

Not Milk? Agribusiness and Canada's Food Guide

by

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Abstract

Food and Agriculture are two of the most direct factors in human and environment health. However, the global industrial food system benefits large agribusinesses, and skews the state – industry power dynamic in the favour of economic growth, not human or environmental wellbeing. Traditionally, agribusiness exercises power in three key ways – media and outreach, market power, and lobbying – impacting agricultural, food and nutrition policy. Therefore, in cases where federal policy changes, it can generally be understood as a response to a shift in one or more of these three factors. In early 2019 Health Canada released Canada’s Food Guide, the newest edition in over 70 years of nutrition advising. However, unlike prior versions which prioritized industry over nutrition, this new food guide is a more accurate reflection of both nutrition and environmental research. Most remarkable in this change, is that the power and interest of agribusiness in Canada does not appear to have changed considerably in order to initiate these changes. As such, five additional factors that collectively minimized the power given to agribusiness are explored - increased awareness of nutritional information, the rise of vegans and vegetarians, demographic and political economy trends, social pressure and bureaucratic changes, and consideration of diet co-benefits and costs. I conclude by highlighting that regardless of the reasons behind the changes to Canada’s Food Guide, without changes to agriculture policy to meaningfully increase the accessibility of the recommended food, the new recommendations are unlikely to impact Canadian eating habits.

Lay Summary

Within Canada, nutrition recommendations have historically reflected what best benefits food producers. However, the recent changes to Canada's Food Guide are aligned with consumer and environmental interests, not producer income. I argue that this shift is not aligned with common assumptions of power dynamics between state and industry and explore other factors that contributed to the shift. I conclude by highlighting that while a good step in the right direction, these changes are meaningless without changes to agricultural policy in order to make recommended food more accessible to Canadians.

Preface

This thesis is the original, unpublished work of the author, Zoe Beynon-MacKinnon.

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Dedication

To all those that call this wild earth home. May you know hope and flourish.

Chapter 1: Introduction

1.1 Introduction

What we do to the planet, we do to ourselves. While all forms of environmental degradation have impacts on human wellbeing, none more so than agriculture and the production of our food. While we now produce more food than ever before in history, cases of both malnutrition due to lack of calories, and under-nutrition due to the consumption of poor calories are at an all-time high.¹ Congruent to this, despite increased research and technological advances, climate change and environmental degradation show little sign of slowing. The industrial food system that has evolved since World War II prioritizes growing methods that pollute the earth and contribute to climate change, in order to produce more of the food that is worse for human health.

Due to the direct and indirect impacts that food and agriculture have on both human and environmental well-being, one would expect federal agriculture and food policy to promote the production and consumption of goods that reduce harm, not lead to it. However, due to the strength and legacy of food and agriculture industry (referred to as agribusiness), most governments promote diets that benefit producers, not consumers or the environment.² Canada is a perfect example of this, as up until 2019, Canada's Food Guide was well documented as a reflection of meat, dairy and processed food interests, not an informative tool to better the health of Canadian citizens.

¹ Clapp, *Food*, pg 3-4

² Kondro, *Proposed Canada Food Guide*, pg 605

However, in January of 2019, the Government of Canada released a new food guide – one that fundamentally changed the manner in which it approaches nutrition, as well as the specific foods it promotes.³ Most notable is the removal of dairy as a food group, and a focus on the consumption of plant-based proteins over animal products. While these changes have dietitians and environmental activists alike rejoicing, it presents an interesting question – why now? The impact of diet and agriculture on both human and environment health is not a new concept, and the strength of agribusiness has not seen a recent decline. However, this is the first time that the federal document has not been a clear reflection of industry interests, despite minimal changes in their relationship.⁴ This change in the food guide is therefore not in line with commonly accepted understandings of the impact of agribusiness on government policy.⁵

In exploring why Canada’s food guide has changed so drastically, this paper poses two key arguments. First, it highlights that despite minimal changes to the power dynamic between industry and state, Canada’s Food Guide has shifted drastically to reflect the most recent science and nutritional information, not industry preferences. Second, this paper argues that while a step in the right direction, food and nutrition policy is irrelevant without congruent changes to agriculture policy. However, these initial changes to Canada’s Food Guide could set the precedent needed to shift agriculture policy towards foods that support and promote human and environmental health.

³ Webster, *Canada’s updated food guide*, pg e5

⁴ Clapp, *Food*, pg 55

⁵ Clapp, *Mega-Mergers on the Menu: Corporate Concentration and the Politics of Sustainability in the Global Food System*, pg 25

For the first argument, three forms of agribusiness power are considered – media and outreach, market power, and lobbying. As there has surprisingly been minimal changes in the power dynamic between agribusiness and state, this paper highlights five additional factors that contributed to this historical shift in priorities: increased awareness of nutritional information, the rise of vegans and vegetarians, demographic and political economy trends, social pressure and bureaucratic changes, and consideration of diet co-benefits and costs. Through considering the complexity of each factor, the shift in agribusiness-government relations can be better understood and explained.

For the second argument, research regarding the food choices of Canadians and food security stress the potential insignificance of Canada's Food Guide. Without meaningful changes to agriculture policy and overall physical and financial access to food, the gains made in nutritional information will not translate to a better fed population. This calls for an integrated federal agriculture/food/nutrition policy, where the industries that the state financially supports align with the health and wellbeing of the population and environment. While these changes are not yet underway, Canada's Food Guide could be the first step towards meaningful changes in agriculture policy.

This change in the food guide is significant for the greater study of Global Environmental Politics as it indicates a shift in the power dynamics associated with agribusiness and state policy. While it remains to be seen if nutritional recommendations will be supported by shifts in agriculture policy, the initial step towards human and environmental health over industry interests is important to acknowledge and understand.

1.2 Overview

In order to best explore the issues at hand, the paper proceeds as follows. Chapter Two provides an overview of the current global food system – with emphasis placed on the impact this system has on environmental and human health, as well as the inherent inequality and skewed power dynamics of the system. Within this overview is the introduction of the three key ways in which agribusiness firms exercise their power over states – media and outreach, market power, and lobbying.

In Chapter Three, the history of industrial agriculture in North America and the role of food guides is explored. This includes highlighting the development of agricultural subsidies and supply management boards, as well as the history of Canada’s Food Guide.

Chapter Four begins the analysis of Canada’s new Food Guide, with emphasis placed on the changes made and initial reactions from various stakeholders. This section concludes by exploring how the apparent continued power held by agribusiness does not adequately explain how these changes in policy took place and presents five potential factors for the changes that do not fit in with the prior understandings of agribusiness power.

In Chapter Five, the larger picture of food and agricultural policy in Canada is discussed. Special attention is paid to driving factors of consumer choices and food insecurity, stressing that meaningful health promotion must start with greater access to nutritious foods – and as such changes in agriculture policy.

Chapter 2: Modern Agriculture and the Global Food System

2.1 Overview of Global Agriculture

While in production, agriculture has the potential to do both great good for nature's systems, as well as great harm. Today, conventional agriculture relies on petroleum-based inputs of herbicides, pesticides and fertilizers for the maintenance of large monoculture farms.⁶ In this form of production, the long-term health of the soil and ecosystem is degraded, leading to overall decline in fertility and output. Furthermore, chemical runoff due to over application and poor soil health further pollutes both fresh water and the world's oceans.⁷ Due to the high reliance on petroleum inputs and industrial equipment, as well as a focus on animal agriculture, the western food system produces a significant amount of CO₂ equivalent emissions, with up to 26% emissions are due to agriculture.⁸ In this way, the production of food goods contributes directly to poor human health through the degradation of ecosystems and the biodiversity we require.

This system of production is not only troublesome for physical health, but also economic. The use of synthetic inputs is not a diverse market, but instead a system of production owned and managed by a small subset of agribusiness firms. With Bayer's acquisition of Monsanto in 2018, there are now only four agribusinesses that own the majority of both seed and chemical production worldwide.⁹ These companies specialize in synthetic input production, as well as the seeds designed to best withstand these harsh chemicals. Most commonly cited is Monsanto's 'RoundUp' herbicide and 'RoundUp Ready' crops. These are genetically modified (GM) cash

⁶ Clapp, *Food*, pg 53

⁷ *ibid*

⁸ Poore & Nemecek, *Reducing food's environmental impacts*, pg 1

⁹ Clapp, *Mega-Mergers*, pg 17

crops (wheat, soy and maize), which are not negatively impacted by the potent herbicide – allowing more liberal spreading of fields. This method of monoculture farming not only kills weeds, but actively degrades the soil, killing all the essential micronutrients for a healthy ecosystem. This necessitates the continued use of modified seeds and additional nutrient support, as degraded soil cannot produce healthy crops over the long run. In this way, the monopoly these four firms have not only impacts the markets at large, but the health and wellbeing of individual farms and communities. While the politics of GM seeds and chemical inputs (herbicides, pesticides and fertilizers) is beyond the scope of this paper, it helps illustrate the power of money within agribusiness at large, as these four firms control roughly 75% of the world’s agricultural inputs – and as such food for the world.¹⁰

Cash crops – while key staples of many people’s diets – are largely prioritized for their role in meat production, as feed for industrially farmed animals. This use of calories is highly inefficient, as animal agriculture requires significant inputs of land, water and food. In a study done by Arrietaa and Gonzálezb comparing the nutritional efficiency of various diets and their impact on climate change, it was found that the typical omnivore diet only produces 15.6 grams of protein per kg Co₂ equivalent.¹¹ This is in contrast to diets that don’t contain ruminants (39.4g protein/ kg Co₂), lacto-ovo vegetarians (40g protein/ kg Co₂) and vegans (41.2g protein/ kg Co₂), which each produce over double the amount of protein per kg Co₂ equivalent emissions. This efficiency of macro nutrient production is consistent across fats, carbohydrates and overall calorie production. This illustrates that the prioritization of cash crops for feed not only reduces

¹⁰ Clapp, *Mega-Mergers*, pg 16

¹¹ Arrietaa and Gonzálezb, *Impact of current, National Dietary Guidelines and alternative diets on greenhouse gas emissions in Argentina*, pg 62

the total available calories for human consumption, but also increases the contribution to climate change.

The redirecting of calories to animal agriculture is not the only process that exacerbates food insecurity and equity issues, as the recent financialization and market trading of food goods increases the volatility of cash crop prices, directly impacting access to food for the world's poor. This global system – while supported by the primary players in the promotion of free trade – reduces the potential for already low-income families to break the cycle of poverty through insufficient calories and chronic hunger.¹²

Once produced, food contributes to poor human health in a second form – its consumption. The market focus on highly processed, calorically dense, yet nutrient poor food is leading to epidemics of non-communicable diseases, including heart disease and type II diabetes.¹³ These highly processed foods are mass marketed and often the cheapest options available to consumers – however, this low overhead cost is not due to an inherent advantage in the food production, but significant market subsidies for the production of specific cash crops and animal products, combined with economies of scale.¹⁴ In this way, and as is highlighted in the following section, this directly links the agricultural policies of states to the availability of foods for their citizens.

2.2 Food as Climate Action

Diet is of further importance when considering the environmental commitments of Canada to climate change and environmental degradation. Despite being far from meeting its

¹² Clapp, *Food*, pg 143

¹³ Cramer et al., *Characteristics of Americans Choosing*, pg 561-62

¹⁴ Ghosh-Dastidar et al., *Distance to Store*, pg 592

Paris Accord Nationally Determined Contribution, it is still important to consider the domestic industries that hinder potential gain in climate efficiency.¹⁵ In 2006 the UN released a report outlining the largest factors contributing to CO₂ emissions. They found that above any other industry, agriculture – and especially animal agriculture – contributes the most global CO₂ equivalent emissions.¹⁶ Some studies have found the food industry at large contributes 26% of total global emissions.¹⁷ This is highlighted in research by Ivanova et al. comparing the emissions of various EU countries. According to her research, Denmark has one of the highest emissions of any EU state despite their work in green energy production and active transport. This disparity in actions and emissions is in large part attributed to the high levels of meat consumption within the country, further emphasizing the role that diet can play on the climate.¹⁸

Considering this impact of agriculture on climate, as well as the commitments that Canada has made on the international stage to minimize CO₂ equivalent emissions, it is essential that the state acknowledge and embrace the potential role that the population's diet can play in reaching these commitments. As is discussed in the coming sections, this would necessitate both climate aware diet recommendations, as well as a shift in federal supported agriculture, in order to align with climate action.

2.3 Agribusiness Power

While the above section provides a very brief overview of the nature of the global food system, the key underlying points of consideration are both a) the global nature of modern food

¹⁵ Climate Action Tracker, *Country Summary: Canada*

¹⁶ United Nations Food and Agriculture Organization & The Livestock Environment and Development Initiative, *Livestock's Long Shadow*, pg 5

¹⁷ Poore & Nemecek, *Reducing Food's Environmental Impacts*, pg 1

¹⁸ Ivanova et al., *Mapping the carbon footprint*, pg 7

production and b) the associated power that agricultural and food production firms hold. Specifically, Clapp highlights three key ways that agribusiness firms hold and exert power in the relationship to food and agricultural policy: i) media and outreach infrastructure, ii) market power and iii) direct and indirect lobbying.¹⁹

First, in the case of media and outreach infrastructure, the sheer size and financial capabilities of agribusiness firms allows for both the direct advertising to consumers, as well as funding of research and reports that focus on the benefits and importance of the current agribusiness structure. This media influence shapes public knowledge and discourse at large. In the context of the dairy industry, one example is the *Got Milk?* campaigns in the USA, and various ad campaigns facilitated by Dairy Farmers of Canada. Originally started by the California Milk Processor Board, *Got Milk?* was later licensed by the Milk Processor Education Program (MilkPEP) and marketed across the USA – everything from TV and magazine advertisements to posters in classrooms.²⁰ In the Canadian context, Dairy Farmers of Canada runs TV, billboard and print advertisements, highlighting different Canadian dairy products. Because these advertisements are focused on a product (dairy) and not a specific distributor, they are often passed as nutritional information, and not a marketing program. This media engagement helps shape public perceptions, as by the mid 90s, 91% of American adults were aware of the *Got Milk?* campaign.

Second, in the case of market power, the complex relationship between state and industry in the creation and promotion of industrial agriculture and the North American diet has given

¹⁹ Clapp, *Mega-Mergers*, pg 25-26

²⁰ Kardashian, *The End of Got Milk*

agribusinesses considerable strength. As is highlighted in detail below, in the case of Canadian Dairy this took the form of supply management – a system developed to aid dairy farmers and now a major point of Canadian foreign policy.²¹ The importance of dairy and other products under supply management is expanded due to both the market share of the industry, as well as its role as a voting point for many farmers and rural Canadians.

Third, lobbying of government offices and party officials further promotes the interests of agribusiness firms. In the case of Canadian Dairy, the close relationship between industry and government is a commonly acknowledged fact.²² This lobbying not only takes place in Ottawa, but within individual party politics, with the most recent scandal taking place at the 2018 conservative convention, where a binder outlining the Dairy Farmers of Canada intentions to shut down conversations regarding supply management and promotion of free trade principles was found.²³

These three key ways that agribusinesses wield power shape public perception and government policy. As is highlighting in the following section, the use of this power has historically been associated with the development and promotion of Canada's Food Guide.

²¹ van Kooten, *Reforming Canada's Dairy Sector*, pg 3

²² Wherry, *Why the Dairy Lobby*, para 10

²³ Gerson, *The Dairy Lobby's Iron Grip*

Chapter 3: Agriculture and Canada's Food Guides

3.1 Agriculture Development in North America

The industrialization of agriculture in Canada and North America began in the 19th century and shaped the future of food and nutrition.²⁴ In response to the Great Depression, agricultural subsidies and food boards were created throughout the 1930s in order to increase production and reinvigorate the economy. In the case of Canada, this looked like the 1935 creation of the Canadian Wheat Board.²⁵ While originally a voluntary marketing agency, by 1943 it became a mandated monopoly on wheat, barley and oats. Where the US focused on farm subsidies, guarantee buyback programs and trade control, Canada utilized a price pooling system, where all wheat producers received an initial payment, followed by a final payment based on pooled wheat sales.²⁶ Following World War II, policies similar to these grew all over the western world, with a focus on wheat, soy and corn. Domestically, these foods were processed to create a wide variety of pre-made, convenience foods. However, the rate of subsidization could not be met by domestic consumption. As such, excess food was shipped overseas as food aid for the struggling post-colonial states, as transporting and giving away the food was cheaper than storing it.²⁷

Even with food aid programs, there continued to be a surplus of grains produced in the western world. This started the practice of feeding grain to livestock, allowing for the advent of factory-farmed meat. In turn, this led to a significant drop in the price of meat, and the

²⁴ Clapp, *Food*, pg 27

²⁵ Skogstad, *The Dynamics of Institutional Transformation*, pg 563

²⁶ Clapp, *Food*, pg 28; Skogstad, *The Dynamics of Institutional Transformation*, pg 537

²⁷ Clapp, *Food*, pg 30-31

“meatification” of western diets.²⁸ As Clapp highlights, by the 1970s this use of grain for meat production led to “the one billion people in the rich world... eating meat that used as much cereals as the two billion people in the poor countries consumed directly in the form of grain”.²⁹ What is worse is that these changes were seen as the success of industrialization and growth of the west. The focus on excess and ‘more’ became synonymous with a successful western world.

However, these policies also allowed the producers of food to grow their income and control with little notice from the public at large. As the consumption of processed foods increased, so did the power of food producers and processors. These agribusinesses in turn gained greater sway with government, utilizing the three avenues of control highlighted in the previous section, and allowing for the promotion of policies that supported continued economic growth.³⁰ In this way, food guides were promoted as a means to both promote human and economic health – by placing emphasis on produce and value added food goods with domestic economic impacts.

3.2 The Canadian Food Guide

The first Canadian Food Rules were developed in 1942, with the intention to “prevent nutrition deficiencies while coping with rationing, and introduced the concept of food groups, emphasizing the consumption of nutrient-rich milk, especially by children”.³¹ These original ‘Food Rules’ were changed several times before the official food guide was released in 1961. First, dairy was stressed as a key component to gaining essential micronutrients – this was

²⁸ Weis, quoted by Clapp, *Food*, pg 55

²⁹ Clapp, *Food*, pg 47

³⁰ Clapp, *Mega-Mergers*, pg 25-26

³¹ Slater & Mudryj, *Are We Really*, pg 1

despite shortages of dairy experienced by the state. Furthermore, initial servings of meat and alternatives were quite low compared to more recent food guides. With the ongoing war, these guides also featured notes about conserving food, specifically “Food is urgently needed in Europe and the Far East. Do your bit for hungry humanity by conserving food. Buy less Use less Waste nothing”.³² Furthermore, these initial food rules explicitly highlighted the importance of vitamin D, with recommendations for how to subsidize it within one’s diet for adequate intake.

After several edits of these initial rules, the first Food Guide was released in 1961, with five food groups (milk, fruit, vegetables, bread & cereals and meat & fish) and information regarding shopping and preparing food for different ages. In this first edition of the Food Guide, Milk was the only food group with explicit intake recommendations, with all others simply referring to unspecified ‘servings’. For example, it was recommended that Canadians consume one serving from the meat & fish group daily. The 1961 Food Guide was also the first to emphasize the potential for “dried beans and peas” as suitable forms of protein in the place of meat.³³

The Food Guide was next updated in 1977. This new food guide combined fruits and vegetables, with the new recommendations depending on four food groups. In this guide, notable changes include the increased servings of ‘meat and alternatives’ to two servings per day, and a reduced emphasis on whole grains, highlighting the role of fortified products instead. The 1982 guide appears near identical to that released in 1977, with the most notable changes being in response to *The Report of the Committee on Diet and Cardiovascular Disease* released in 1977.

³² Health Canada, *History of Canada’s Food*, pg 5

³³ Ibid, pg 7

This report highlighted the rise of non-communicable, lifestyle related diseases in the Canadian Population, and as such the new food guide included an emphasis on the need for physical exercise, as well as reductions in fat, sugar, salt and alcohol intake.³⁴

1992 brought a new guide and a new name, ‘Canada’s Food Guide to Healthy Eating’. This Food Guide introduced the iconic food rainbow, with the foods one should eat in higher quantities making the largest outer rings of the rainbow, and the foods that should be minimized focused in the center. Despite meat and alternatives being the lowest recommended serving size, these servings were once again increased to two to three servings daily, depending on age and sex. This Food Guide also brought about the introduction of an ‘other food’ category, intended to include processed foods that are not easily contained in one of the main food groups. Without a specific serving suggestion, the guide simply highlights to limit these more processed foods.³⁵

‘Eating Well With Canada’s Food Guide’ was released in 2007, and built off of the established food rainbow. While very similar to the 1992 edition, this new guide included a note about the importance of drinking water, as well as being aware of the types of oil one consumes – with emphasis placed on canola, olive and soy oil, as well as “soft margarines that are low in saturated and trans fats”. Furthermore, ‘Fruits and Vegetables’ replaced ‘Grain Products’ as the outer, largest component of the rainbow. Additionally, the renaming of ‘Milk and Alternatives’ allowed for the inclusion of non-dairy, fortified alternatives to cow’s milk. Furthermore, culturally diverse foods were pictured, as well as the release of a food guide specific to Canada’s indigenous population.³⁶

³⁴ Health Canada, *History of Canada’s Food*, pg 8-9

³⁵ Health Canada, *History of Canada’s Food*, pg 10

³⁶ Health Canada, *History of Canada’s Food*, pg 11-13

3.3 A Guide for Who? Supply Management and Agriculture Lobby

While the official Government of Canada report highlights the importance of nutritional information and citizen health in the promotion of the food guide, critiques take a different perspective in understanding the development of Canada's Food Guide over the years. With respect to the 12 member 'External Food Guide Advisory Committee', used to create the 2007 Guide, the role of representatives from "Food and Consumer Product Manufacturers of Canada, the Vegetable Oil Industry Council and the BC Dairy Foundation" were seen as a direct conflict of interest.³⁷ Others went so far as to argue "The big winners of the revision were the beef and dairy industries... not the Canadian public".³⁸ This is grounded in the continual focus on meat and dairy consumption, despite increasing research finding the direct negative impact that both have on human health.³⁹

The role of the dairy, egg and poultry lobby is of special interest in Canada, due to the role of supply management. Through the supply management system, there are guaranteed quotas and prices associated with the production of each good, keeping prices high for both producers and consumers.⁴⁰ This supply management has aided mainly large, industrial farms that have been able to grow considerable wealth through the system due to economies of scale. This has created a positive feedback of agricultural input in policy, where the economic stability guaranteed through supply management allows for a stronger dairy lobby, which in turn ensures

³⁷ Kondro, *Proposed Canada Food Guide*, pg 605

³⁸ Collier, *Calls for a Better*, pg 1281

³⁹ Barnard et al., *Vegetarian and vegan diets*, pg 256

⁴⁰ van Kooten, *Reforming Canada's Dairy Sector*, pg 2-3

that supply management is maintained.⁴¹ Despite being dubbed ‘soviet like’, supply management is supported by every large political party in Canada.⁴²

Supply management started in 1966 with the development of the Canadian Dairy Commission, and by the late 70s there were additional management boards for eggs, chicken and turkey.⁴³ Through the quotas established by the Canadian Milk Supply Management Committee, provinces are allocated a quota to distribute between their farms. Farmers can then buy and sell quota in order for the final needs of the province to be met. The price of milk is based on a target price, estimated on previous production costs. Farmers are ensured that their provincial marketing board will buy any excess product at the guaranteed supply management price. While about 50% of Canada’s milk production is managed by the largest 25% of dairy producers, medium and small-scale farms that do not benefit from economies of scale drive the supply management price up. This supply management has not been popular on the international stage and has gotten Canada into a number of difficult trade positions – most recently being the negotiations of the USMCA Agreement.⁴⁴

While we can see the impact of dairy supply management internationally, we can also see its impact domestically. Dairy Farmers of Canada are active advertisers, with promotional material in print, television, transit, billboards and classrooms.⁴⁵ Over the years of changes to Canada’s Food Guide, it is not surprising that Dairy continued to be a focal point of good health, despite contradictions in nutritional research. In conjunction with the role they have played in the

⁴¹ Wherry, *Why the Dairy Lobby*, para 6

⁴² Herman, TPP Pressure on Canada, para 1

⁴³ van Kooten, *Reforming Canada’s Dairy Sector*, pg 3

⁴⁴ van Kooten, *Reforming Canada’s Dairy Sector*, pg 3

⁴⁵ Adnews, *Dairy Farmers of Canada*; Dairy Farmers of Canada, *Teach Nutrition*

development of Canada's Food Guide, and the prominence of Dairy as a key food group, it is not surprising that most Canadians consider Dairy an essential component of a healthy diet. As is discussed in the Analysis, the removal of Dairy from the Canadian Food Guide has sparked outrage amongst dairy farmers.

3.4 Why Do Food Guidelines Matter?

While the previous sections have outlined the onset of industrial agriculture and the development of the Canadian Food Guide, it is important to acknowledge the potential impact that the Food Guide actually has for Canadians. While discussing the nuance of the changes made over the years since 1942 can provide insight into the priorities of the Canadian Government, it is also essential to consider the actual impacts that the Food Guide has on Canadian eating habits. Consistently, studies have found that a) Canadian knowledge of the food guide is low and b) following the principles outlined by the Food Guide are rarely priorities for consumers.

On the first point, Canadians generally have a poor understanding of what is covered in the Canadian Food Guide. In a study by Allen, Taylor, Rozwadowski, Boyko and Blackburn, it was found that in a sample of Canadian pharmacy students, less than 50% of students were able to identify the recommended daily servings of each food group.⁴⁶ Furthermore, these students consistently under consumed fruits, vegetables and grains, while over consuming meat, dairy and alternatives. Finally, they showed high levels of consumption of 'other foods' – a group that was removed from the 2007 food guide, yet included highly processed, calorically dense, yet nutrient

⁴⁶ Allen et al., *Adherence to Canada's Food*, pg 80

poor foods.⁴⁷ This is supported by more recent research by Slater and Mudryj, who found that while there is high awareness of the existence of the Canadian Food Guide, knowledge of its contents and adherence are low. Most shocking is the finding that up to “62% of Canadians calories come from ultra-processed foods”.⁴⁸

With regards to adherence to the Food Guide, Mathe, Agborsangaya, Loitz, Johnson and Johnson found that this was generally correlated with wealth and educational levels, as “only 26% of Canadians over 2 years of age met recommendations for vegetable and fruit consumption”.⁴⁹ This is reinforced by St John et al. who found that vegetable & fruit and ‘other foods’ had a positive and negative correlation respectively with income – where those with the fewest funds were most likely to purchase the least nutritionally dense foods.⁵⁰ This research indicates that regardless of the changes in recommendations made within Canada’s Food Guide, if not met with better promotion of what the Food Guide includes, and policy to increase access to healthy whole foods, there is likely to be little change in the eating habits of Canadians.

While this research reinforces the insignificance of nutrition policy for citizens’ wellbeing, it reinforces the role of agricultural policy in dictating access to food. As is highlighted in the following sections, the changes to Canada’s Food Guide are therefore potentially significant in the shift they could dictate in agriculture policy (and therefore access to food by Canadians) and not in the nutritional recommendations themselves.

⁴⁷ Ibid, pg 81

⁴⁸ Slater & Mudryj, *Are we Really*, pg 5

⁴⁹ Mathe et al., *Health Behaviours and Awareness*, pg 69

⁵⁰ St John et al., *Overweight Nova Scotia Children*, pg 304

Chapter 4: Analysis – Canada’s Food Guide, 2019

4.1 The Changes 2007 to 2019

In January of 2019, the Government of Canada released Canada’s Food Guide, the new and improved continuation of *Eating Well with Canada’s Food Guide* of 2007. As is discussed below, there have been some critiques of the scope and content of Canada’s Food Guide, however the majority of the attention received thus far has been astoundingly positive. Unlike prior guides, Canada’s Food Guide explicitly focuses on whole, plant-based foods as the foundation of a healthy diet.⁵¹ In contrast to prior food groups, Canada’s Food Guide focuses on ways of eating, with three components of consideration – fruits and vegetables, whole grains and protein foods. This is accompanied with a visualization of a plate half full of fruits and vegetables, with one quarter each allocated to grains and protein foods. Most notable about this is the transformation of a ‘meat and alternative’ group to ‘protein’, and the complete removal of ‘milk and alternatives’. Within the visualization, protein foods includes legumes, nuts and seeds, yogurt and lean meat.⁵²

Within the written overview of protein rich foods, the Guide explicitly states to choose mainly plant-based forms of protein, and to eat animal products in significantly reduced quantities.⁵³ It goes further to highlight the risks of processed animal foods – incorporating the International Agency for Research on Cancer findings that processed red meats are classified as a type I carcinogens, while unprocessed red meats are type II carcinogens.⁵⁴ Furthermore, the

⁵¹ Health Canada, *Canada’s Food Guide*; Health Canada, *History of Canada’s Food*, pg 8-9

⁵² Ibid.

⁵³ Health Canada, *Canada’s Food Guide*; Health Canada, *History of Canada’s Food*, pg 8-9

⁵⁴ Health Canada, *Evidence Review for Dietary*, pg 4; International Agency for Research on Cancer & the World Health Organization, *Red Meat and Processed Meat*, pg 497

inclusion of dairy in protein foods, and removing its own food group is of special interest. Where previously dairy was stressed as an essential component of a healthy diet, it is now highlighted as simply one way to get the nutrients that can be found in a variety of whole plant foods.

Canada's Food Guide has also changed the way in which it promotes the consumption of fruits and vegetables, with them now being stressed as the bulk of each meal, not simply a side dish to be incorporated. This includes reclassification of fruit juice as a processed food, no longer being contained within the 'fruit and vegetable' classification due to lack of fibre and high sugar content.⁵⁵ This is not the only food that has been demoted, as all processed foods with added fat, sugar and sodium are now stressed as things to avoid.⁵⁶

In addition to the changes in recommendation of what to eat, the new Food Guide also includes new recommendations about how Canadians should eat. With stress placed on cooking one's own meals, eating with others and taking the time to enjoy food, Canada's Food Guide is countering the prior messages of simply making 'healthy' food choices in the world of convenience foods.⁵⁷ There are also notes included stressing the importance of reading food labels, avoiding processed foods and being aware of food marketing.⁵⁸ This is a significant change of tune compared to prior food guides that highlighted that processed, fortified foods could be healthy components to a diet, and reflects recent research that a variety whole foods are the best way to achieve micronutrient needs.⁵⁹

⁵⁵ Health Canada, *Food, Nutrition & Health*, pg 3

⁵⁶ Health Canada, *Evidence Review for Dietary*, pg 4

⁵⁷ Webster, *Canada's Updated Food Guide*, pg e5

⁵⁸ Health Canada, *Canada's Food Guide*

⁵⁹ Health Canada, *History of Canada's Food*, pg 8-9

4.2 Initial Reactions

Considering the changes to the Food Guide, there are a number of known factors of consideration, and open reactions to the changes in nutritional information from various stakeholders. With regards to the overall focus on whole, plant-based foods, there has been both praise and concern by MDs and dietitians.⁶⁰ While the intended flexibility associated with prior Food Guides was seen as a deterrent to overall health, the more explicit focus on avoiding all processed foods – not only unfortified products – is seen as a step in the right direction.

The removal of meat and dairy specific food groups is seen as huge step for both human health and environmental standards. The prior focus on both meat and dairy was explicitly contradictory to well-documented impacts of both on human health, with high association to obesity, heart disease and type II diabetes.⁶¹ Instead, Canada’s Food Guide re-centers the focus on ‘protein foods’, a way to change the narrative surrounding protein and other micronutrients, breaking the misconception that meat and dairy are essential for human health. This will hopefully increase the micronutrient intake of the general population, as well as support re-thinking of meal building, reducing the other negative impacts of high meat consumption. The only point of complaint that has come from the health community is the focus on fresh produce, as it is seen as inaccessible to low income communities – however this fear has been partially debunked by researchers out of Dalhousie University, and has started larger conversations about the need for healthy food to be cheaper.⁶² While this diet information has been available for

⁶⁰ Webster, *Canada’s Updated Food Guide*, pg e5

⁶¹ Health Canada, *Evidence Review for Dietary*, pg 4; International Agency for Research on Cancer & the World Health Organization, *Red Meat and Processed Meat*, pg 497

⁶² Hui, *Study Suggests the New*

years from a variety of dietitians and MDs, many would simply promote the diet outlined in the food guide, despite the contradictions present within more complex research on diet and nutrition.⁶³

Environmentalists have also applauded the recent changes, as the focus on whole, plant-based foods better aligns the federally promoted diet with climate sound food choices.⁶⁴

However, as will be discussed in the following section, changes in agricultural policy are also needed for these changes to the Food Guide to have a meaningful impact on the actual food choices of Canadians.

On the other side of the diet debate, the meat and dairy industry are openly opposed to the changes made to the Food Guide.⁶⁵ This discontent is not new, as both industries made their frustration known during the research and writing of Canada's Food Guide, aggravated that they no longer held their special seat as external advisors. When the first indicators that Canada's Food Guide may drastically change were released in 2017, both the dairy and meat industry openly contested these changes.⁶⁶ Following these complaints, there was concern that Canada's Food Guide would have its recommendations weakened in order to comply with this lobby interest. However, as can be seen from the new Food Guide, drastic changes were still undertaken, to the open dismay of both lobbies. This was reinforced in January after Canada's Food Guide was released, with Dairy Farmers of Canada citing negative impacts that the reduced emphasis of animal products would have on human health – and their bottom line.⁶⁷

⁶³ Health Canada, *Evidence Review for Dietary*, pg 5

⁶⁴ Pippus, *Canada's 'Good News' Food Guide*, para 6

⁶⁵ Grant & Jenkins, *Resisting Influence From Agri-Food*, pg E451

⁶⁶ Blanchard, *Beef Producers Weigh In*; Spencer, *The NEW Food Guide*

⁶⁷ Dairy Farmers of Canada, *Milk Products are a Key*

While the above reactions to the changes in Canada’s Food Guide are what we know from public responses, there are factors at play responsible for the changes that cannot be understood at this surface level. In an attempt to understand the various contributing factors to these changes thus far, and the role they may have played in the recent shift in priorities, the following section explores stakeholders and market shifts that played a role in Canada’s Food Guide changes.

4.3 Why these Changes?

When considering these possible positive benefits associated with the changes in the food guide, it is essential to acknowledge the underlying ways in which the power dynamic between the Canadian Government and the major agribusiness firms active in Canada have changed, and how they have remained the same. When considering the three forms of agribusiness influence highlighted in the first section (media, market influence and lobbying), the power of Canadian agribusiness has shifted slightly, yet has not yet been reflected in agricultural policy.

4.3.1 Media and Outreach

With regards to the use of media and outreach by agribusiness firms and organizations, even the proposed changes to the Canada’s Food Guide released in 2018 to minimize a focus on meat and dairy spurred a response by the associated industries. One example was the creation of ThinkBeef, a campaign launched by Canada Beef in order to promote the role of beef within a healthy diet, following initial discussions of a reduced focus on meat within Canada’s Food Guide.⁶⁸ Front and center on the ThinkBeef website is the statement “Beef belongs on Canada’s

⁶⁸ Staff, *How Will the Industry Address the New Food Guide?*

food guide plate”. The website includes nutritional information, recipes and blog posts.⁶⁹ This coincided with the promotion of the hashtag #beefbelongs.⁷⁰ Notable about this campaign is that it is organized by the Canadian Beef Check-Off Agency – a body under the Farm Products Council of Canada with the purpose of helping “beef producers expand their markets and increase sales”.⁷¹ The 16 person agency is comprised almost exclusively by industry representatives, and uses the levy gained off of beef imports to run promotional campaigns – such as ThinkBeef. In this way, industry is not only promoting its economic interest with its own funds, but using federal funding to promote its interests as well.

However, while the traditional animal agriculture sectors are working to continue their promotion, there has also been a recent push in the media coverage of plant-based foods. This is highlighted in greater detail below as one of the five factors pushing Canada’s Food Guide in the plant direction. Regardless of this growth in plant-based promotion, the strength of large agribusiness media use did not minimize prior to the creation of Canada’s Food Guide, indicating that this was not the power shift necessary to see the changes in recommendations.

4.3.2 Market Power

Second, we know that market shares give agribusiness influence over federal policy. As was highlighted previously, the role of supply management is especially relevant in this respect, as the dairy, egg and poultry boards all have significant sway over federal and provincial policy. This importance was reinforced with the renegotiation of NAFTA into the USMCA, as dairy was

⁶⁹ ThinkBeef, *ThinkBeef*

⁷⁰ Staff, *How Will the Industry*

⁷¹ Farm Products council of Canada, *Canada Beef Check-off Agency*

once again a major sticking point for negotiations.⁷² However, as is discussed below, the market is starting to shift away from dairy milk. If Canada ran a free market for dairy, this could have been a good indicator as to why Canada's Food Guide is shifting towards no longer promoting dairy. However, considering supply management, this market power is not reflected in the choices made within Canada's Food Guide.

4.3.3 Lobbying

Third, one must consider the power of the agribusiness lobby and their impact on domestic politics. On the one hand, there is direct evidence that Health Canada made attempts to reduce the power of industry in the creation of Canada's Food Guide – most directly through the removal of industry representatives on review boards.⁷³ This alone is a significant shift, and the possible contributing factors to this choice are reviewed in the following section. However, despite this change, agribusiness is still a significant lobby body – as is highlighted in the example of the conservative meeting.⁷⁴ In this way, the agribusiness lobby appears to have lost some weight in one area of government (Health Canada), while maintaining its hold in others (Agriculture and Agri-Food Canada and party politics).

Collectively, there have been some shifts in these three forms of power exerted by meat and dairy agribusiness in Canada. Most notable is the removal of industry representatives in reviewing dietary recommendations, however this change appears to be the effect of a desire to move away from agribusiness influence, and not the cause of this change in priorities.

⁷² van Kooten, *Reforming Canada's Dairy Sector*, pg 3

⁷³ Kondro, *Proposed Canada Food Guide*, pg 605

⁷⁴ Hopper, *Full Text: The Dairy*

4.4 The Reasons for Change – What We Don't Know

While the reactions from various stakeholders of Canada's Food Guide are known, what is still unclear is where the momentum needed to make these changes originated, as the three major sources of agribusiness power don't appear to have changed significantly. While there has been considerable research over the last 12 years regarding the impact of animal products on health, the under arching knowledge of the impact of diet on health is not new, with the 2007 guide being criticized for its poor focus on health promoting foods.⁷⁵ Furthermore, while the recent Paris accord has reawakened the attention placed on climate change and environmental degradation (specifically because Canada has not removed itself from this agreement like it did Kyoto) the impact of agriculture on climate and the environment are not new concepts. This paper therefore explores several additional factors that contributed to these monumental changes. First, better understanding of nutritional information; second, the rise in Canadian vegans and vegetarians; third, larger demographic and political economy trends; fourth, social pressure and bureaucratic changes; fifth, consideration of diet co-benefits and costs.

4.4.1 Better Understanding of Nutritional Information

While the impact of poor diet has long been understood as a key factor in obesity, heart disease, type II diabetes and other non-communicable diseases, the extent of the risk has become better understood in recent years. Where prior research highlighted the role that highly processed foods played in poor health, with an emphasis on added sugar, fat and salt, recent research has found direct negative health impacts associated with the consumption of meat.⁷⁶ As stated above,

⁷⁵ Collier, *Calls for a Better*, pg 1281; Kondro, *Proposed Canada's Food Guide*, pg e5

⁷⁶ Health Canada, *Evidence Review for Dietary*, pg 4; International Agency for Research on Cancer & the World Health Organization, *Red Meat and Processed Meat*, pg 497

this has led to the categorization of processed red meat as a type I carcinogen, and unprocessed red meat as a type II carcinogen.⁷⁷ These findings make the promotion of diets high in meat much harder to support by any group attempting to encourage health.

Potentially more pertinent to the specific changes to Canada's Food Guide, population survey data from 2004, analyzed in 2015 found some truly shocking discoveries regarding the diets of Canadians. Most notable "one-third of total calories came from foods higher in fat, sugar, or salt" as "mean intake of either dark green or orange vegetables was less than one Food Guide Serving per day".⁷⁸ Furthermore, the vast majority of both dairy and meat choices were not 'in-line' with Food Guide recommendations for preferred healthy choices of each. These trends indicate the need for a drastic overhaul for how the state addresses the health of the population. What is notable here is that the population survey data was available prior to the release of the 2007 report, begging the question of what other factors contributed to the changes observed in the recent report.

4.4.2 Rise of Vegans and Vegetarians

Upon the initial release of Canada's Food Guide, considerable attention was paid to a recent report on Canadian diet trends out of Dalhousie University. Their research highlights that the Canadian population is aligned with other western states' shifts in dietary choices – with a significant growth in both vegans and vegetarians in recent years.⁷⁹ This is reflected in the US, with roughly 10% of the population vegetarian, and vegans making up 2%.⁸⁰

⁷⁷ Willett, *Food in the Anthropocene*, pg 455

⁷⁸ Health Canada, *Evidence Review for Dietary*, pg 4

⁷⁹ Charlebois, Somogyi & Music, *Plant-Based Dieting*, pg 2

⁸⁰ Cramer et al., *Characteristics of Americans Choosing Vegetarian*, pg 566; Wrenn, *Trump Veganism*, pg 1

This surge in vegans has not only been recognized by academics, but the food markets at large. In 2017, Forbes published an article stressing the strength of the vegan consumer, and the importance for firms to embrace their interests.⁸¹ This was reinforced a year later by The Economist proclaiming 2019 the year of the vegan.⁸² Both 2017 and 2018 have seen significant growth in plant-based food sales in the US, at 8.1% and 17% respectively (in comparison to overall food sales growth of -0.2% and 2%).⁸³ Furthermore, over this same timeframe plant-based milk grew 3.1% and 8.8% respectively (while 2017 saw a 5% decrease in dairy sales).

These shifts in consumer preferences can also be seen in the service sector, as 2018 saw vegan options adopted by 51% American chefs; up from the 31% seen in 2017.⁸⁴ Finally, even the fast food servers of America are embracing the plant based consumer, with widespread availability and promotion of vegan options such as the beyond burger.⁸⁵

While the growth of this market is interesting in and of itself, it also indicates a growing demographic with an active interest in diet and specifically animal agriculture. As will be highlighted in the following section, this growing demographic could be impacting both the political economy of Canada, as well as the pressure applied to the bureaucratic processes.

4.4.3 Trends in Political Economy

With the growth of plant-based markets highlighted above, it is important to acknowledge the impact that these market trends are having on meat and dairy. While the data above is US specific, similarities in consumption habits indicate that we can assume consumer

⁸¹ Fox, *Here's Why You Should*

⁸² Parker, *The Year of the Vegan*

⁸³ The Good Food Institute, *Plant-Based Market Overview*

⁸⁴ Toledo, *Plant-Based Food Influencers*

⁸⁵ Greenebaum, *Managing Impressions*, pg 310

trends are quite similar in Canada.⁸⁶ While the loss of market shares may have less significance initially to our supply managed dairy, poultry and egg industries, over the long run they could signify the necessity for long-term policy changes. Regardless of the contents of Canada's Food Guide, significant sustained reductions in market shares by each industry would necessitate a shift in the quotas under supply management.⁸⁷ While it is unlikely that the majority of the Canadian population will adopt a vegan diet, as highlighted above, trends towards plant based eating are notable. As time passes and the availability of plant-based options continues to grow, in conjunction with continued stress of the impact of animal agriculture on environmental and human health, it is predicted that consumption of animal products will see increased decline in coming years. Considering the political weight placed upon supply management within Canada, the future of these programs presents an interesting political puzzle. While Agriculture and Agri-Food Canada may not yet be ready to acknowledge these market shifts, it appears that Health Canada is.

4.4.4 Social Pressure and Bureaucratic Changes

Reports of the re-writing of the Canadian Food Guide have highlighted that this was the first writing that strictly removed industry and lobby groups from the development of the nutrition and lifestyle recommendations.⁸⁸ While there are a number of factors that could have contributed to this change in bureaucratic structure, vocal concerns of both health care professionals and the public are likely influential in this.⁸⁹ Public mishaps, and political support

⁸⁶ Clapp, *Food*, pg 117

⁸⁷ van Kooten, *Reforming Canada's Dairy Sector*, pg 7

⁸⁸ Grant & Jenkins, *Resisting Influence From Agri-Food*, pg E451

⁸⁹ Kondro, *Proposed Canada Food Guide*, pg 605; Vogel, *Food Guide Under Fire*, pg E256

for the dairy industry likely fueled greater concern over the role of the lobby in nutritional planning. While all three major federal parties have openly supported the supply management system, recent events have shown just how far they are connected to the lobby.⁹⁰

Over the summer of 2018, the National Conservative Party held their convention in Halifax, Nova Scotia. Amongst the delegates and party members was a delegation from Dairy Farmers of Canada. This is not in and of itself remarkable, except for the fact that their briefing binder was found in one of the meeting rooms.⁹¹ This contained detailed information on the Conservative Party's willingness to support the Dairy Farmers at a high level, and the confidence that any potential debate on supply management would be shut down quickly. While Conservative Party representatives later denied these remarks, they feed into a narrative of Dairy politics that is already quite powerful – that the Dairy lobby has politicians in their pocket. This fear is supported by the images released a year prior of Andrew Scheer, leader of the Federal Conservative Party, drinking a carton of milk on stage at the Press Gallery dinner.⁹² Combined, concern over industry influence in the 2007 Food Guide, as well as the exposure of the Dairy Lobbies influence may have created the perfect breeding ground for a new, science based Food Guide, to better promote the separation of policy and industry. This is not to say that agribusiness lobbies are less powerful, but that the increased attention they have raised removes the ability for Health Canada to cater to their interests without significant public backlash.

⁹⁰ Wherry, *Why the Dairy Lobby*, para 6

⁹¹ Hopper, *Full Text: The Dairy*

⁹² National Post, *Sheer Joy at Press*

4.4.5 Consideration of Diet Co-Benefits

Finally, it appears that the new Canadian Food Guide is cognizant of the co-benefits between diet and the health of humans and the planet. As is highlighted above, recent research has supported the understood risks of processed foods high in fat, sugar and salt. However, further research has found that whole food, plant-based diets actually have the ability to reverse some potential ailments, including type II diabetes and heart disease. While it is essential to acknowledge here that diet is not the only factor in ones development of one of these diseases, changes in diet from one heavy in animal products to one of plant-foods have consistently shown results across individuals.⁹³ By embracing the potential role that food can play in long-term human health, this is the active promotion of a preventative medicine, in contrast to the prominent reactive western medical system that we currently utilize.⁹⁴

Furthermore, in stressing the importance of plant-based foods, Canada's Food Guide is actively supporting citizen actions and behavior changes with positive impacts on the environment. As is highlighted by Poore and Nemecek, plant-based sources of protein and overall calories have drastically lower environmental impacts than their meat alternatives. For example, across production types, per 100 g of beef protein, there are on average 50 kg of CO₂ equivalent released – which can go as high as 105 kg of CO₂ equivalent per 100 g protein. This is in contrast to pulses and peas, which both release less than 1 kg of CO₂ equivalent per 100 g of

⁹³ Barnard et al., *Vegetarian and vegan diets*, pg 256; Cramer et al., *Characteristics of Americans Choosing*, pg 561-62

⁹⁴ Rosenthal et al., *Obesity in America*, pg 1648; Kim & Basu, *Estimating the Medical Care*, pg 612

protein. This difference is reflected across measures including land use, water use and acidification.⁹⁵

4.4.6 Weight of Various Factors

While rhetoric of various stakeholders makes the importance of each of these factors known, what is beyond the scope of this paper is the relative weight that each factor had on both a) the initial desire to reduce agribusiness influence in Canada's Food Guide and b) the internal choices of what to include (and exclude) from the final document. This would create an interesting realm for future research, disentangling which factors were historically most influential, as well as the new factors filling their role. While such in-depth analysis is beyond the scope of this paper, it presents an interesting direction for future researchers.

⁹⁵ Poore & Nemecek, *Reducing food's environmental impacts*, pg 1-2

Chapter 5: How to Make Canada's Food Guide Matter

As is stated above, we know that the majority of Canadians do not make their food choices based upon federal diet recommendations, but instead on price, convenience and taste.⁹⁶ Due to a lack of food security and food sovereignty, this often materializes through the consumption of foods that promote poor health and have negative environmental externalities. Therefore, beyond a Food Guide highlighting the importance of whole plant foods for human and environmental health, there must be measurable steps taken to make these foods more accessible to Canadians. When we discuss access to food, there are several key components to consider, a) do people have physical access to the food, b) do people have financial access to food, c) do people have the knowledge and ability to prepare their own food, and d) is the food culturally appropriate? While not the driving factor of consumer choices, Canada's Food Guide could set the precedent needed for more acute food and agriculture policy – supporting the production and consumption of foods that align with the promotion of human and environmental health.

Lack of physical and financial access to food often go hand in hand, as food deserts necessitate either the buying of processed, convenience foods, or making a trip to a neighboring community to buy groceries.⁹⁷ As it is most commonly low income communities and communities of colour that have food deserts, getting to a grocery store in and of itself can pose a complication, as both transportation and finding time in the day have associated costs.⁹⁸ Once

⁹⁶ Ghosh-Dastidar, *Distance to Store*, pg 590; Lin, Ver Ploeg, Kasteridis, Yen, *The roles of food*, pg 949

⁹⁷ Ghosh-Dastidar, *Distance to Store*, pg 590; Lin, Ver Ploeg, Kasteridis, Yen, *The roles of food*, pg 949

⁹⁸ Bullard & Wright, *Wrong Complexion for Protection*, pg 91-92

at a grocery store, there is an inverse relationships with distance from home and proportion of fresh produce bought – meaning the farther one has to travel, the more likely they are to prioritize processed, easily transported foods.⁹⁹ Furthermore, processed, convenience foods are often prioritized for their reduced cost – in both money spent at the store, and time and energy needed in preparation. This is exacerbated by large scale marketing schemes to increase the awareness of particular processed foods, often fortified for perceived health benefits, with little promotion of the ease and simplicity of eating whole foods.¹⁰⁰

Similarly, whole plant foods require a greater base knowledge of food preparation, as well as the space and time to do so. Without widely promoted knowledge of the potential ease of preparing one’s own meals, processed and ‘convenient’ foods will always appear faster and easier.¹⁰¹ Collectively, these barriers to a healthy diet present an important aspect of diet and food choices not covered by Canada’s Food Guide. While it is clearly beyond the scope of a diet recommendation to address the structural barriers to healthy eating, it is not beyond the scope of Government at large.

Each of these considerations are even more pertinent in Canada’s northern communities, where up to 56% of the population is food insecure.¹⁰² The three northern territories, as well as communities in the boreal forest of each province are especially vulnerable to food insecurity due to climate and lack of consistent access throughout the year. While some communities are merely isolated, others are only accessible by land during the winter months when ice roads can

⁹⁹ Lin, Ver Ploeg, Kasteridis, Yen, *The roles of food*, pg 949

¹⁰⁰ Ghosh-Dastidar, *Distance to Store*, pg 592

¹⁰¹ Campos, Doxey & Hammond, *Nutrition labels on pre-packaged foods*, pg 4

¹⁰² Galloway, *Canada’s northern food subsidy Nutrition North Canada: a comprehensive program evaluation*, pg 2

be established, others only ever accessible by air.¹⁰³ This lack of connection to the rest of the country leaves food prices remarkably higher than in southern communities.

The isolation contributes to food insecurity in two significant ways: first, access to fresh, unprocessed produce is minimal, second, cost of all food goods are considerably higher than the rest of the country. With consideration to fruits and vegetables, transportation presents a difficult problem to fix, as fresh produce often expires, and frozen goods are often unable to be kept at adequate food safe temperatures until delivery. This further increases the price of produce for northern communities above the already high food prices. Second, privatization of food shipment has supported significant increase in the price of all foods – making both healthy and unhealthy food inaccessible to much of the population.

The federal government has attempted to address the issue of Northern food insecurity in several ways over the years – first through the air drop program, and more recently with the use of Nutrition North – a subsidy program available to food retailers in select Northern Communities. This program provides a varying subsidy for different types of foods and different communities in order to help combat the high price of food.¹⁰⁴ However, the subsidy goes directly to retailers and there has been some concern raised over the quality of the programs monitoring program and cultural adaptability.

In order to bring meaning to the advice of Canada’s Food Guide, there must be an active push to increase the accessibility of food for all Canadians. First, this would mean addressing barriers to physical access. While in the long-term there needs to be permanent locations to buy

¹⁰³ Kenny et al., *Calories are cheap, nutrients are expensive – The challenge of healthy living in Arctic communities*, pg 41

¹⁰⁴ Galloway, *Canada’s northern food subsidy*, pg 5

groceries in all neighborhoods, short-term work in mobile markets has been explored in some communities with great success.¹⁰⁵ Second, the price of food must be addressed. Beyond the supply management system that supports dairy and poultry farmers, Canada has minimal agricultural subsidies.¹⁰⁶ However, as a member of the global market, we are impacted by the food policy of other states. For example, the US subsidies for agriculture cash crops suppress true costs of production, making the food with the most processing and least nutritional value the cheapest on the market.¹⁰⁷ This impacts the economy within which our own farmers are operating, keeping prices low for highly processed foods.

Work must therefore be done in order to reflect the true price of processed, nutritiously poor foods, while promoting whole, plant-based foods. This becomes difficult at a large scale due to WTO regulation of food and food goods, however support for small scale agriculture, urban agriculture and community agriculture all offer easy entrance points prior to taking on the global food system.¹⁰⁸ However, as researchers have predicted that the price of produce will continue to rise this year due to increased demand, it is essential that supply find a ways to meet this growing need for all communities.

While this is a very unpopular opinion, it may be time to end the supply management of dairy, poultry and eggs. Not to simply convert the markets to a free system, but to instead provide incentives to farmers to reinvent their farms with a focus on produce that provides a better option for both human and environmental health. However, considering the recent

¹⁰⁵ Mobile Food Market Halifax, *Welcome*

¹⁰⁶ Herman, *TPP Pressure on Canada*

¹⁰⁷ Clapp, *Food*, pg 28

¹⁰⁸ Clapp, *Food*, pg 86

renegotiation of NAFTA/USMCA, with special attention given to Canada's supply management, it is unlikely that these changes will be seen anytime in the near future.¹⁰⁹

Overall, it is essential to view agriculture, food and nutrition policy as different sides of the same coin. Where the current distinction between Agriculture and Agri-food Canada and Health Canada allows for incongruent policies, meaningful promotion of human and environmental health requires collective action across federal departments. As is highlighted above, Canada's Food Guides is simply one small component of Canadians food choices. As such, meaningful nutrition and environmental policy must engage with the ways we produce food – from what we choose to subsidize and support, to where we allocate levy advertising funds.

¹⁰⁹ van Kooten, *Reforming Canada's Dairy Sector*, pg 1-2

Chapter 6: Conclusion

With increased attention being paid to the impact of food and agriculture on human and environmental health, addressing what we eat and where it comes from is an important step in promoting a healthier population and state. Historically, the Canadian Food Guide has made recommendations based on input from lobby, conventional assumptions of health and perceived ease for consumers. However, over the years the guide was found insufficient to promote health in a meaningful way, and promoted foods known to have disastrous consequences for individual and environmental health. With the development of Canada's Food Guide 2019, we have seen a transition for the first time – away from lobby and special interests, towards health and sustainability.

Through exploring the history of Canada's Food Guide and the changes made in the recent 2019 update, this paper highlights where the power of agribusiness has impacted Canadian health policy through media and outreach, market power, and lobbying, and where other factors are needed to explain the shift in policy. Specifically, five factors are found to contribute to the shift in priorities - increased awareness of nutritional information, the rise of vegans and vegetarians, demographic and political economy trends, social pressure and bureaucratic changes, and consideration of diet co-benefits and costs.

However, while the new food guide should be applauded for the focus on whole, plant-based foods, there is still significant work that must be done at all levels of government in order to make such foods accessible to the masses. Without meaningful changes in agricultural policy to accompany the new dietary recommendations, the food guide is unlikely to reach its goal of promoting a healthier population and environment. This is due to systemic lack of physical and financial access to health food – or food insecurity. While providing accurate nutritional

education is a step in the right direction, meaningful shifts in consumer habits must be supported by shifts in agricultural policy that support the production of nutritious and environmentally sound foods. Without this, the changes in Canada's Food Guide are worth little more than the colourful paper they're printed upon.

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