other actions in the eighteenth and nineteenth centuries were undertaken to “destroy food supplies and the land from which it came in order to make Native people reliant on the American government” (Hoover, 2017, p. 7). In many cases, tribes were pushed off their land onto marginalized territories, and cut off from their lands as a result of the government’s treaty-based system (Hoover, 2017). The “allotment system” further undermined tribal land rights by prioritizing the distribution of “communal land to individuals and families” (Hoover, 2017, p. 7).

Into the late-nineteenth and twentieth centuries, policies were enacted to actively encourage Indigenous people to resort to farming on reservations - despite their traditional ways of hunting, fishing, and gathering (Hoover, 2017). Although farming was a part of certain tribes’ history, for other communities in North America (like Plains tribes) it was not (Hoover, 2017). To these communities, the United States and Canadian governments “introduced farming projects in order to disrupt hunting cultures and expand the agricultural frontier while assimilating indigenous livelihoods” - often while non-Indigenous people had access to the most optimal land (Hoover, 2017, p. 7). Alternately, “urban relocation programs” during the 1950s incentivized Indigenous people to leave rural reservations and turn to urban areas for employment opportunities, “but this move often left families food insecure and distant from traditional food sources” (Hoover, 2017, p. 8).

Colonial impacts on the environment - whether intentional or not - proved incredibly detrimental to traditional Indigenous food systems and food access. For example, “damming the Missouri River in the 1940s and 1950s resulted in Native peoples in the Dakotas losing most of their arable land on the Standing Rock, Cheyenne River,

Crow Creek, and Fort Berthold reservations” (Hoover, 2017, p. 8). Similarly, other dams across the country flooded Indigenous territories and interfered with fisheries (Hoover, 2017).

Over time, changes caused by industrial contamination have affected modes of sustenance like fishing - for instance, in the Akwesasne Mohawk community in New York, as well as the Coast Salish Swinomish community in Washington (Hoover, 2017).

A Passamaquoddy participant says:

“There's this area in the St. Croix called Salmon Falls and in the 1800's, they said that a single person could catch 200 salmon there. (In) a very short period of time, we'll just say that by the end of this where they started damming the streams and things like that, the salmon fishery...got reduced to 200 in an entire season. So, it used to be really robust then and now...we're really excited when there are 500 counted in the river or something like that. I think the food extraction thing, it's interesting in this context because for the St. Croix River, it's food extraction in the sense of fisheries offshore and outside companies (that) have over-fished them. And then when you look at it inland it's the resource extraction from the timber industry, that's also done this in. And the way I like to describe colonization is...it doesn't really give any focus to the actual land. (The) land is always fuzzy...that's the assumed part of the conversation. And fish are attracted to very specific places, so people are attracted to very specific places around those fish, like Salmon Falls on the St. Croix River. It's the first waterfall on the river. So, when it's also the site of a paper mill...you put a dam in there because they need to move the timber. And it basically says that this way of life around the timber industry can survive here. And the way of life for salmon cannot, as well as (for) anyone who relies on the salmon. So, it's like this - food extraction and resource extraction over time limits your access to these very specific places. It's...a gradual thing that has happened. Taking away one place, that's not going to be a big deal. It's the gradual accumulation of all these places over time...pretty soon, all the chips are in one basket. And you know that has clearly benefited one group of people while not benefiting the other.”

Organic pollutants also made consuming traditional foods dangerous to health in polar regions (Hoover, 2017). The Arctic has been heavily impacted by climate change, which led to “declining sea ice, forced community relocations, shifts in plant and animal

populations around North America, changes in river flow impacting water availability for crops, and a broadening of the range of disease organisms” (Hoover, 2017, p. 8).

To compensate for the decline of “hunting, fishing, and agricultural lands,” treaty agreements with the federal government resulted in the distribution of food rations on reservations to avert the certain malnutrition and starvation that would have followed the separation from traditional diets (Hoover, 2017, p. 8). These rations typically consisted of foods that were alien to Indigenous diets, such as sugar, salt, bacon, beef, coffee, and flour (Hoover, 2017). A Penobscot woman recounts,

“Back during the days when the Bureau of Indian Affairs was controlling everything, you would have to go to them and get a voucher...you could spend that for your own food. I personally wasn’t in that situation, but everybody I knew pretty much, and even my grandparents, they all had commodity foods, and things that came through the government. Government cheese, canned chicken, those kinds of things. Powdered milk and eggs...things have changed over time.”

And physical health was not the only thing that was damaged - women’s health, as well as collective health as a community must also be addressed here. With the decline of access to traditional foods came a decline in “stories, language, cultural practices, interpersonal relationships, and outdoor activities implicated in those food systems” (Hoover, 2017, p. 10). After all, when relationships that comprise “traditional food cultures and economies” are hindered, so too are a tribal community’s ability to enact “collective continuance” and experience wellbeing in all of its forms. Indigenous women, who experienced heightened vulnerabilities at multiple levels, were at the front of this struggle.

CHAPTER 3

CONTEMPORARY RELATIONSHIP BETWEEN INDIGENOUS WOMEN, HEALTH, AND FOOD SECURITY

Historical conditions that created the foundation for Indigenous food insecurity have taken on new forms of inequality today. As a result of continued colonial harms, Indigenous women remain at a disadvantage due to risks associated with their unique positionings within society. These risks permeate a number of spheres - including those that are social, cultural, health-related, and economic - and will be examined in this chapter.

Food insecurity - which can be defined as “the limited and uncertain availability of healthy foods” - has increased steadily in the United States for the last few decades, with 10% of the population food-insecure in 2001 when compared to 14% in 2010 (Jernigan et al., 2016, p. 1). The expense of healthy, nutritious foods, along with limited access in marginalized and low-income groups, further contributes to food insecurity by limiting available food choices (Jernigan et al., 2016). Food insecurity has also been linked to the unreliability of funding for social and food assistance programming (Jernigan et al., 2016).

Malnourishment, underweightness, obesity, and diabetes are all examples of health conditions that are associated with food insecurity (Jernigan et al., 2016). For instance, food-insecure participants of the National Health and Nutrition Examination Survey were found to be “twice as likely as food-secure participants to be obese and more likely to have diabetes, even after adjusting for body mass index” (Jernigan et al., 2016, p. 2). Additionally, the lower intake of fruits and vegetables is heavily linked to the

increase in food insecurity and contributes to a higher risk of cancer and cardiovascular conditions (Jernigan et al., 2016).

Indigenous communities have one of the highest rates of food insecurity in the United States. In fact, one in four Indigenous people are considered food insecure, and “90 percent of U.S. counties with the highest Indigenous populations (40 percent Indigenous or higher) are also among those with the highest food insecurity rates” (ACS 2017). As discussed in the previous chapter, the issue of food insecurity stems directly from poverty and other systemic inequities established through racial and gender discrimination such as colonization (Ibid). These inequities include, but are not limited to: unemployment and low wages, less access to education, higher incarceration rates, and the impacts of federal policies on the sovereignty of Indigenous nations.

While the United States has a poverty rate of 12.3%, for example, Indigenous communities experience a higher poverty rate of 25.4%. On reservations and in female-headed households, these rates are even higher yet - 40% and 54%, respectively (ACS 2017 and Urban Institute). Compared to the general population of the United States, Indigenous people are also twice as likely to be unemployed, and “more likely to hold low-wage jobs with few or no benefits” (Household Income in the Past 12 Months, 2017). Many people who find employment earn wages below poverty-level, and one in three Indigenous households survive on less than \$25,000 a year (Household Income in the Past 12 Months, 2017).

Access to education can predict an individual’s future earnings and socioeconomic status. As a result of “racially inequitable policies, Indigenous students are more likely to attend lower-resourced schools,” with less support systems available

for academic and future success (National Center for Education, 2018). Almost 40% of Indigenous students currently attend “high poverty” schools, when compared to 8% of white students (National Center for Education, 2018). Furthermore, an analysis of the Current Population Survey - Food Security Supplement (CPS-FSS) revealed that Indigenous people were overall less likely to graduate from high school (Jernigan et al., 2016).

From 1887 to 1934, the United States “acquired more than 90 million acres of Indian Nation land - leaving Indigenous communities with only one-third of their original land” (National Congress of American Indians). The struggle over land, in addition to historical destabilization and trauma, has continued to strain the relationship between Indigenous people and the federal government, which implemented policies such as the Dawes Act, seizing Native American land (Ibid). Although the United States officially recognizes Indigenous Nations as “semi-sovereign governments” - meaning that they have the right to govern themselves - the cumulative loss of land and sovereignty has rendered them especially vulnerable to hunger. Many anti-poverty programs have not had much success in Indigenous communities, partially due to the fact that “policies often do not consider geographic, cultural, and linguistic differences, historic trauma, or the implications of being a citizen of a sovereign nation” (National Congress of American Indians).

Maliseet, Passamaquoddy, and Penobscot participants speak to access issues in Maine, which impede the ability of Indigenous people in consuming certain foods:

“A lot of things are impacting (access to traditional foods). I mean, there's numerous literature that shows that we have access issues...and there's one in particular that was showing that Maine access laws really favor fishing or lobster or that kind of industry.

But there's nothing on there for Native people to protect any kind of access...And even recently, somebody wrote a new law to try to restrict access to fiddleheads as well - land rights...So there's this open land tradition that if you're along the river, you can go pick fiddleheads. This new law was trying to make it change, that if it was your private property, that was actually going to be a criminal law if you started picking fiddleheads.”

“I don't have any personal experiences where I've been prosecuted or anything like that. But you know, even the place where I picked fiddleheads...it's areas where you need to have landowner permission to go there. And that's kind of the...current climate for people doing stuff like that...they need access to land because it may not necessarily be on ours. Like if we're going hunting, we can go to Passamaquoddy land to do that. Something like fiddleheads - if I'm going along the riverbanks, I need permission to do that. Or things like state parks are interesting because state parks get to decide what type of activities occur there. So if you want to dig for clams, they can either allow it or not allow it even if that was an area where people may have traditionally dug clams...I think it's really interesting when I see the signs that define how the land is used when I'm out there using it. Again, it's like a by-permission thing to do. But I hear stories of people who have had their votes taken...for being in waters they're not supposed to, stuff like that.”

“...We do have some restrictions on elver fishing...We have to abide by state laws as far as a lot of those things go because of the Settlement Act...so those things do restrict us. And the state of Maine has been fighting us, as you may well know, on the ownership of the river. And they claimed that we always kept one foot on the land when we fished.”

At a minimum, 60 reservations in the United States are affected by food insecurity (Northern Plains Reservation Aid). This condition commonly occurs in food deserts - “rural or urban areas that are vapid of fresh fruits and vegetables and other healthy whole foods” (Northern Plains Reservation Aid). These “food deserts” tend to provide communities with more convenience stores and fast-food restaurants than grocery stores and supermarkets, for example (Northern Plains Reservation Aid). This further contributes to “communities of people with poor diets” and high levels of obesity, and diet and lifestyle diseases like heart disease and diabetes (Northern Plains Reservation

Aid). A Maliseet woman reflects on her experiences with health concerns through a Western diet:

“When I was younger, I would say, how we grew up was very much...traditional, a lot of wheat and a lot of potatoes where I was from, because it was more cheap from a grocery store...County potatoes were like everything, and bread, right? And so I think (about) that and...I now deal with wheat allergies. I think in part, I wonder, if my reliance so much on those foods affected my ability today to eat those foods...the rate (at which) these allergies are growing. Why does that happen? Who knows? I have no idea why, but I do think maybe if I had more of a varied diet as a child, I would have had a healthier gut. But now, I have to change my diet to make sure that doesn't happen. So I would say we're different...my mother thinks that we eat weird...we work really hard at having fresh food and vegetables and that's not the norm of how we grew up. And if you go to elder meals, you see...a lot of starchy foods. And they'll say that the elders don't want to change...they want the food they want, it's an emotional response, right? How we choose what we eat is an emotional place that we're in. If we want something, we want it. Not because we need it, but because we emotionally decide, and I think that's what they are (doing). They want the food that they've eaten for sixty years, even though it's not the healthiest. So yeah, I would say there's a big issue in our communities. Native communities in particular, I think they have a hybrid of health issues all around. And I think that's why I changed my diet...because inflammation is a huge issue. And so, Native women...you can see inflammation throughout our whole community, through peoples, how they look like, their faces...I think we have a huge issue with all of that in the foods we eat.”

Jernigan et al.'s 2016 study of food environments on multiple United States reservations - for example, in a California reservation - found both structural and environmental barriers to fruit and vegetable consumption, as well as “historical reliance upon the Food Distribution Program on Indian Reservations, which has been criticized for its role in creating unhealthy food practices and preferences across generations” of American Indian and Alaskan Natives (Jernigan et al., 2016, p. 8). Their survey of Washington's reservation food environments revealed that reservations not only had very

little availability of fresh fruits and vegetables, but also that this produce is actually *less* expensive in non-reservation communities (Jernigan et al., 2016). Also, the Supplemental Nutrition Program for Women, Infants, and Children clinics based in reservations in Washington had “significantly lower cash value voucher redemption rates compared to non-reservation-based clinics regardless of whether the reservations had supermarkets” (Jernigan et al., 2016, p. 8). The authors, as well as other researchers, make it clear that further research is needed to better examine the social, political, physical, and geographic factors surrounding nutrition and food-related inequalities widespread among Indigenous communities in “urban, rural, and reservation” localities (Jernigan et al., 2016).

Along with discussion on the effects of food insecurity on Indigenous women today, it is important to be aware of the contemporary factors that contribute to making them vulnerable to a host of issues, of which food insecurity is simply one. In Western nations, we are taught to see globalization as a phenomenon that creates positive change and improves quality of life for all. Kuokkanen, however, describes it as a “more direct exploitation of dispensable bodies for profit, whether in export processing zones, homeworking and as sex slaves” (2008, p. 218). And indeed, it is most often people of color and minorities who are disproportionately affected by this exploitation. Although globalization and colonialism can be seen as separate processes, they go hand in hand when we consider observable trends throughout history: colonizers exploited natural resources in order to participate in the global economy and effectively “reduce, constrain, and convert life into commodities” - particularly that of Indigenous women (Gomez-Barris, 2017, p. 8).

Environmental racism disproportionately affects non-white communities and those of low socioeconomic status. According to Smith, “half of all Asians, Pacific Islanders, and American Indians live in communities with uncontrolled toxic waste sites” (Smith, 2005, p. 57). The connections between land extraction and environmental racism are part of the key to understanding how Indigenous women’s health is affected in particular by violence that “takes many forms including sexual violence, domestic violence, economic and social violence and persecution and criminalization if they try to defend themselves, their communities and the environment” (KAIROS, 2015).

In extraction zones like the Tar Sands region, Northeastern British Columbia, and Alberta, we can see how these attitudes carry on in the abuse of the land, which then translates to abuse of the women of that land. Ongoing activities of oil production facilities, for example, have resulted in chemical contamination, destruction of local ecosystems, and widespread illness among Indigenous communities. According to Weis, Black, D’arcy et. al (2014), they are also “disproportionately affected by the path of pipelines, and the threats to ecological and human health these entail.” Then there is the epidemic of sexual violence on or near these extraction zones, which is due in part to the presence of hyper-masculine environments like “man camps” that pose safety risks to Indigenous women (Notley, 2018).

In addition, we must consider the absence of empathy and misconduct in addressing this violence, especially on the part of authorities. Police in the United States and Canada, for example, have historically been complacent in responding to reports of missing Indigenous women, and at times have contributed to this nationwide epidemic themselves. To observe this occurring at a higher level, the Canadian government once

denied the murders and disappearances of Indigenous women as being a sociological phenomenon. Instead, they were referred to as "individual acts" and "crimes," and it was stated blatantly that the issue was not a priority (Saramo, p. 208). By denying that this is indeed the product of a sociological phenomenon, the government only condones and further perpetuates it.

During the systematic abuse of the land, people's bodies also become abused in a process known as environmental violence, which is defined as "the disproportionate and often devastating impacts that the conscious and deliberate proliferation of environmental toxins and industrial development...have on Indigenous women, children and future generations, without regard from States or corporations for their severe and ongoing harm" (Violence on the Land, Violence on our Bodies, p. 215). Thus, we can see the connection between the continued "rape of the land" and abuse of women's bodies - such as the exposure to detrimental effects of environmental pollution and resource extraction (sterility, birth defects, and toxic breast milk, for example) - as an abuse within itself, because it is imposed by a colonizing force that never gained consent for any of this. A Penobscot woman and Passamaquoddy man discuss gendered vulnerabilities that follow environmental degradation:

"I would say one traditional food would be fish, but I personally...wouldn't eat the fish, because most of the fish where I would fish - I would question whether it was healthy or not."

"We went to the Passamaquoddy lands in New Brunswick because they recently got tribal land on the St. Croix River. And we went up there for a ceremony that was welcoming the alewives, which are river herring. And they migrate all the way up the river. So I think it's a cool example of how people reorient to the timing of fish migrations and things like that...When we got there, you could already smell the smoked fish and stuff like that because people had caught some and that was part of our meal. And everything was (centered) around this one species...At the time my son

was like three months old, so he's pretty little, and my wife was breastfeeding and she couldn't eat the fish because there are certain chemicals leftover in the rivers from the mill industries and things like that, that prevented her from doing so. So that's important because the child's learning your culture's taste through there...And she didn't get to have that experience. She didn't get to participate fully...to do all that stuff...So I think in terms of a community that gets their life from fish, I think I would say the women do share more of the burden of that...I probably wouldn't have thought much about it until I gave her the plate. I don't think if we had that situation, I (would) have thought too much of it. And I think that's probably similar to a lot of people. They may not think about it until it directly impacts them.”

A case study of an Inuit community located in Igloolik, Nunavut, Canada, found that the “isolation of Inuit settlements, high rates of unemployment, and accumulative stresses” have created substantial food insecurity, and Inuit women are most vulnerable to this (Beaumier and Ford, 2010, p. 1). These “accumulative stresses” included store food (affordability, availability, and quality), poverty, gambling and substance addictions, hunting costs, weakening of food sharing, and environmental conditions (Beaumier and Ford, 2010).

Most women in the Beaumier and Ford study identified the price, quality, and availability of food as major constraints in their access to food (Beaumier and Ford, 2010). In fact, “the cost of a basket of food in Igloolik is twice as high as in Montreal due to transportation distance and small population base” (Beaumier and Ford, 2010, p. 3). In recent years, there has been a steady price inflation that has prevented people from being able to afford food on a regular basis (Beaumier and Ford, 2010). In addition, the quality of available foods in stores affects their access to fresh foods and healthy meal options (Beaumier and Ford, 2010). Due to “long transportation distances and weather-related delays in shipping,” fresh foods can be near or past their expiration date by the time they arrive (Beaumier and Ford, 2010, p. 3).

A Passamaquoddy man says,

“I think fish is always the best example. We've been talking about salmon a lot, but I think that's a species a lot of people identify with... If we're looking at proteins, it's like \$8.99 a pound if you're lucky to get it. There was this guy who told a story in a Passamaquoddy community in Sipayik. And he said he caught this 24-lb. Atlantic salmon one time and...it was the best thing he'd ever had...It is easy to think about how that would transform that local diet...it would be pretty powerful. All the healthiest communities in the world have strong components of fish within their diets. So to do that, it would require access to capital. And to circle around to...food insecurity, it's always impacting communities of lower economic capacity. And most people living on reservations tend to be lower income. So they're not going to be going down to Hannaford and buying salmon for X amount...So they are experiencing this more and they're additionally now experiencing it because they can't get to any of the places where they would do that. Or those places have been so far depleted that it doesn't make sense to go there. And...as a result, those roles and culture associated with those places start to go away. Like there's not many people around that are my age who have ever speared fish, because there's not any fish to spear. I've never done it.”

As noted by health professionals, Indigenous women often have little knowledge on store-bought foods, limiting their ability to “make informed food choices” and decreasing store food options (Beaumier and Ford, 2010, p. 4). In addition, they are limited in their ability to substitute traditional foods with healthy, affordable store foods (Beaumier and Ford, 2010). However, a Maliseet participant has an alternate view on this:

“I think people also are lower-income, you know...and so (they have) less access. And so what does that mean? And (there is) less education on food health, but it's not just education, right? That's not the only component. There are multiple components that make it sustainable for people. I don't know what those are exactly, but I know just thinking, “Oh, let's educate people, let's educate the poor” - that's kind of a little arrogant, I think, to say that, to act like that's going to solve their problems. Not the whole (question of), why are they poor?”

Women in Beaumier and Ford's study also talked about their living conditions, many of which were indicative of various levels of poverty. In some cases, conditions of

extreme poverty were described, such as the inability to pay bills and afford basic daily needs, and overcrowded living situations (Beaumier and Ford, 2010). All participants spoke of not being able to afford to eat at least once in the past year (Beaumier and Ford, 2010).

Those who did not have hunters in their immediate or extended family reported having less access to traditional or “country” foods compared to those who did (Beaumier and Ford, 2010). Most expressed their concern about the reduction of full-time hunters, which can be attributed to “illness, injuries, death, and, more importantly, the lack of young individuals taking over full-time hunting roles as elder Inuit reduce their hunting activity” (Beaumier and Ford, 2010, p. 4). The decrease of full-time hunters impacts other determinants of food insecurity, which include “affordability, harvesting costs, and food sharing” (Beaumier and Ford, 2010, p. 4). One participant speaks to her experiences: “I’d say I eat country food 3-4 times a year. Now that my parents are living elsewhere and my common law’s father recently passed away and he was the only one giving us country food...we barely have country food for ourselves” (Beaumier and Ford, 2010, p. 4).

When asked about challenges associated with getting youth involved in food procurement (gardening, in her case), a Penobscot woman said:

“...I think that they need role models and if there’s a living elder that’s interested in it...(otherwise) to bring them as a class or as a youth group or something - they’re usually not into it. And, a lot of solutions have been to say, “let’s involve the kids” - and I hear that all the time about the kids, the kids...(but) this is hard work, it’s not kids’ play. You know, most kids aren’t going to like it. And that has been my experience...A couple of years ago, there was a group of teens that came, a work group that they had for summertime...teens came and met up at the garden and, there might have been about eight of them. And out of the eight, there were like two that were interested and the rest just had zero interest. So, it’s a great concept,

but I don't know...I always say that the young people need role models in which to encourage them to work...When I grew up on Indian Island my grandmother had a little veggie garden on the side of the garage. So there was something that was familiar to me.”

The sharing of traditional foods has been historically significant in Igloodik family units and is still important even today, forming the foundation of food security in many households (Beaumier and Ford, 2010). Women in the study, however, spoke of the decline of food sharing in the community (Beaumier and Ford, 2010). Along with rising costs of hunting and the decrease of native species populations (like walrus and caribou), hunters are becoming more hesitant to share their meat; at the same time, women are also becoming hesitant to ask for traditional foods for fear of judgement from others:

The reason why these hunters are hesitant to give country food is because the cost of gas has gone up so high that they worry that if they give country food out, their supply will not last and they will not have money to buy the gas to make another trip. (Beaumier and Ford, 2010, p. 4)

(when I have a hard time to get store food) I look for people that won't look down on me if I ask for assistance. There are people that look down on you. (Beaumier and Ford, 2010, p. 4)

Discussing other barriers or challenges to food security, including those relating to gender, a Penobscot woman and a Maliseet woman add:

“I know that a lot of people have hardships just in transportation, or getting around, or feeling safe to go to these territories, especially if they're not accompanied by someone they feel is a safe person. Even though some of these places may not be very far or may be still considered part of the reservation...traveling there, not having transportation, that's a huge problem in the tribal community. And, just not feeling safe, like I would go to Birch Stream and love to pick berries. But I wouldn't go by myself because I wouldn't feel safe to go there, and I think part of that is because I'm a woman. So even going with other women...or usually I go with my son or my boyfriend...I would seldom go by myself. And then the fact that it's all just seasonal and then you have to either just get enough for a few feeds, or you have to have the time...and know how to put it away. So I usually just get what I need for myself, to share.”

“I think I carry the responsibility (of food) more than my husband does. The emotional responsibility of a food, of feeding people...I put more energy into that stuff. So it's about access, but it's more about wanting the best for my kids. And wanting those relationships and understanding where food comes from. And, that takes time and effort, somewhat, to...not to go with the norm. Not to go with what's in front of you takes more energy and effort. And so, there is extra responsibility on me...I assume responsibility that then affects how my time and energy of trying to access traditional foods (are spent)...I want them to be doing those things because I'm a mother. And then that's a weight of...where can I allocate the time management of...gardening? It's important to me. But my garden is also really important to me...(so I can) raise my kids with a garden...So I have to choose where I allocate my time into my own things, into going out with people to go harvest things. So there is an economic issue of time and money about doing all those things because I'm a mother. I think my husband doesn't care as much. He likes it on the table. He likes seeing it when it's already there, but the energy into creating it...he's less engaged. If that makes sense. He doesn't like waiting two years for something to grow. Like we have grapes now, and it's going to take about two or three years? He could care less until they show up.”

Both causes and effects of food insecurity contribute to the continued displacement of Indigenous women from experiencing optimal physical, mental, cultural, and spiritual health. According to a Passamaquoddy participant,

“Wabanaki basket makers say it takes a whole community to make a basket because everybody has their own different roles. So when you lose one of these very specific places, you're saying all these roles for men and women...they don't have those anymore. And cultural practices are good for people's mental health. Practicing who you are is like me picking fiddleheads - it feels good to that. There's something very special. So it's definitely a part of somebody's overall holistic sense of health.”

As we will see in the next chapter, many Indigenous individuals and communities are working towards the restoration of traditional lifeways and health through a multitude of paths which have one thing in common – the reclamation of sustenance.

CHAPTER 4

THE PATH FORWARD: RECLAIMING INDIGENOUS HEALTH THROUGH FOOD SECURITY

In a recently published seminal work on Native American food sovereignty, Winona LaDuke writes,

If we are unable to feed ourselves, we will not survive; and if we lose our whole being to our minds, policy work, and scholarly discussions, we will have lost our direction. We need to strike a balance. Think of it this way: our ancestors navigated by stars, lakes, and trees; today, we navigate with a global positioning system. Due to pollution we can no longer even see many of the stars; that is, unless we return to the lands and the fields. Indeed we must be conscious and work our way back to the soil. The soil and seeds help us navigate the future. (Mihsuah and Hoover, 2019)

She is, of course, pointing out the necessity of connection of self with the land as a means of preserving cultural identity for the coming generations. In this vein, this last chapter explores solutions - including Wabanaki - to food insecurity among Indigenous communities and women, with an emphasis on establishing tribal independence, sustainability, and resilience through these efforts.

According to LaDuke, “Despite the \$13 billion corporate food industry, 70 percent of the world’s food is grown by families, peasants, and Indigenous farmers” (LaDuke in Mihsuah and Hoover, 2019). Yet, these groups remain among the most vulnerable and impoverished in the world. As a response to high rates of health conditions, environmental degradation and pollution, resource extraction, poverty, and a widespread lack of access to nutritious food, Indigenous tribes and grassroots movements have created projects to reclaim food sovereignty - which include “seed distributions, farmers’ markets, cattle and bison ranches, landscape restoration projects, community

and school gardens, economic development initiatives, political activism, and legal actions” (Mihsuah and Hoover, 2019, p. 4). The food sovereignty movement has arisen worldwide to address, and refuse, conceptualizations of food security as merely a means to focus on adequate food supply while ignoring actual means of food production and acquisition, preventing lasting solutions from being implemented to address the core issues (Mihsuah and Hoover, 2019). Speaking to food security research in North America, Indigenous scholars have stated that emphasis on the supply aspect is not enough to address the “food conditions, histories, and relationships of Indigenous peoples,” even if the aim is to record and target hunger in individual households (Mihsuah and Hoover, 2019, p. 8).

Alternatively, the food sovereignty movement works to address overlapping issues of hunger, unsustainable production methods, and economic and social inequities on a political scale (Mihsuah and Hoover, 2019). The intent is to “democratize food production, distribution, and consumption,” shifting “the focus from the right to access food to the right to produce it” (Mihsuah and Hoover, 2019, p. 8). The movement can be viewed as an alternative to capitalistic economic structures and the agricultural industry, both of which have ruined livelihoods of small-scale farmers, favoring corporations and perpetuating economic and environmental disasters (Mihsuah and Hoover, 2019). In supporting the localization of sustenance, as well as sustainable production, food sovereignty seeks to remedy the “triple crisis,” which is comprised of: “displaced local food production for almost 50 percent of humanity, deepening fossil fuel dependency in an age of ‘peak oil,’ and industrial agriculture that generates roughly a quarter of the

greenhouse gas emissions which are contributing to global climate change” (Mihesuah and Hoover, 2019, p. 9).

It is crucial to bear in mind that social justice is not just an additional component to a sustainable food system, but rather lies at the heart of food sovereignty in its path to right colonial inequities. It is imperative that the “production, distribution, and consumption of culturally appropriate food” go hand in hand with bolstering environmental sustainability, communities, and livelihoods (Mihesuah and Hoover, 2019, p. 9). Food sovereignty emphasizes the social connections embedded within the production and consumption of food, deconstructing the conception that commodifies sustenance (Mihesuah and Hoover, 2019).

Within the specific context of Indigenous communities in North America, food sovereignty can be understood through the framework of economic, cultural, and social relations that shape food sharing (Mihesuah and Hoover, 2019). It highlights the importance of “communal culture, decolonization, and self-determination,” in addition to the “inclusion of fishing, hunting, and gathering - not just agriculture” as core elements to the approach (Mihesuah and Hoover, 2019, p. 11). Kyle Powys Whyte states that the Indigenous food systems at the heart of these understandings “refer to specific collective capacities of particular indigenous peoples to cultivate and tend, produce, distribute, and consume their own foods, recirculate refuse, and acquire trusted foods and ingredients from other populations” (Whyte, 2015). These “collective capacities” encompass “an ecological system, of interacting humans, nonhuman beings (animals, plants, etc.) and entities (spiritual, inanimate, etc.) and landscapes (climate regions, boreal zones, etc.) that

are conceptualized and operate purposefully to facilitate a collective's (such as an indigenous people's) adaptation to metascale forces" (Whyte, 2015).

As discussed in preceding chapters, the impacts of settler colonialism - both intentional and unintentional - have severely hindered Indigenous people's adaptability to these forces (Mihesuah and Hoover, 2019). Thus, an Indigenous food sovereignty framework "explicitly connects the health of food with the health of the land and identifies a history of social injustice as having radically reduced indigenous food sovereignty in colonized nations" (Rudolph and McLachlan, cited in Mihesuah and Hoover, 2019). Food sovereignty as a concept not only stresses *rights* to land, food, and systems of production, but also cultural, ecological, and spiritual *responsibilities* to and *relationships* with these (Mihesuah and Hoover, 2019). A Maliseet participant expands on her thoughts on cultivating multiple kinds of relationships below.

"...Seeing the whole process from growth to harvest to eating does affect our overall health of relationship to landscape and who we are. I think if we were able to access all of those things and those pathways were there for us to do that...we'd have much more of a connected relationship...Instead of...we have this disconnect of going to the grocery store. We have no idea where (food) comes from, there's a whole market that we have no idea at the ethics around those things...were they farmed by migrant workers that were paid (horribly)?...And so I think that's a problem in our society. Emotional problems. I think that leads to the idea of food and health. For Native people, we believe...that the energy of how you harvest something is in the things that you harvest. So it comes out of traditional medicines, especially, that you're supposed to be in a positive place. You shouldn't have hate in your heart or in your mind when you're harvesting because it actually will come into the medicine itself, or the food itself, and then you spread that sort of emotion. So, it's interesting (to think about) the difference in...belief systems and how that affects us."

Dawn Morrison and the Working Group on Indigenous Food Sovereignty have developed four principles that sum up the discourse on the concept: "(1) the recognition

that the right to food is *sacred*, and food sovereignty is achieved by upholding sacred responsibilities to nurture relationships with the land, plants, and animals that provide food; (2) day-to-day *participation* in indigenous food-related action at all of the individual, family, community and regional levels is fundamental to maintaining indigenous food sovereignty; (3) *self-determination*, or the ability of communities and families to respond to the needs for culturally relevant foods and the freedom to make decisions over the amount and quality of food hunted, fished, gathered, grown, and eaten; and (4) *legislation and policy support* to reconcile indigenous food and cultural values with colonialist laws, policies, and mainstream economic activities” (Hoover, 2017, p. 14).

There are numerous ways in which Indigenous people are reinstating tribal food sovereignty through individual and collective action. These efforts often focus on the restoration of elements that intersect with food sovereignty, such as health, culture, economic stability, and relationships. The White Earth Land Recovery Project in the Ojibway community in Minnesota is using traditional food systems as a means of cultural restoration (Hoover, 2017). The current director, Bob Shimek, describes the creation stories that are associated with each “relative” - plant or animal - as vital to this endeavor:

Inside those words that tell that story, that’s where the true meaning and value of our culture is stored in, our languages that tell those stories...the effort I’m making right now - it’s to not only keep building on our physical health, improving on our physical health by teaching people not only about gardening and small scale farming but also all the wild plants, the wild foods out there, and packaging those up in the historical, cultural, and spiritual context which is part of the original understanding in terms of our role here... (Hoover, 2017, p. 21)

In Oklahoma, the Mvskoke Food Sovereignty Initiative works with students in the Euchee language immersion program to plant a garden at their school (Hoover, 2017).

Language has long been viewed as a major determinant in the cultural health of an Indigenous community, as an important indicator of cultural sovereignty. Gardening was described as providing the ideal environment to learn and practice language because “you’re physically doing what’s being said that helps you to remember and learn and associate the meaning with the activity and that has all that repetition built in” (Hoover, 2017).

Winona LaDuke states that "If the rice die, we die," meaning that survival of Indigenous people is linked to the preservation of first foods (LaDuke, *The Good Life*). Reservations typically spend one-quarter of their money on food which is mostly bought off-reservation in commercial stores, and one-quarter on energy (LaDuke, *The Good Life*). Why is so much spent on energy and food? Because more fossil fuels are used up in the process of de-localizing forms of sustenance. In order to repair this situation, people are developing ways to keep food dollars within Indigenous communities (Hoover, 2017).

Lilian Hill, who runs Hopi Tutswa Permaculture, has made efforts to help start markets to support local farmers and producers, as well as to encourage the sale of nutritious foods in the area (Hoover, 2017). She partnered with other organizations, including the Hopi Special Diabetes Program, to found the Hopi Farmers Market, providing an environment for consumers to connect with food producers on a more direct level (Hoover, 2017). The market “provides a venue for local farmers and gardeners to sell or exchange their fresh, seasonal produce directly with the Hopi community,” and uniquely for most farmers markets but keeping in line with traditional Hopi economy,

encourages “community members to bring fresh produce, vegetables, crafts, and home prepared goods to trade/barter/exchange with farmers market vendors” (Hoover, 2017).

Indigenous restaurant owners and chefs are playing some of the most visible roles in promoting traditional foods and diets. Due to the competition in the restaurant industry, chefs often follow mainstream food trends and create “signature” dishes that cater to popular demand (Mihsuah and Hoover, 2019). In addition, high-end restaurants tend to ignore the cultural significance of foods (Mihsuah and Hoover, 2019). When Indigenous foods are featured in the media, chef Nephi Craig believes their stories neglect to discuss what he calls “the colonial reality”: “poverty, food-related maladies, environmental destruction, and loss of culture” (Mihsuah, 2019 cited in Mihsuah and Hoover, 2019). Craig, a White Mountain Apache, Diné chef, and founder of the Native American Culinary Association (NACA), opened Café Gozhóó in 2019 (Mihsuah, 2019 cited in Mihsuah and Hoover, 2019). Here, he offers traditional dishes made from local ingredients to serve Apaches and outsiders alike (Mihsuah, 2019 cited in Mihsuah and Hoover, 2019). Most notably, however, Café Gozhóó is included as part of the Nutritional Recovery Department for those at the Rainbow Treatment Center, which is the addiction treatment facility for the White Mountain Apache (Mihsuah, 2019 cited in Mihsuah and Hoover, 2019).

The Wabanaki people have fought for their right to access traditional forms of sustenance for generations. In 2012, the state of Maine declared that it has “exclusive regulatory jurisdiction over activities taking place on the Penobscot River” (Garbus, 2017, p. 108). According to this ruling, the Penobscot Indian Reservation - which includes over 200 islands in the Penobscot River - does not encompass any part of the

river (The Penobscot: Ancestral River, Contested Territory). This manipulation of historical treaties, such as the Maine Indian Claims Settlement Act, impinges on the tribe's fishing rights on the river and threatens to end this practice. The legal case *Penobscot Nation v. Mills* has since been established in an effort to uphold tribal sovereignty. Kirk Francis, Chief of the Penobscot Nation, commented: "For us it's not about controlling the river system or controlling individuals within the system. It's really about our ability to manage a subsistence resource that we have a responsibility for, for multiple generations" (The Penobscot: Ancestral River, Contested Territory).

The Penobscot River case has caught the attention of several environmental and social justice organizations, and has gained many allies in supporting the cause (The Penobscot: Ancestral River, Contested Territory). Despite positive reactions and increased awareness of the public, however, the case has been misrepresented by the state, media, and corporate interests. According to Penobscot attorney Sherri Mitchell, there are

...interested parties who are involved in this case that have joined it essentially to protect the rights of industry, and have couched it as a water quality case. That is unfortunate, because it has the potential to strip away the cultural and traditional rights, the subsistence rights, of the tribe...And these rights aren't something that we're asking for, they're inherent - we've had them forever, and we did not (give up) those rights with the Maine Indian Claims Settlement Act...This is part of our cultural tradition...this is the Penobscot River, we're the Penobscot people from the Penobscot Nation. There is no separation between us and the river. We are a part of the river...(This way of life) encompasses the people, it encompasses the land and it encompasses the waterways (The Penobscot: Ancestral River, Contested Territory).

Similarly, a Passamaquoddy participant speaks on restoring waterways to encourage fish migration:

"The Passamaquoddy environmental departments are doing a lot of work with the state, federal, and international Canadian government to get fish

passage up in the St. Croix River because at one point, it wasn't very good because of all the dams. So...they're trying to open those older dams up...that way fish can go up there. So the hope is that that work on the river is going to help rebuild some of those other species. But we're kind of living in that time of change now seeing what's going to happen. So it's kind of exciting on one end.”

According to a Maliseet woman, “There're a lot of us that are working for food sovereignty...like wild rice projects, the wild rice restoration...and (we) try to keep access to traditional foods. There are little projects that are happening...they haven't really seemed to seep into the full community. So, I think the pathways are starting to be opened.” Gedakina is a New England-based organization that works with Indigenous women and youth to restore cultural knowledge and identity, and is dedicated to preserving “traditional homelands and places of historical, ecological, and spiritual significance” (gedakina.org). It seeks to address challenges that arise from systemic inequities by empowering Indigenous individuals with resources and experiences that help prepare them for future opportunities. Many of these experiences involve food system recovery work, such as wild rice recovery with schools in Maine (gedakina.org). Gedakina also partnered with Sweet Land Farm in Starks, Maine, to “work toward recovery of women-led traditional three sisters mound agriculture,” which was the first time in over 250 years that “Wabanaki descendants of the original Abenaki Norridgewock village” had been invited to their ancestral lands to grow food (gedakina.org).

Through discussion with the Wabanaki case study participants, it seems that gardening - in addition to other food procurement activities previously mentioned, such as hunting or fishing - is particularly popular within multiple tribes. Below, three women, one Maliseet and two Penobscot, reflect on their own experiences and reasons for

gardening as a way to achieve food sovereignty. Both Penobscot women talk about the People's Garden, which is located on the Penobscot Indian Reservation and grows food for the local community.

“...I'm a gardener. So for me it's about bringing back traditional food sources of vegetables...so pumpkins, I try to get the heirloom beans...I've grown corn, traditional corn, that's a lot of work. I recently learned (about) all these traditional tubers we used to eat. And we're trying to bring back the Indian potato, which is...like Jerusalem artichoke...There's all these traditional tubers that we're trying to kind of bring back and plant in our yard...for us to eat so we can put them in our diet. So there's a component of time, an economic component from a perspective of time and energy, I guess...to do that sort of stuff. But yeah, I would say I try to grow heirloom stuff because it's something I love.”

“We have...the People's Garden - it's a hoop house that we have. It's a little piece of land, over by the pond, and it's in the back of that. We have planted all (kinds of) medicinal plants and things like that. And, you know, we have some allies that worked with us to help us to keep those plants and things, that have advised us of ways to keep those things where we've kind of lost it ourselves. We knew what we needed to have...but we didn't know how to take care of it, or where to position it so it grows best...we gather elderberries and make a lot of our own medicines. And all that old knowledge we're trying to really keep...and revive what has been lost...But really we do as a community, work together well to make sure that everybody is provided for, so we have many different avenues of doing that...the People's Garden is one, and the seniors have their own garden as well...So we work hard at being food-sovereign.”

“There's the community garden, although it's not necessarily just traditional food...we do (make) a point to growing corn and squash and beans and things like that...the hoop house allows us to grow for a longer season. I think that since the Community Garden started, it's inspired more people to have their own gardens in their yards...The People's Garden has a lot of cooking herbs...but people don't know how to use it, and I'm always pushing for people to use those herbs because there's so many vitamins and nutrients just by adding some of these things to your dishes. My childhood was on Indian Island, and then I moved away for a while and now I'm back there but, you know my family has always (been) very outdoorsy, so it's just an extension of what I learned growing up. I did it because I loved it, so it was just my thing...I'm growing food for the community. And I knew people were enjoying the food, they were coming in, taking the food, because I'd eyeball a cucumber and then...next time I

came it was gone. So you know, that's what matters, is people are getting the food and they're enjoying the food.”

Two of the same participants from above, however, provided some alternate perspectives and insights on challenges associated with traditional food sovereignty:

“So law and how we get supported in that way affects it, also it's (having) time and energy...we all have jobs in certain ways, we all need to make money, and to do those types of things aren't easily accessible. Like food sovereignty...people are really interested in food sovereignty. But unfortunately right now for us...it's a big hurdle to start creating those pathways...And that's a lot of time and effort. And unless that's your job to kind of start helping those pathways become easier, it's a lot of work for us to do that. And then we also have other work...to put that into our timeframe can become a challenge.”

“I would imagine that maybe some people who lived away may not be that familiar with (gardening)...or maybe even (know) where to go, let alone what to do...But I think...it's been challenging at the community garden because some people really like that type of work, and other people just abhor it. It's hot in there, and you're filthy, and I just love it! And some people are like, “I'm not doing it!”...A few times I'd get frustrated, like I'd show up, and nobody else would show up...It's not for everybody, which is the hard part in trying to rally a community around a community garden.”

These women also had similar opinions about trying to revive traditional plants and dishes:

“I know a lot of people are really interested in preserving heirloom seeds or traditional seeds, and I'm more of a practical practice...you know, let it be things that we're going to eat. For example a few years ago, somebody gave us these particular types of squash seeds...and so, everyone's all excited because these are seeds that they got from...a traditional squash...and those things are disgusting! Hey, great, you get all these traditional seeds. But wouldn't it be nice to have food that you wanted to eat? They were really nasty, I had no desire for that...but I do love seeds, saving them. I'm always just amazed at how many things you can grow out of one plant. But it's not necessarily a traditional resource, it's really (for) anything that I'm growing, I try to use seeds. I mean, what's the sense of growing it if nobody wants to eat it? Or if it's not going to be feeding a family...I mean it's nice to have (traditional foods). (But) I always feel like...when you plant together, like some corn and beans and squash - the

Three Sisters Garden - nobody's feasting off of it, it's more like it...it's there. We try to commemorate that aspect of...(traditional) food. And then we're growing things that people are going to want like peppers, tomatoes, cucumbers - everyone wants cucumbers."

"Another thing is that recipes tend to be gross from a hundred years ago. I don't know what it was, but people, at that time...when we hear (about) traditional foods, oftentimes it's this hulled corn soup at a pow-wow or at a celebration, and I'm not a fan of it. It's like mushy corn soup, or things are burnt to a crisp black for some reason. So we're trying to (use) this idea of shifting traditional foods into modern times. Like, you know, not cook them till they're nothing for whatever reason...So shifting recipes for how we eat today. Using traditional foods is a challenge..."

Despite damages to traditional food systems over centuries, the examples and case studies highlighted in this chapter are a testament to Indigenous communities' resilience and determination in reviving not only these diets, but also relationships with each other and the land in a move to decolonize their lifeways. In discussion of their own experiences and thoughts on achieving this end, the Wabanaki participants echoed many of the same themes - such as the importance of fish, waterways, and gardening in their cultures - while maintaining diverse opinions and talking about challenges they or their communities encounter. Due to their unique sociocultural ties, Wabanaki women are especially active and vocal participants during this process, seeking individual health and healing while remaining grounded in a collective framework.

CONCLUSION

Food insecurity as it affects Maine Indigenous women cannot be fully addressed without considering the historical and contemporary impacts of settler-colonialism that have served as a foundation for this issue. These include, but are not limited to, the enforcement of heteropatriarchal gender norms, environmental degradation resulting from resource extraction, chronic health conditions caused by economic and physical barriers to a healthy diet, and lack of access to traditional food sources. While whole communities faced hardships that followed, Indigenous women have been particularly vulnerable to these outcomes due to their multi-generational displacement from cultural, gendered roles and responsibilities, including those surrounding subsistence.

The term “food security” is therefore an insufficient answer to the dilemma, as it only accounts for *access* to foods, not *self-determination* and *connection* to the processes of food cultivation and procurement as a part of an identity. It merely serves as a band-aid, while ignoring the factors that create the conditions for food insecurity in the first place. To avoid the perception of Indigenous food insecurity through a surface-level gaze, it is crucial that we instead think of solutions rooted in food sovereignty, in order for communities to implement lasting prosperity.

This project was an exploration into Indigenous food insecurity through the use of a case study with a gendered lens; it is by no means all-encompassing, or a complete picture of the matter as it relates to Wabanaki women or communities. Rather, as supplementary to the literature utilized here, the case study provides glimpses of experiences and conceptualizations of food insecurity as relayed by these individuals.

Due to the scope of the project, it is impossible to draw overarching conclusions. However, although each participant interviewed had unique perspectives, there were notably common themes interwoven throughout their responses, indicating the significance of certain foods, sources, and processes in Maine. These include: fiddleheads, seafood, moose and deer meat, gardening, hunting, fishing, gathering, and waterways. Each participant also impressed upon the social and cultural aspects of engaging in these activities.

Challenges and barriers to food sovereignty as a response to food insecurity and other concerns were discussed by all participants, with a Maliseet woman stating, “I think it’s going to take generations to change,” on the prevalence of the contemporary food system in North America. The participants identified a number of personal and community obstacles, including those of an economic, time, and gendered nature, as well as others. Their responses, however, also spoke to the adaptability and preservation of values within their communities, as well as optimism and hope for the future:

“I think food sharing still happens a lot...it looks different though. So overall community health is impacted...I think if we're looking just at fish, there's just not a lot of fish around anymore...it's this social component. It's a part of our cultural identity as well. And again, we're people who fish...I think without the presence of fish, those things are gone. People aren't learning how to catch mackerel. They're not developing a taste for it necessarily. If it's not there, then they're not going to know what to do with it. And at the same time, I still think a lot of those values, those social values around food, still exist...Food sharing is just going to exist in a different way. Nobody's going to go hungry because everybody's always tried to feed you no matter what they have, if it's good food or if it's “bad food” - it doesn't matter. They're going to share what they have with you. And that's all building on this same idea of community health...people take care of each other. Would it be great if there were tons of fish and things like that? I think it would be great. And at the same time, it's still kind of special with what people share now, in terms of creating that social bond - it just kind of looks different.”

“They talk about in the seventies, the fisheries were really robust, so they could literally go down to the shoreline and catch fish. But now there’s just so few that nobody does that. And now people are growing up right now where one, they don't eat fish. And two, they're not fishing unless they're doing some sort of commercial fishing activity, just because the fisheries...they're not really robust. But the fish are coming back right now so it's also kind of an exciting time, because the alewives are coming back and other species that are associated with that, hopefully will start to come back too. So maybe one day people will be fishing from the banks and the shoreline again.”

There were limitations to the scope of the project. The time constraint dictated the number of people I was able to interview in the given timeframe. I was only able to speak to people from the Penobscot, Passamaquoddy, and Maliseet tribes in the Orono/Bangor area, so Micmac voices are not present. Finding people to interview also proved to be a challenge, and many people declined and/or simply did not have the time to partake in an interview. Due to the lack of literature on this particular topic in Maine, I often supplemented with literature based on Indigenous communities in other parts of the country. Continued research on a larger scale - along with the inclusion of both more numerous and more diverse Indigenous female voices - are needed to gain a better understanding of Indigenous food insecurity in Maine on all of its levels. However, it is my hope that this thesis is seen as a way to spark dialogue on this topic.

There is one more element I feel is important to add in concluding my reflection of my work on this thesis. I initially focused on food security as the main framework for the project. However, my conversations with each participant were often marked by their reframing and redefining of my questions and statements, based on their specific, holistic understandings as Indigenous people. The below commentary from a participant encompasses the basis of these ways of knowing, as well as the shift in my own understanding of these ways.

“So with food insecurity, I don't know if anyone would describe it more like that. We're talking about similar things, like with the fish thing, it absolutely creates a greater sense of food security just because there were so much fish that used to be there. When you live in a rural area...there's always going to be issues of food insecurity. So your best grocery store is always going to be off the shore. So, that's the goal. And in terms of food...that's the biggest example of how they're alleviating those issues of food insecurity. It's just more about...community health. So if you think about health more broadly, I think that's how Wabanaki people think about it...Those cycles of fish coming through have been disrupted by people. And they're trying to restore those cycles because they know that their health and the community's health, ('their' being the fish)...their health and the community's health is related. So they don't really think of it like 'I'm doing this project, or we're doing this project' so we can have food security. They're doing it because they know if the fish comes back, it's going to also have transformative impacts on not just their community, but all kinds of numbers of communities that live along that watershed. And yes, it's food security...(but) it's more about community identity as well, sustaining that. So, it's more of the assumption that their health is reliant on our health and our health is reliant on their health...It's kind of this relationship, and their work is trying to restore that relationship so we can eat more fish. If we can eat more fish, we don't have to go to the store as much. That's great. And nobody ever complained about eating more fish.”

Although this thesis examines food insecurity as it relates to Maine Indigenous women and communities, we must think beyond this term in order to understand and address it. Just as it is impossible to separate the issue of Indigenous food insecurity from the factors and conditions it is borne of, so too is it imperative to bring forth solutions that are intertwined with the restoration of cultural connections. For Indigenous women, these connections are part of a lifestyle - part of an *identity* – that links them to a greater web of living beings, land, and community.

BIBLIOGRAPHY

1. ACS (American Community Survey). (2017). RECEIPT OF SNAP IN THE PAST 12 MONTHS. ACS 1-Year Estimate. Table B22005C.
2. A Renewed Commitment to End Violence Against Women. (2015). <https://www.kairoscanada.org/a-renewed-commitment-to-end-violence-against-women>
3. Beaumier, M.C. & Ford, J.D. (2010). Food Insecurity among Inuit Women Exacerbated by Socio-economic Stresses and Climate Change. *Can J Public Health* 101, 196–201 <https://doi.org/10.1007/BF03404373>
4. Black, T., Klein, N., McKibben, B., Russell, J. K., D'Arcy, S., & Weis, A. J. (2014). A line in the tar sands: Struggles for environmental justice. Ontario, Canada: Between the Lines.
5. Breadfortheworld. Hunger and Poverty in the Indigenous Community. <https://www.bread.org/sites/default/files/downloads/hunger-poverty-indigenous-community-may-2019.pdf>
6. CIER. (2007). Climate Change Impacts on Abundance and Distribution of Traditional Foods and Medicines – Effects on a First Nation and Their Capacity to Adapt.
7. Coté, C. (2016). “Indigenizing” food sovereignty. Revitalizing Indigenous food practices and ecological knowledges in Canada and the United States. *Humanities*, 5(3), 57.
8. Eberts, M. (2014). Victoria’s secret: How to make a population of prey. *Indivisible: Indigenous human rights*, 144-165.
9. Garbus, M. (2017). Penobscot Nation v. Mills: First Circuit Dodges the Indian Canon of Construction to Diminish the Water Rights of the Penobscot Nation. *Tulane Environmental Law Journal*, 31(1), 107-118.
10. Gedakina. <http://gedakina.org/>
11. Gómez-Barris, M. (2017). The Extractive Zone: Social Ecologies and Decolonial Perspectives. Durham, NC: Duke University.
12. Gundersen, C.G. (2007). Measuring the extent, depth, and severity of food insecurity: an application to American Indians in the USA.

13. Gurney, R.M., et al. (2015). Native American Food Security and Traditional Foods: A Review of the Literature. *Sociology Compass*, vol. 9, no. 8.
14. Harper, B., & Ranco, D. (2009). Wabanaki Traditional Cultural Lifeways Exposure Scenario.
15. Hoover, E. (2017). "You Can't Say You're Sovereign if You Can't Feed Yourself": Defining and Enacting Food Sovereignty in American Indian Community Gardening. *American Indian Culture and Research Journal*, 41(3), 31-70.
16. Household Income in the Past 12 Months. (2017).
17. Hueffer, K., et al. (2013). "Zoonotic infections in Alaska: disease prevalence, potential impact of climate change and recommended actions for earlier disease detection, research, prevention and control." *International journal of circumpolar health* 72.1 (2013): 19562.
18. Ibid.
19. Jernigan, V., Huyser, K. R., Valdes, J., & Simonds, V. W. (2017). Food Insecurity among American Indians and Alaska Natives: A National Profile using the Current Population Survey-Food Security Supplement. *Journal of hunger & environmental nutrition*, 12(1), 1–10.
20. Kuokkanen, R. (2008). Globalization as Racialized, Sexualized Violence, *International Feminist Journal of Politics*, 10:2.
21. LaDuke, W. Minobimaatisiwin - The good life: Beyond the fossil fuel economy. <https://www.youtube.com/watch?v=pPJ3nrsCcrE>
22. Lynn, Kathy, et al. (2013). "The Impacts of Climate Change on Tribal Traditional Foods." *Climatic Change* 120: 545-556.
23. Mihesuah, D. A. (1996). Commonalty of difference: American Indian women and history. *American Indian Quarterly*, 20(1), 15-27.
24. Mihesuah, D. A., Hoover, E., & LaDuke, W. (2019). Indigenous food sovereignty in the United States: Restoring cultural knowledge, protecting environments, and regaining health.
25. Mitchell, S. (2018). Sacred Instructions: Indigenous Wisdom for Living Spirit-Based Change.
26. National Center for Education Statistics. (2018). <https://nces.ed.gov/>

27. National Congress of American Indians. <http://www.ncai.org/>
28. Northern Plains Reservation Aid. www.nativepartnership.org
29. Notley. (2018).
30. POVERTY STATUS IN THE PAST 12 MONTHS. (2017). ACS 1-Year Estimate. Table B17010C.
31. Rudolph, K. R. & McLachlan, S. M. (2013). Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada, *Local Environment*, 18:9, 1079-1098, DOI: [10.1080/13549839.2012.754741](https://doi.org/10.1080/13549839.2012.754741)
32. Sanger, D. (1996). Testing the models: Hunter-gatherer use of space in the gulf of Maine, USA. *World Archaeology*, 27(3), 512-526.
33. Sanger, D. (1982). Changing Views of Aboriginal Seasonality and Settlement in the Gulf of Maine. *Canadian Journal of Anthropology*.
34. Sanger, D. (2000). "Red Paint People" and Other Myths of Maine Archeology. *Maine History*.
35. Saramo, S. (2016). Unsettling spaces: Grassroots responses to Canada's missing and murdered indigenous women during the harper government years. *Comparative American Studies an International Journal*, 14(3-4), 204-220.
36. Simpson, L. B. (2017). *As we have always done: Indigenous freedom through radical resistance*. Minneapolis: University of Minnesota Press.
37. Smith, A. (2005). *Conquest: Sexual Violence and American Indian Genocide*. Duke University Press.
38. Sunlight Media Collective. *The Penobscot: Ancestral River, Contested Territory*.
39. Thornton, R. (1998). *Studying Native America: Problems and Prospects*. Univ of Wisconsin Press.
40. Tribal Climate Change Project. The University of Oregon. <https://tribalclimate.uoregon.edu/tribal-profiles/>
41. Urban Institute. (2016). Mapping food insecurity and distress in American Indian and Alaskan Native communities. <https://www.urban.org/urban-wire/mapping-food-insecurity-and-distress-american-indian-and-alaska-native-communities>

42. Vinyeta, K., Powys Whyte, K., & Lynn, K. (2015). Climate change through an intersectional lens: gendered vulnerability and resilience in indigenous communities in the United States. Gen. Tech. Rep. PNW-GTR-923. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
43. Violence on the Land, Violence on Our Bodies: Building an Indigenous Response to Environmental Violence. (2016).
<http://landbodydefense.org/uploads/files/VLVBReportToolkit2016.pdf>
44. Whyte, K. P. (2014). Indigenous women, climate change impacts, and collective action. *Hypatia*, 29(3).
45. Whyte, K. P. (2017). “Indigenous Food Sovereignty, Renewal and Settler Colonialism,” in *The Routledge Handbook of Food Ethics*, ed. Mary C. Rawlinson and Caleb Ward (New York: Routledge), 354–65.
46. Whyte, K.P. (2015). Food Justice and Collective Food Relations.
47. World Health Organization (WHO). (2011). Gender, climate change and health.
http://www.who.int/globalchange/publications/reports/gender_climate_change/en/

APPENDIX: IRB APPROVAL

APPLICATION FOR APPROVAL OF RESEARCH WITH HUMAN SUBJECTS
Protection of Human Subjects Review Board, 400 Corbett Hall

PRINCIPAL INVESTIGATOR: Sara Imam
FACULTY SPONSOR: Dr. Darren Ranco

EMAIL: sara.imam@maine.edu
EMAIL: Darren.ranco@maine.edu

(Required if PI is a student):

TITLE OF PROJECT: The Effects of Food Insecurity on Indigenous Women in Maine
START DATE: January 2020 DEPARTMENT: Anthropology

STATUS OF PI: FACULTY/STAFF/GRADUATE/UNDERGRADUATE U (F,S,G,U)

If PI is a student, is this research to be performed:

x for an honors thesis/senior thesis/capstone?

for a master's thesis?

for a doctoral dissertation?

for a course project?

other (specify)

FOR IRB USE ONLY Application # 2019-12-01 Review (F/E): E Expedited Category:

ACTION TAKEN:

Judged Exempt; category 2 Modifications required? Yes Accepted (date) 1/3/2020

FINAL APPROVAL TO BEGIN

1/3/2020

Date

AUTHOR'S BIOGRAPHY

Sara Imam is an Anthropology major with a minor in Pre-Medical Studies. Born in New York City, she grew up across the bridge in New Jersey and moved to Maine during her last two years of high school. During her undergraduate career at the University of Maine, Sara has been involved in several student clubs and organizations on campus, including the Muslim Students' Association (MSA), Student Heritage Alliance Council (SHAC), and Student Government. She has also been a Resident Assistant for two years. In her free time, she is an avid reader and loves baking, travelling and the outdoors.

Upon graduation, Sara plans to attend medical school to obtain a degree in Naturopathic Medicine. As a future naturopathic doctor, Sara is especially interested in women's health and expanding the scope of alternative, holistic and integrative healthcare to make it more accessible to minorities and underserved groups in the United States.