# Review and Analysis of the Effect of Public Policy on Nutrition Policy Instruments in Canada: 1867-2006

By Kristin E. Anderson

A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfillment of the requirements of the degree of

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## THE UNIVERSITY OF MANITOBA

## FACULTY OF GRADUATE STUDIES

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#### **ABSTRACT**

Canada needs to consider innovative approaches to nutrition policy as increasing rates of obesity have been linked to population health problems and negative economic and environmental effects on society.

The history of Canadian nutrition policy from 1867 to 2006 was documented through descriptive historical research. Use of neopluralism and mainstream policy assumptions assisted in a phased analysis of structures and theories related to policy development, policy communities and instrument choice.

The results suggest that nutrition policy goals and related instrument choices can be categorized into four stages: 1867-1939, 1940-1979, 1980-2000 and 2001-present. The definition of food and nutrition problems varied historically between individual and societal failure consistent with shifts in public policy between welfare and neoclassical liberalism. Currently, nutrition policy instruments are biased towards neoclassical liberalism. The hypothesis, that consideration of more coercive policy instruments suggest a shift in the context for decisions related to nutrition policy was supported.

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#### **ABBREVIATIONS**

AAFC Agriculture and Agri-food Canada APF Agriculture Policy Framework

BMI Body Mass Index

BSE Bovine Spongiform Encephalopathy

BNA The British North America Act

CAFS Canadian Association of Food Studies
CCHS Canadian Community Health Survey
CCFN Canadian Council of Food and Nutrition
CFIA Canadian Food Inspection Agency
CIHR Canadian Institute for Health Research

CON Canadian Obesity Network

CPHA Canadian Public Health Association
CHST Canadian Health and Social Transfer Act
CSPI Centre for Science in the Public Interest

CDPAC Chronic Disease Prevention Alliance of Canada CIC Communications/Implementation Committee

DRI Dietary Reference Intake F/P/T Federal/Provincial/Territorial

FAO Food and Agriculture Organization

FPRB Food Prices Review Board

FTA Canada-US Free Trade Agreement

IOM Institute of Medicine

NIN National Institute of Nutrition

NPHS National Population Health Survey
NAFTA North American Free Trade Agreement

INMD Nutrition, Diabetes and Metabolism Institute, Canadian Institute for

Health Research

ONP Office of Nutrition Policy, Health Canada
OECD Organisation for Economic Development

RDA Recommended Dietary Allowances
RNI Recommended Nutrient Intakes
SRC Scientific Review Committee

UK United Kingdom US United States

WHO World Health Organization

#### **CHAPTER 1: INTRODUCTION**

#### I. Problem Definition

Canada needs to consider innovative approaches to nutrition policy as increasing rates of obesity have been linked to serious population health problems. In 2005, the Organisation for Economic Cooperation and Development identified that 46.5 per cent of the Canadian population was considered overweight or obese. We ranked between Japan with the lowest percentage (24.9 per cent) and the United States (US) with the highest percentage (65.7 per cent) of overweight or obese citizens (Organisation for Economic Co-Operation and Development 6). Obesity is a risk factor for the development of chronic diseases. More than 75 per cent of deaths in Canada are attributable to five chronic diseases: cancer, diabetes, cardiovascular diseases, kidney disease, and respiratory diseases (Chronic Disease Prevention Alliance of Canada).

In addition to health effects, the economic, social and environmental impacts of obesity on society are becoming evident. A 1999 study estimated that in 1997, the total direct cost related to treatment of and research into obesity in Canada was more than \$1.8 billion(Laird Birmingham et al. 483). It has also been noted that increased body weights and larger body sizes have increased costs to industry. In the US, it was calculated that the average American body weight gain over the last 10 years has required the consumption of an additional 350 million gallons of jet fuel (Dannenberg, Burton and Jackson 264). Further, the US Army has become concerned about finding new recruits fit enough to fight as a large percentage of young adults are over the military weight standards, for entry to

training (Nolte et al. 486-490). From the environmental perspective, current food production methods are resource intensive and based on industrial inputs such as fertilizers, pesticides and machinery linked to off-farm suppliers (Laidlaw 12-35).

The currently understood causes of obesity in western society can be categorized using the epidemiological triad of *host*, *agent* and *environment* as a framework to categorize sets of contributing factors. *Host* factors include characteristics of the general population that increase the risk of becoming obese such as age, gender or determinants of health. *Agent* factors are related to the food intake of individuals. It is well established that excess energy intake and suboptimal energy expenditure are linked to the development of obesity. *Environmental* factors provide the context for individual behaviour and include physical, economic, policy and sociocultural factors that promotes excess food intake and discourages physical activity(Canadian Institute for Health Information; Swinburn et al. 123-146; Young 392). The goals of nutrition policy vary according to the degree each set of factors is considered important in processes that contribute to views about obesity as a public policy problem.

To evaluate government's response to obesity, it is important to understand the history of Canadian food and nutrition policy. Food policy can be defined as production, marketing and consumption of food from an agriculture perspective. Nutrition policy can be defined as sectoral policies concerned with the food supply that have an explicit mandate to take the health and well-being of the whole population into consideration (Helsing S1-S3). This study begins with the assumption that liberalism, a central feature of public philosophy in Canada is

an important concept in understanding policy instrument choice in the area of nutrition. Terence Ball defines liberalism as the promotion of individual liberty by trying to guarantee equality of status and opportunity within a pluralist society (Ball, Terence et al 38-78). They note that a division within liberalism occurred in the latter half of the 19<sup>th</sup> century as a result of different reactions to the social effects of the Industrial Revolution. Welfare liberals argued that properly directed government policy can be a positive force for promoting individual liberty by ensuring that everyone enjoys relative equality and condition in life. More traditional classical and neoclassical liberals maintained that action of this sort would invest too much power in government. In his 1984 historical study of a range of policy areas, Manzer identified that Canadian public policy reflects elements of both types of liberalism and that policy discourse overtime has tended to favour one type over the other during particular periods (Manzer).

Following Confederation in 1867, a classical approach was evident in a Canadian social and economic policy framework that emphasized individual responsibility for pursuing one's own good. The move towards urbanization and industrialization in the early 20<sup>th</sup> century resulted in new social problems that placed increasing demands on government to use their legal powers to reduce risks faced by the population. These demands increased with the rise of the welfare state in the 1940s that generally involved debates regarding government responsibility for the provision of services, benefits and rights for citizens.

Treasury based policy approaches that redistributed income by financing services to veterans, the unemployed, seniors and families with children were

implemented and enhanced their ability to purchase adequate quantities of food. The consensus on the direction of the Canadian welfare state eroded in the 1970's as neoclassical liberals argued that government should have a decreased role congruent with an increased reliance on the free market for allocating goods and services (Ball, Terence et al 38-78; Rice and Prince).

Since September 11, 2001, the global economic situation has become more uncertain, due to a number of factors such as terrorism, the Iraq and Afghanistan wars, increasing energy costs and climate change. While the liberal goals of individual liberty remain strong, there is disagreement among observers on how to sustain and enhance this goal (Ball, Terence et al 38-78). Food system issues have become more strongly linked to sustainable environment practices and the need to address issues related to quality of the food supply(Caraher, Martin Coveney, John 591; Robertson et al. 1-385). It has been argued that the current efforts promoting healthy eating and daily physical activity with a focus on individual responsibility are ineffective in the face of the data indicating increased obesity rates and increased risk for the development of chronic diseases (McLaren et al. 1-33). Given this, the question of how public policy goals have played a role in food and nutrition policy historically and may play a role in the future is important.

# II. Theoretical Policy Literature Review

From a neopluralist perspective, Stephen Brooks and Lydia Miljan have identified the following assumptions regarding the process of policy making in Canada: 1) policy making is strongly influenced by organized interest 2) the

state is viewed as being essentially democratic; 3) individuals and organized groups are the relevant units for policy analysis; and 4) ideas are viewed as a major determinant of policy. They assume that pressure groups vary in the type and quality of resources they bring to efforts to influence government policy (those with the most resources often have the greatest influence). The role of the state is to define consensus within the mix of demands and resource capacities in a dynamic policy environment (Brooks and Miljan 22-49). As a result, policy discourse in Canada has been defined by Brooks and Miljan as "an unfolding tapestry of words and symbols that structures thinking and action constructed out of the multiple definitions (or denials) of the problem". This definition recognizes that policy agendas are influenced by social and economic conditions, agents of cultural learning (families, schools, mass media) and workplace experiences. In addition, problems and arguments that reach the policy agenda are largely determined by the resources and social power of the interests advancing them. Governments also can influence the discourse as a result of the information and financial resources at their disposal if they choose to deploy these resources (Brooks and Miljan 22-49).

In many components of public policy, long term participant groups with specific policy interests and agendas reside in policy communities and have become an important component of neopluralist policy research(Brooks and Miljan 22-49). Besides the Government of Canada and the Provinces, there are many participants in the food and nutrition policy community. Health professional groups such as Dietitians of Canada, the Canadian Pediatric Society and non-

governmental organizations such as the Canadian Diabetes Association, Heart and Stroke Foundation and Canadian Cancer Society attempt to provide food and nutrition technical expertise to the policy community. Agri-food organizations and industries involved in food production, distribution and marketing such as Food and Consumers Products of Canada, Canadian Council of Grocery Distributors and commodity groups also provide input to the discourse related to food production as well as supply and demand information. A concern has been raised by some researchers that the Agri-food industry may have more influence over government as a result of the systemic bias towards organized interests with greater social or material resources (Caraher, Martin Coveney, John 591; Koc and Dahlberg 109-116; Lang 335-343).

The stages model of the policy cycle - agenda setting, policy formulation, decision making, implementation and evaluation — conceptually breaks down the policy process into a series of sequential stages and provides a systematic approach to organizing complex relations (Hessing and Howlett). The result of policy discourse may be a decision about whether an issue makes the agenda and is discussed, whether new policy goals will be implemented and the type of instrument chosen to achieve those goals. Within Canada, governments have been reluctant to use highly coercive nutrition policy instruments since they may not be supported by the public on the grounds that they might be viewed as diminishing individual choice(Brooks and Miljan 172-198; Macdonald 1161-1187). However, the literature has indicated there has been less resistance to coercive

approaches if risk to the public can be confirmed, such as in reduction of neural tube defects in infants by food fortification with folic acid (Milio 413-423).

There is limited peer-reviewed literature regarding the linkages between social/economic policy and food/nutrition policy in Canada. The peer-reviewed literature on this topic is mainly found in international nutrition journals and is based on research conducted in the US, Australia, Europe and through the World Health Organization. The Canadian peer-reviewed literature is primarily descriptive and is focused on Health Canada initiatives (Anderson; Anderson; Raine S8-S13). This position is supported by the 2003 Canadian Institute of Health Research report outlining gaps in policy research on obesity and health in Canada related to the state of obesity in Canada; causal relationships among the various factors associated with obesity; and the impact of upstream interventions on obesity(Canadian Institute of Health Research). This situation is beginning to change. For example in 2006 Aleck Ostry released Nutrition Policy in Canada 1870-1939, which described early national nutrition policy and provided explanations for changes over time. Ostry investigated three basic themes in the history of nutrition policy in Canada: adulteration and evolution of a system of food safety, policies on breastfeeding, and scientific and policy developments leading to a national dietary standard. He identified four sub themes that contributed to discourse related to each theme: the safety of cow's milk, the increasing role of the medical profession in dispensing expert nutritional advice, the role of industry in shaping nutrition education and policy, and changing dietary and health status of the Canadian population. In the area of food safety, he notes

that the disjointed constitutional and organizational structure of public health agencies with responsibility to ensure food safety made it difficult to develop a coordinated strategy to improve the quality of the food supply. This in turn, limited efforts to address infant mortality in the 1920's as one solution to this problem given the reduction in breastfeeding, was to improve the quality of the national milk supply. Although the federal government made efforts to slow or stop movement away from breastfeeding, physicians and women preferred bottle feeding. Further, when vitamins and minerals were discovered in the 1920's. industry and the Department of Agriculture were supportive of vitamin-based health claims, while the Department of Health viewed the addition of vitamins to foods as adulteration. Given the disjointed nature of public policy agencies Ostry notes that it was the success of social reformers in obtaining more money for the unemployed that was key to reducing the high proportion of income that poor Canadians families spent on food in the 1930's. Despite this, many nutrition scientists of the period continued to assume that malnutrition was related to individual failure and resorted to 'blame the mother' strategies rather than supporting initiatives to increase incomes of the unemployed. The need for standards to ensure the efficiency of the unemployment insurance system under development was identified as a catalyst to form the national nutrition committee and develop dietary standards to determine appropriate food allowances (Ostry 143). In May 2007, Ellen Vogel and Sandra Burt presented a case study describing stakeholder convergence on nutrition policy: a cross-case comparison of case studies in Costa Rica, Brazil and Canada. Nutrition policy formulation and

approval processes aimed at preventing and controlling chronic noncommunicable diseases at the country-level were examined. They identified that within Canada, there is strong evidence that the nutrition labelling policy making process in the late 1990s and early 2000s was complex, often chaotic and unpredictable, hampered by a shortage of human and financial resources, and negatively affected by policy silos. In spite of formidable barriers and tight timelines, a high degree of stakeholder convergence developed amongst the policy community that included academics and key representatives of trade associations; advocacy and consumer organizations; professional associations; health groups; topic experts; and other federal government departments. They suggest that convergence was due to three main factors: (1) a common health policy frame adopted by all participants in the consultative process; (2) the emergence of strong champions within the federal government's health policy sector; and (3) the implementation of an innovative policy development process overseen by an intersectoral Nutrition Labelling Advisory Committee (Vogel and Burt 1-24).

### III. Research Questions

Given the lack of post World War II research in Canada, in particular regarding upstream interventions in the form of public policy, there is a need to develop a knowledge base to better understand the discourse within the nutrition policy community, rationales for the types of nutrition policy instruments implemented and impacts of these policy decisions. Although a range of possible research questions are available, the following four questions are addressed in this thesis:

- 1. What has been the history of nutrition policy in Canada since 1867? How has the history of nutrition policy contributed to the current structures and policy instruments used in Canada?
- 2. How has the discourse among the nutrition policy community been structured since 2001? Have changing conditions opened a discourse related to shifting established policy goals?
- 3. How have organized interests/pressure groups been involved in the development of nutrition policy since 2001? How do certain members of the policy community see the future direction of nutrition policy in Canada?
- 4. What types of nutrition policy instruments have been considered or discussed by the Government of Canada since 2001? What types of instruments have been implemented and how has their impact been viewed in the literature?

The research covers the time period from Confederation in 1867 to January 2006 in order to provide a description of the structures and agents historically involved in nutrition policy. This will assist in defining the broader context of public policy development in Canada and variables important when responding to questions 2-4. A special focus is placed on the period after 2001 which coincides with the onset of global and societal shifts resulting from the September 11 attacks.

## IV. Hypothesis and Argument

Evidence of the need for nutrition policy reforms in Canada is building. This research is timely as the rates of obesity and chronic diseases continue to increase which suggest that current nutrition policy instruments and approaches are limited in their goal of promoting the health of Canadians (Organisation for Economic Co-Operation and Development 6; Statistics Canada). The research hypothesis is that consideration and/or implementation of more coercive policy instruments indicate a shift in the context for decisions related to nutrition policy. While increased government activity in the area of nutrition may violate the rights

of individuals from a neoclassical liberal perspective, reducing individual choice, such as choice of foods, may be necessary in order to gain freedom in another area (i.e. reduced risk of disease due to guarantees of food quality and environmental support for healthy food choices).

The research is innovative as it is assessing nutrition policy from historical, political and economic perspectives. The research uses mainstream assumptions to guide the method such as neopluralist theory, stages model of policy development and theory regarding the classification of policy instruments (Brooks and Miljan 22-49; Hessing and Howlett). It is hoped that the results will contribute to the current discourse related to the direction and content of policy formulation in response to obesity rates.

## V. Methodology and Theoretical Framework

Earl Babbie describes the three purposes of research as exploration, description and explanation. Exploratory research is done to satisfy the researcher's curiosity and desire for better understanding, test the feasibility of undertaking a more carefully study and develop methods to be employed in future studies. Descriptive research focuses on describing situations and events while explanatory research focuses on explaining things (Babbie 82-108). This research combines descriptive and exploratory research, through the application of concepts from the general public policy discourse of neopluralism to contribute to possible explanations for choice of nutrition policy instruments and to develop a method that could be used in future research.

Pluralist theory generally views economic factors, ethnicity, language, religion, gender, region and ideology as important contributors to public policy discourse. A systematic form of pluralism common to Canadian public policy research, neopluralism is employed as a framework for the research. Neopluralism assumes that the policy process is characterized by group competition, but the competition is more structural and less dynamic than classical pluralism (Held 199-232). Lindblom argues that policy making in capitalist societies is imprisoned by the fact that a market economy operates on the basis of inducements such as incentives and disincentives to induce business to behave in ways desired by policy makers. He also argues that business is a powerful interest, because of its direct influence on the economy. If business perceives that state action may be harmful to their interests, they can react by cutting back on production, deferring or cancelling new investment or shifting production to other countries. This triggers a change in the environment which could result in increased unemployment or an economic slowdown, which punishes government (Brooks and Miljan 22-49). The following sections identifies the more specific methods used by researcher to answer each of the research questions.

Question 1: What has been the history of nutrition policy in Canada since 1867? How has the history of nutrition policy contributed to the current structures and policy instruments used in Canada?

A descriptive historical research approach was used to document and understand the history of Canadian nutrition policy within the context of public policy. This research collected information about economic policy, the policy

community (structures and people) and nutrition policy instruments developed within the following four time periods: 1867-1939, 1940-1979, 1980-2000 and 2001-2006. This historical information was gathered from national and international scientific literature; searching the Internet for pertinent documents; and reviewing Government of Canada documents. Use of this type of secondary data provides freedom from reactive measurement, the material is stable, can be reviewed repeatedly over a long span of time and it contains exact details about many events and settings (Creswell). The researcher objectively evaluated the data through external and internal criticism as historical sources of information may not have been written or developed for research purposes. External criticism assesses the authenticity of the data. Internal criticism evaluates the worth. truthfulness and accuracy of the data. Gay describes four factors that were considered to determine the accuracy of documents: knowledge and competence of the author; time delay between event occurrence and recording of the factors; bias and motives of the author; and data consistency (Gay and Airasian).

# Question 2: How has the discourse among the policy community been structured since 2001? Have changing conditions opened a discourse related to shifting policy goals?

The documented history of government public policy approaches and nutrition policy was analyzed using Brooks and Miljan's three main components of the policy discourse. They indicate that the discourse involves the scope of public policy, the choice of policy instruments and the distributional dimensions of public policy. These components provide the basis for comparing the patterns of public policy and understanding the course of historical change within a society (Brooks

and Miljan 22-49). The first component of the discourse is related to the scope of public policy which has evolved over the years. Governments are involved in maintaining social order, defence and facilitating economic development as well as education, health care, income support for segments of the population, broadcasting and much more. Today, over half of federal government's spending is on transfer payments to provinces, organizations, individuals, and families and reflects government's redistributive role in society. Within a liberal context, the redistributive function of the state and the focus on the collective solutions to social and economic problems have been challenged by those who prefer market solutions and believe that personal dignity depends on one's own efforts. There are differences over the nature of these economic, social and cultural policy goals and the appropriate scope of government activities to achieve the overall goals of liberalism (Brooks and Miljan 22-49).

The second component of the discourse is the type of policy instrument selected to achieve the identified policy goals. Instrument selection often depends on how things have been done in the past and by new ideas or beliefs that may or may not be well founded. A list of nutrition policy instruments developed within Canada was compiled and includes details such as year, type, goals and where possible impacts. Taxonomy developed by Christopher Hood who proposed that policy makers used four broad categories of governing resources was used. He argued that governments confront public problems though the use of the information in their possession as a central policy actor (nodality), their legal powers (authority), their money (treasury) or the formal organizations available to

them (organization). (See Appendix 1) These categories are useful as they can distinguish between changes in policy tools within and between categories (Hood; Howlett and Ramesh 3-24). Policy instruments not implemented were also documented to assist in understanding the discourse and the potential effect of the type of liberalism in play.

The third component is related to the distribution dimensions of public policy such as who benefits and who pays. Government taxation and spending policies affect the distribution of wealth within Canada, although a consensus regarding how much wealth is transferred and to whose advantage has not been achieved. The Canadian government redistributes income to individuals in the form of income security; to geographical regions through equalization payments to the less affluent provinces; to businesses in economically depressed regions through assistance programs; and producer and occupational groups through subsidies and programs. This aspect of the policy discourse was assessed through the identification of the beneficiaries of public policy and types of instruments implemented (Brooks and Miljan 22-49).

Question 3: How have organized interests/pressure groups been involved in the development of nutrition policy since 2001? How do certain members of the policy community see the future of nutrition policy in Canada?

Societal and state participants in nutrition policy development were documented in order to understand their roles and influence within the policy community. The concept of a policy subsystem as described by Hessing and Howlett was used to classify the different sets of actors involved in policy making

and the nature of their interaction. Policy actors can be divided into at least two categories based on an assumed inequality of resources among actors in the policy sub-system. In one category, actors are bound together by common material interests that facilitate ongoing interactions about a general framework of policy ideas. This is referred to as the *policy network* and could include actors such as government, food production, distribution and marketing groups and professional nutrition organizations. In the second category, the material interests that promote regular contact may be lacking, but common policy knowledge creates a subset of significant policy actors involved in the discussion. This is referred to as the attentive public, and could include non-governmental agencies. scientists or health providers. Actors in both categories constitute what is generally termed a policy community in a particular policy field. The stages of the policy cycle - agenda setting, policy formulation, decision making, implementation and evaluation – were used to organize and classify the activities of the policy communities and state structures (Hessing and Howlett). As it is beyond the purview of this research to analyze the entire policy community, the primary focus will be to understand the role of societal actors such as health professional associations, non-governmental organizations and scientists. Actors with a market interest such as the food industry were identified but the analysis was limited.

Question 4: What types of nutrition policy instruments have been discussed by the Government of Canada since 2001? What types of instruments were implemented and how has their impact been viewed in the literature?

Many policy instruments are available to policy makers to address problems and achieve desired policy ends. The taxonomy of governing resources developed by Hood was also used by Douglas Macdonald as a framework for environmental policy instruments. Macdonald suggests that an assessment of the "degree of coerciveness" should include traditional meanings of physical force and due process as well as the extent to which a policy instrument may not be legitimate coercion because it infringes on social values (Macdonald 1161-1187). A gap in Macdonald's work, if we have two views of liberalism, is that that there may also be two views of coercion. Early liberals thought of freedom as an absence of restraint. T.H. Green thought that there was more to freedom than this, and that freedom was the power or ability to do something. Welfare liberals like Green believed that society acting through government should establish public schools and hospitals to assist the poor and powerless members of society to become freer. Neoclassical liberals disagreed and thought these types of policies robbed individuals of their freedom by forcing them to transfer their property through taxes to others. When thinking about policy instrument choices, whether a policy is perceived as coercive or not may depend on the underlying value perspective of welfare or neoclassical liberalism. The policy instrument analysis also includes further classification into whether they are consistent with a welfare liberal perspective and exhibit positive freedom defined as the ability to realize or achieve our ideal or "higher" selves in cooperation with others or a neoclassical liberal perspective and exhibit negative freedom defined as policies

that rob some individuals of their freedom by forcing them to transfer their property through taxes to others (Ball, Terence et al 38-78).

## VI. Analysis/Interpretation

The theoretical frameworks and assumptions described above will assist in the analysis of the structures and theories related to public policy development and instrument choice in the area of food and nutrition. The analysis was done in three phases. The first identified how food and nutrition policy fit within the broader discourse of liberalism during four stages: 1867-1939, 1940-1979, 1980-2000 and 2001-January 2006. Liberalism as an ideology can explain or evaluate why things are the way they are, with particular attention to social, economic and political conditions. For liberals, these explanations are typically individualistic. Social conditions are the result of individual choices and actions. Conditions are considered good if the individual is free to do as he or she wishes without harming or violating the rights of others (Ball, Terence et al 38-78). The different approaches to achieve nutrition policy goals during welfare liberalism and neoclassical liberalism are described.

The second phase describes the influences of neopluralist policy assumptions, the concepts of the discourse and participation of policy communities on the choice of nutrition policy instruments. Through the analysis the range of policy options and limitations or barriers to policy development were explored by asking the following questions:

Why were certain instruments or combination of instruments chosen or not?

- What approach dominates the outcome of the stages of historical discourse? (welfare or neoclassical)
- To what extent are current activities designed to promote an individual or collective approach? (welfare or neoclassical)
- Are the current approaches consistent with our understanding of effectiveness of public health and obesity prevention interventions?
- Is the balance of nutrition policy instruments developed or implemented adequate to promote healthy population weights?
- Given the increasing rates of obesity, are voluntary approaches sustainable? Is there a new consensus for nutrition policy emerging?

The analysis was assisted by identifying sub themes common to the historical stages. The first sub theme was related to the use of nodality instruments, such as provision of information in the form of consumer and health professional guidelines or establishment of specialized groups to assist in nutrition policy. A second sub-theme was related to instruments used or suggested to ensure Canadians had adequate quantities of food to eat. The third sub theme was related to agriculture policies such as food safety, food production or trade, as the issues varied throughout history. The last sub-theme which describes instruments related to food fortification and nutrition labelling, was only found in the last three time periods. There is some overlap between the sub-themes as they are interrelated and policy instruments may have been used for multiple purposes.

The third phase identified options for nutrition policy for the future. These options were based on a review of the policy alternatives being suggested within Canada currently and as well as a review of policies in other countries.

The public policy context, discourse within the policy community and types of instruments discussed are described for three historical time periods: Chapter 2 focuses on 1867-1939, Chapter 3 on 1940-1979 and Chapter 4 on 1980-2000. Chapter 5 turns to the current policy discourse between 2001 and 2006. Chapter

6 answers the research questions by assessing the trends from the previous three stages to evaluate the current stage and speculating why policy instruments may or may not have been implemented. Suggestions for future nutrition policy in Canada based on review of research and food and nutrition policies in other countries are summarized to assist in identifying nutrition policy instruments that would help Canadians achieve and maintain good health. Recommendations for future research are also provided.

#### **CHAPTER 2: NUTRITION HISTORY AND ANALYSIS: 1867-1939**

This chapter describes the public policy discourse in Canada between 1867 and 1939. This time period included multiple social, economic and military events produced as a result of the establishment of the Dominion of Canada in 1867, World War I (1914-1918), and the "Great Depression" of 1929 to 1939. The first section describes the scope of government policy, the nutrition policy instruments developed and the distributive dimensions of the state. The second section assesses how nutrition policy during this period can be linked to the broader liberal discourse in Canada.

## I. Policy Context

Confederation was achieved when Queen Victoria gave royal assent to the *British North America Act*<sup>1</sup> (*BNA Act*) in 1867. While the *BNA Act* gave Canada more autonomy than it had before, there was still a connection to the United Kingdom (UK) for foreign policy and constitutional amendment through the Commonwealth. Federal-provincial relations were regulated by both the written Constitution and unwritten conventions that have developed over time (Brooks and Miljan 22-49). In the area of health and social policy, the federal government was allocated jurisdiction over marine hospitals and quarantine while the provinces were to establish, maintain and manage hospitals, asylums, charities and charitable institutions. From 1867 to 1919, health related concerns were addressed by the Department of Agriculture (Chenier 1-11). Provinces were assigned responsibility for the provision of welfare and services were usually

<sup>&</sup>lt;sup>1</sup> The name of this Act was changed to *The Constitution Act* in 1982.

provided by municipalities following the principles of British "Poor Law". Two principles of "Poor Law" described how the state responded to the indigent. The first was the principle of less eligibility which identified that the state should never provide more than what the lowest paid worker could hope to earn. The second was the principle of perceived needs which identified that people may be indigent related to their choices (the unworthy poor) or related to failures of society and its economic system (the worthy poor). The first was in keeping with the individualism common in the 18<sup>th</sup> and 19<sup>th</sup> century (Turner 80-95). The second appears to allow welfare liberal assumptions a limited role in understanding poverty.

During this time, the direction of economic policy in Canada was guided by the main goal of national development. This included developing the natural resources of the nation by extending the geography, creating secondary industries and incorporating the unoccupied territory of the West in to the nation. Agriculture was a useful instrument to develop land, absorb new populations and assist in population growth (Drummond, Anderson and Kerr 92). Sir John A. MacDonald put forth an ambitious National Policy in 1879, an economic development strategy designed to favour Canadian industries and to promote consumer confidence. Although initially seen as protectionist, the Canadian Pacific Railway, the settlement of the Prairies, the development of ports, and financial resources for a sea link to support the export of Canadian goods were included as part of the National Policy. The National Policy remained the main economic policy until 1935 (Library and Archives Canada.).

Between 1881 and 1901 the population of cities in Central Canada nearly doubled and new cities grew out of small towns in the West. With this growth emerged the classic problems of this time period: pollution, crowding, inadequate housing, poor sanitation, inadequate roads and water supply, poor working conditions and increased incidence of disease (Rice and Prince). At this time, the major health threats were infectious diseases related to poor hygiene, contaminated food and poor sanitation such as typhoid; diseases associated with poor nutrition such as pellagra and goiter, poor maternal and infant health; and diseases or injuries associated with unsafe workplaces(Centres for Disease Control and Prevention 905-913).

In response to the identified health concerns, public health planners in Canada organized in a manner similar to the UK and gave policy attention to sanitation in the form of food inspection, water treatment, waste disposal, and communicable disease control. The prevention of illness, disability and dependency were the core of new provincial public health programs as well as factory inspection measures regarding working conditions. Beginning with Ontario in 1882, each province passed Public Health Acts establishing the basic administrative framework and gathering the different regulatory functions together. Municipal, county or district health boards were also established in many provinces during the 1880s and 1890s (Cassel 276-312; Rice and Prince). The advances made in public health in the 1890s were attributed to the combined effort of health professionals, the voluntary community and the municipal and provincial Departments of Health (Chenier 1-11). Science was also a contributing

factor as Louis Pasteur's germ theory focused on explaining diseases in which contaminants contained in food and water were considered to be disease vectors (Centres for Disease Control and Prevention 905-913).

Food supply was identified as a concern by all levels of government. For example, in 1875 sections of the *Inland Revenue Act* protected against the adulteration of food and drink. In 1884, a separate Adulteration Act was established that expanded the definition of adulteration and is considered to be a precursor to the Food and Drug Act. (Cassel 276-312). In the late 1800s and early 1900s, an increased understanding of infectious disease and its transmission in an increasingly urbanized and industrialized environment triggered a public health reform movement. Jay Cassel identified two different types of reform movements that emerged during this time. The goals of the first type attempted to reaffirm and secure old social and moral values, usually defined by Anglo-American attitudes and the Protestant religion. The second type also had a desire to restore order and a sense of community to an increasingly complex urban society, but instead emphasized reordering the affairs of society. Public interest in reform was influenced by American concepts such as efficiency and order. The argument that was presented was that ill health was a significant drain on national economic resources and exceeded the cost of public health measures that would prevent sickness (Cassel 276-312).

During the late 1800s and early 1900s there was also tension between a Canadian tradition of looking to government to resolve certain problems (particularly economic development) and a dislike of government involvement in people's lives. The tension was informed by the liberal concepts of 'personal' and 'private' spheres. To many, public health regulation implied government intervention in 'private' activities. Physical well being was seen as a personal matter and illness was often seen as a personal failing. Many observers noted that illness and death were associated with certain kinds of environments, especially poor hygiene, overcrowding and poverty which all were considered as personal failure (Cassel 276-312).

The science of nutrition advanced in the early 1900s when Casmire Funk proposed the vitamin theory of disease, that the absence of specific factors from food could also contribute to the development of disease (Schneeman S5-9). It was increasingly recognized that vitamins and minerals found in food were required to sustain life and prevent disease. After 1912, in reaction to UK research on bovine tuberculosis, pasteurization of milk was made compulsory, first in parts of Ontario and gradually across Canada during the 1920s (Cassel 276-312).

On August 14, 1914 Britain declared war on Germany and Canada joined the fighting in World War I. At recruiting stations, medical examinations indicated that many potential recruits were in ill health and displayed high rates of tuberculosis and sexually transmitted diseases. Military and medical authorities were also surprised at the level of malnutrition and the lack of fitness of recruits

(Cassel 276-312; Ostry 293-294). The demands of World War I also caused an intense short term need for food. In 1914, the federal government passed the *War Measures Act* that allowed the government to assume sweeping emergency powers during "war, invasion, or insurrection deemed necessary or advisable for the security, defence, peace, order and welfare of Canada." One resulting action was to establish the Office of the Food Controller by an Order-in-Council on 16 June 1917. The Food Controller was empowered to investigate the quantities, location, ownership and sources of supply of any food articles used by Canadians and to make regulations for the prices, storage, distribution and sale of food; food conservation; and the manufacture of food. The Food Controller also formed a Milk Committee, which recommended consolidating the dairy industry to increase economic efficiency and to make it easier to organize public health inspection (Ostry et al. 171-185).

The Office of the Food Controller was replaced in February 1918 by the Canada Food Board, which reported to the Governor-in-Council through the Minister of Agriculture. The Canada Food Board was created with the primary objective of increasing food exports to the UK. A series of posters appeared addressing Canada's export opportunities, urging the population to voluntarily go without, such as on "meatless Fridays" and to increase local production of food through gardening(Archives of Ontario; Department of Agriculture 2).On November 11, 1918, Armistice with Germany ended fighting and the war. In 1919, Canada signed the Treaty of Versailles, which formally ended the war and

joined the newly-created League of Nations (The League) as a member state in its own right (Morton).

#### **Interwar Years**

A number of new federal social ministries were created following World War I, specifically Departments of Immigration and Colonialization in 1917, Soldiers Civil Re-establishment in 1918 and Health and Welfare in 1919. Financial benefits for veterans and their families were introduced through the establishment of *The Pensions Act* of 1919 (Rice and Prince). The federal Department of Health and Welfare consolidated health services and took on a coordinating role to standardize programs across the country by providing conditional grants to the provinces (Cassel 276-312). Within Health, the newly established Food and Drugs Division took over the administration of the Adulteration Act. In 1920, the Food and Drugs Act superseded the Adulteration Act to protect consumers from adulteration and fraud in the sale of food and drugs (Health Protection Branch, Health and Welfare Canada 46). In 1921, the Division of Child Welfare in the Federal Department of Health and Welfare developed the nation's first dietary guidelines encouraging women to breastfeed infants less than nine months and to feed cow's milk to infants over nine months. The purpose of these guidelines was to reduce infant mortality rates and they were disseminated through a consumer education tool, Canadian Mother's Books (Ostry et al. 171-185).

During the 1920s and 1930s, the public requested increased federal government involvement in health and welfare matters, although law it did not

have power to do so from a constitutional perspective. In 1926, the federal government unsuccessfully tried to find a way to bypass Constitutional barriers by passing enabling legislation that allowed for cost-sharing between the federal and provincial governments to fund the *Old Age Pension Act* (Turner 80-95). In 1931, Canada obtained almost full autonomy within the British Commonwealth with the Statute of Westminster. The provinces of Canada were not able to agree on a constitutional amendment formula; therefore, this power remained with the British Parliament (Brooks and Miljan 22-49).

When the Great Depression arrived in Canada in the early 1930s, unemployment, bankruptcy, foreclosure and poverty were understood to be individual and private matters, with families, churches, charities and municipalities providing primary supports (Bradford 193-215). It was estimated that between 1929 and 1933 Canada's Gross National Expenditure declined by 42 per cent. By the latter year 30 per cent of the labour force was unemployed and 1 in 5 Canadians were dependent upon government relief such as social assistance or relief camps for survival. Although there were no official accounts of starvation, scurvy and other deficiency diseases during this time, cases were commonly reported by medical authorities (Struthers 2). In 1935, a Liberal Prime Minister was elected replacing a Conservative government that had been in power for 5 years.

Between 1925 and 1935, The League examined problems relating to food and nutrition, especially those resulting from the economic crisis of 1929. The Secretary General called attention to the need for national dietary standards;

improved diets for school children and special need populations; and for methods to evaluate nutritional status. In 1935, The League released *International Dietary Standards* with the goals of improving national diets as well as stimulating agricultural production and international trade (Harper 509-537). Sir John Boyd Orr, Director of the Rowett Research Institute in the UK built on the new science of nutrition through research and publication of his 1936 study *Food, Health and Income*. By surveying family budgets in Britain, he found that only those with income levels above that of 50per cent of the population had optimal, health promoting diets. Orr described this is as the "first attempt to get a picture of the food position of the country showing the relationship of income, food and health" (Orr). This report formed the basis of the British food-rationing system during World War II.

In response to The League's 1936 Report *Relation of Nutrition to Health, Agriculture and Economic Policy*, the Government of Canada established the

Canada Council on Nutrition<sup>2</sup> to advise the Minister of Pensions and National

Health on nutrition matters. Early activities included dietary surveys, food

composition analyses and research. In 1938, *Canadian Dietary Standards* were

established and defined the amount of energy and essential nutrients considered

adequate, on the basis of scientific data, to meet the physiological needs of

practically all healthy Canadians (Morrell 49-55).

In 1936, a new role for liberal governments in the area of economic policy was put forward by John Maynard Keynes in *The General Theory of Employment Interest and Money.* Drawing on welfare liberal discourse in the UK, Keynes

<sup>&</sup>lt;sup>2</sup> Membership included scientists, medical experts and welfare workers.

argued that governments should use their taxing and spending powers to maintain a healthy economy. Keynesian economics postulated a direct link between social policy and economic development: although each area had its own policy goals, achievement in the one area was believed to have positive outcomes in the other (Ball, Terence et al 38-78). In 1937, a Royal Commission on Dominion-Provincial relations (the Rowell-Sirois Commission) was appointed to re-examine the economic and financial basis of confederation and distribution of legislative powers. The report argued for the establishment of national standards for social programs and system for equalizing the fiscal capacity of the provinces, consistent with Keynesian views (Rice and Prince). World War II began in September 1939 when the German Armies invaded Poland. Britain France and Canada were the first three countries to enter the war to support Poland.

Another research advance was related to the application of epidemiology to the study of nutrition through surveys and statistical analysis (Acheson 131-138). The Canadian Dietary Surveys (1939-1940) provided information about the nutritional status of Canadians living in urban areas. The results were summarized as follows: "Only 40per cent of the people studied were adequately nourished, 40per cent were in a border-line state, and 20 per cent were seriously undernourished." The three main causes of malnutrition were identified as 1) economic as people could not afford an adequate diet; 2) educational as people did not know enough about nutrition; and 3) technical as people did not apply what they knew about nutrition(Pett 565-570).

### II. Analysis

During this period, the signing of The BNA Act allowed Canada to increase its independence from the UK parliament in Westminster by establishing its own governing structures and functions. Economic policy was based on a mix of classical and neoclassical liberal ideas emphasizing individual responsibility and a limited role for government (Howlett and Ramesh 87-117). Social policy approaches were adapted from the British "Poor Laws" and varied between policies based on the principles of perceived needs whereby poverty was caused by failure of the individual or society (Turner 80-95). The approaches of the two different schools of social reformers during this period seem to reflect the emergence of the ongoing debate between welfare liberalism and neoclassical liberalism that is part of our current debate (Ball, Terence et al 38-78). Food policy shifted from concern about the safety and quality of the food supply to concerns related to the inability of some Canadians to meet basic needs by purchasing enough food. By the end of this time period, discontent with neoclassical liberalism was evident and the Canadian government was considering implementation of a Keynesian approach to economic and social policy.

Table 1 summarizes the policy instruments affecting nutrition implemented between 1867 and 1939 using Hood's categories of governing resources (Hood). As Canada was newly established, the purpose of many policy instruments was to develop a federal government infrastructure. Policy instruments were established in all categories, contained both welfare and neoclassical liberal content and based on approaches used in the UK and US.

Table 1: Policy Instruments affecting Nutrition during 1867-1939			
Policy instrument categories	Welfare Liberal Content (Positive Freedom)	Neoclassical Liberal Content (Negative Freedom)	
Nodality	<ul> <li>Established</li> <li>Canada Council on Nutrition 1936</li> <li>Canadian Dietary Standards 1938</li> <li>Canadian Dietary Surveys 1939-1940</li> </ul>	<ul> <li>Market responds to consumer demand</li> <li>Dietary guidelines for infants over the age of 9 months 1921</li> </ul>	
Treasury	<ul> <li>Municipal physicians</li> <li>Conditional grants to provinces for health services 1919</li> </ul>	<ul> <li>Charity provided by families, local voluntary organizations, good neighbours, churches or religious orders</li> <li>Establishment of income supports for veterans based on means testing 1918</li> <li>Relief camps during depression</li> </ul>	
Authority	<ul> <li>BNA Act 1867</li> <li>Provincial Public Health Acts</li> <li>Inland Revenue Act 1875</li> <li>Adulteration Act 1884</li> <li>War Measures Act 1914</li> <li>Pensions Act 1919</li> <li>Updated Food and Drug Act 1920</li> </ul>		
Organization	<ul> <li>Established</li> <li>Office of Food Controller 1917-1918</li> <li>Canada Food Board 1918- 1919</li> <li>Department of Health and Welfare 1919</li> </ul>	Market infrastructure	

The analysis now turns to three sub themes evident in the policy discourse of this period, nodality instruments introduced to address nutrition; the discourse related to adequate quantities of food related to wartime and depression; and

approaches to address food safety. (Note: food fortification and nutrition labelling were not included as these were not concerns during this period.)

### **Nutrition (Nodality)**

In the late 1800s, diseases associated with malnutrition such as pellagra or goiter, poor maternal and infant health were common. The discovery of the requirement of vitamins and minerals for health in the early 1900s allowed the development of policy solutions to address health promotion and disease prevention. The establishment of the Department of Health in 1919 assisted provinces to build their capacity to deliver health services. Infant nutrition became a focus of nutrition policy in 1921 with the release of dietary guidelines for infants with the goal of reducing infant mortality rates.

During the interwar years, The League influenced the choice of nutrition policy instruments by suggesting that all nations needed national dietary standards, improved diets for children and methods to evaluate nutrition status. By way of response, the Canada Council on Nutrition was established in 1936 to ensure the Minister had expert advice on food and nutrition issues. New scientific understanding of dietary requirements and an improved ability to recognize disease related to food intake assisted the Council to develop Canadian Dietary Standards in 1938. Government also began to gather information regarding the food intake of Canadians through Dietary Surveys which identified severe or borderline malnutrition in 60per cent of Canadians. These three actions provided a foundation to further develop nutrition policy to improve the health of Canadians.

In summary, as understanding of the impact of nutrition on health and new scientific knowledge increased, nutrition became part of the government agenda. The Dominion government began to establish an organizational capacity to better understand food and nutrition issues. A national Advisory Committee was appointed to provide leadership on food and nutrition and assist in policy formulation and implementation. In addition, surveillance data began to collected to better define the problem.

# **Nutrition (Adequate Quantities)**

Medical exams at recruiting stations during World War I identified that many Canadian men were in poor health. Authority instruments such as *The War Measures Act* increased the power of the government and enabled the passing of coercive policies for national security reasons. During the war, Canadians learned to live with increased government control and involvement in their daily lives as food and fuel shortages led to "Meatless Fridays" and "Fuelless Sundays" (Morton). The Food Controller and Canada Food Board established between 1917 and 1919 promoted an adequate food supply for Canadians at home and overseas by limiting the consumption of certain types of food such as meat and promoting gardening and food preservation. The federal government has become alert to the broad national security implications of poor health in the general population (Ostry et al. 171-185; Pett 1-5).

After World War I, the sponsorship and control of social care began to shift from private and charitable sectors to state sectors, increasing the involvement of government in social policy (Rice and Prince). Food shortages and reduced

incomes for farmers occurred during the Depression. The depression introduced the concept that public policy had responsibility to promote agricultural income and stability as well as expansion and productivity (Drummond, Anderson and Kerr 92). Previously, unemployment, bankruptcy and poverty were seen as an individual and private matter, therefore family, local and private charities were seen as solutions to address poverty and hunger. After the Depression,

Canadians began to realize that poverty and unemployment were not related to individual actions but to failure of economic and social policies. International influences such as The League and Boyd Orr identified a relationship between food, health and income which suggested that individuals with higher income also had better health.

In summary, war and depression altered the food supply and reduced access to food resulting in malnutrition in a large number of Canadians. There was a shift in thinking about causes of poverty, from failure of the individual to failure of society, opening the door for the potential to consider different policy instruments as solutions.

# Agriculture (Food Safety)

In the late 1800s, a contaminated food and water supply were major causes of infectious disease and were seen to be caused by failure of society. Government chose to use authority to regulate the food and water supply. *The Inland Revenue Act (1875)* and *Adulteration Act (1885)* focused on protecting the consumer from fraud due the deliberate adulteration of food. Provinces also began to pass *Public Health Acts* to develop an administrative framework to

implement regulations focused on preventing illness and disability. Pasteur's germ theory assisted in identifying the sources and characteristics of food and water borne disease. This assisted in identifying control techniques such as hand washing, sanitation, refrigeration, pasteurization or pesticide application, which reduced the rates of infectious disease (Centres for Disease Control and Prevention 905-913). In 1920, the Food and Drug Act superseded The Inland Revenue Act and the Adulteration Act and responsibility for administration was moved to the Department of Health signalling a new focus on health protection (Ostry 143).

#### III. Conclusion

Canada was a new country that required the development of a government, economy, land settlement and population expansion in order to grow and be successful. In the late 1800s, food and nutrition related health concerns focused on the relationship between infectious disease rates and a contaminated food supply (Dubois 135-167). Regulation of the food supply through use of authority and advances in technology such as pasteurization of milk reduced many concerns about this source of disease. The problem of malnutrition was initially defined as an individual responsibility. After the depression and with new ideas from Boyd Orr, Canadians began to realize that poverty and unemployment were less related to individual failure and more related to failure of economic and social policy. Malnutrition became linked to distributional issues such as low wages and unstable unemployment resulting in less money for food or limited access to food because of food shortages (Orr; Ostry 143). The food and

nutrition agenda expanded to include adequate quantities of safe food for all Canadians to ensure a well nourished and healthy population and military to support the war effort. A combination of policy instruments with both welfare and classical liberal content were implemented during this time period. A strong foundation to develop national nutrition policy was established through the creation of the Canada Council on Nutrition, Canadian Dietary Standards and Nutrition Survey.

#### **CHAPTER 3: NUTRITION HISTORY AND ANALYSIS: 1940-1979**

This chapter describes the public policy discourse in Canada between 1940 and 1979. This time period includes World War II (1939-1945) and the post war reconstruction period during which welfare liberal policy reforms were implemented to address social and economic policy. The end date of 1979 reflects the change in federal administration with the election of a short lived Progressive Conservative government. The first section describes the scope of government policy, the nutrition policy instruments developed and the distributive dimensions of the state. The second section assesses the relationship of nutrition policy with a changing liberal discourse.

### I. Policy Context

In 1939, the *War Measures Act* was once again invoked allowing the federal government broad emergency powers to ensure the peace, order and welfare of Canadians. In the UK, the proposed implementation of Keynesian policy post-war was described by Sir William Beveridge in the report *Social Insurance and Allied Services* (1942). This Report recommended a universal national health service; a system of universal children's allowance; a comprehensive social insurance plan to address interruptions or loss of earning power due to unemployment, disability, old age or sickness; and maternity and funeral grants (Rice and Prince). This Report informed the Dominion government's plans for post-war reconstruction along with five pivotal Canadian reports published between 1940 and 1945 that were informed by the Keynesian approach: the Heagerty Report, the Curtis Report, the Marsh Report, the White

Paper on Employment and Income and Green Book Proposals to the Dominion-Provincial Conference on Reconstruction (Rice and Prince). The federal government was given constitutional power to generate financial resources through taxation and borrowing and to spend such money on any activity, provided that the legislation authorizing the expenditure did not infringe on provincial powers (Chenier 1-11).

Domestic and international food shortages occurred during World War II. Agriculture increased food production to meet food requirements for Canada's war time allies and curb domestic inflation of consumer prices. Government provided incentives to assist in this shift (Drummond, Anderson and Kerr 92). The Department of Agriculture and Wartime Information Board provided public information related to the best use of Canadian food to ensure an adequate and nutritious food supply for civilians and troops. Agriculture programs began extensive experimental work to produce dehydrated vegetable and egg powders. The Department of Fisheries provided demonstrations to increase consumption of fish (Department of National Health and Welfare, Nutrition Division), Activities of the Canadian Council on Nutrition expanded to include application of nutritional knowledge to promote the efficient utilization of food domestically and for Armed Forces rations. In 1941, Dr. L.B. Pett was appointed as full-time Secretary to the Council and Director of the new Nutrition Services within the Department of Pensions and National Health with the goal of helping people eat the right foods. In 1942, dietary guidelines for consumers were established to guide food selection, promote nutritional adequacy and reduce variations in nutritional

messages. These first Official Food Rules only suggested consumption of 70 per cent of what was recommended in the 1938 Dietary Standard because of wartime food shortages. Six food groups were identified: Milk; Fruit; Vegetables; Cereals and Breads; Meat and Fish; and Eggs. Government used a number of strategies to implement the Food Rules including a media campaign and the development of print resources, lesson plans for teachers and food shopping lists. In 1944, the name was changed to Canada's Food Rules and the quantity of food became 100per cent of what was recommended in the 1938 Dietary Standard (Office of Nutrition Policy and Promotion). Pett identified that increased income levels and agricultural production were not enough to improve food intake. He suggested that ongoing efforts were necessary to ensure that all sections of the population were using enough of the right kinds of foods and preparing them in the right way (Morrell 49-55; Pett 1-5).

In October 1944, the Department of Pensions and National Health was split into the Departments of Veteran's Affairs and Health and Welfare to better reflect the wish for national social security services and standards. An example of this new policy approach was The *Family Allowances Act* (1944) which provided a basic allowance to all parents with children under sixteen. It had social goals to ensure minimum standards of health and decency for children in low income groups and economic goals to assist in maintaining levels of consumption (Nutrition Division, Department of National Health and Welfare 1-8). Within Health, the Nutrition Services Agency became the Nutrition Division with the primary function of aiding in the improvement of the health of all Canadians by

raising the nutritional status of the nation. The Division had three major roles: nutrition research, provision of information through community educational programs and inspecting food facilities on war contracts (Department of National Health and Welfare, Nutrition Division; Nutrition Canada). The Dominion Provincial Nutrition Committee was established in 1945 to increase coordination and communication between federal and provincial nutrition activities (Health Canada; Morrell 49-55). World War II ended in 1945.

When vitamins became available to add to food in the 1930s and 1940s, there were no restrictions to their addition to foods in Canada. Concern about fraudulent practices in the addition of vitamins to food led the government to set minimum levels for the addition of vitamins in 1942, followed in 1949 with maximum levels to prevent exposure to excessive amounts (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). A debate over the nutrient content of flour also began during World War II, following the results of the 1939-1940 Canadian Dietary Surveys that identified vitamin deficiencies in the population. Although flour in the US and UK was fortified with vitamin B1, Canada was reluctant to move ahead with this type of fortification as it was viewed as adulteration of food by the Department of Health (Ostry 143). Scientists from the Canada Council on Nutrition, as well as public health and medical professionals, argued that the addition of thiamine to flour would not address B vitamin deficiency in the population. Another approach to fortification was suggested and resulted in the development of a high extraction milling technique that retained two to three times the amount of thiamine as compared to regular white flour. In

1942, this higher extraction flour (Canada Approved) was introduced into the food supply (Morrell 49-55; Nathoo, Holmes and Ostry 375-382).

Post war advances in technology resulted in common use of refrigerators powered by electricity in urban and then rural settings. Widespread adoption of refrigeration meant that food could safely travel over longer distances through the use of cooling units in box cars and trucks (Atkinson 98-123). Advances in medical science resulted in mass production of antibiotics and development of a polio vaccine, antihypertensive and antipsychotic medications. After the war, it was observed that the incidence rates of some diseases were reduced in European countries that experienced a restricted war time food supply. This observation was a catalyst to a new exploratory approach to nutrition research. the investigation of risks and benefits of consumption of specific foods and nutrients among populations. For example the Framingham Heart Study was initiated in 1949 to identify the contribution of diet and sedentary lifestyles to the development of cardiovascular disease (Carpenter 3331-3342). In 1949, the 1938 Dietary Standards were revised and Canada's Food Rules updated to reflect the expanding knowledge of nutrient requirements and the changing food supply. Five food groups remained and previously used educational strategies were updated (Office of Nutrition Policy and Promotion).

lodization of table salt for household use was made mandatory in 1949 and almost eliminated goiter in Canada (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). Vitamin D addition to evaporated and dried milk was permitted in 1950. The Newfoundland government, not part of Canada at the

time, permitted the voluntary fortification of margarine with vitamins A and D and the mandatory fortification of flour to reduce nutrient deficiencies in the population. When Newfoundland entered Confederation in 1953, the Canadian government passed new legislation permitting voluntary enrichment and prescribed the amount of iron, thiamin, riboflavin and niacin permitted in enriched flour (Health Protection Branch, Health and Welfare Canada 46). Also in 1953, the Nutrition Division and Dominion Bureau of Statistics began the Canadian Weight-Height Survey to provide the necessary data to construct tables of average weights for different heights and age groups. Twenty two thousand Canadians had their weight and height measured and age and sex specific means, percentiles and average weight-for height values were calculated. The original data was lost although existing tables provide enough information so data can act as a baseline for further studies (Katzmarzyk 666).

After the war, agriculture policy shifted to meet the new public policy goals by enhancing production to increase food availability and reduce food costs (Drummond, Anderson and Kerr 92). The Marketing Service, Canada Department of Agriculture maintained a national food information service to promote satisfied customers in order to maintain the Canadian agriculture industry. The Consumer Section worked with the Dairy Products, Fruit and Vegetable and Livestock Products Divisions to provide consumer advice regarding food selection, preparation and handling (Pepper 1-3). In 1957, the federal Liberal government which had been in power for 22 years was replaced by a Conservative government.

#### 1960s

In response to expanding knowledge of nutrition requirements and changes in food supply resulting from new methods of food processing, storage and transportation, such as the inclusion of citrus fruits Canada's Food Rules were revised in 1961. The name was changed to Canada's Food Guide to reflect a more flexible approach with which Canadian's could apply the advice (Ballantyne 183-186; Office of Nutrition Policy and Promotion). Mr. Lester B. Pearson was elected Prime Minister in 1963, replacing a Conservative government which had been in place for six years.

In 1964, the Nutrition Division was assigned an advisory, consulting and coordinating role within the federal government. Also in 1964, the Canadian Council on Nutrition recommended that a comprehensive nutrition survey be undertaken to collect information about the food intake and nutritional status of Canadians. (Campbell) A positive listing<sup>3</sup> approach to fortification was initiated when the 1964 regulations for the addition of nutrients to foods sold in Canada were implemented. One regulation change led to a cessation of vitamin D fortification of fluid milk which resulted in an increase in rickets. Health Canada attributed this rise to overlooking an important principle of food fortification, that an appropriate vehicle should be selected to reach the target population. The regulations were amended in 1965 to include fluid milk and the incidence of rickets began to decline (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). In 1968, a process to solicit support from health officials

<sup>&</sup>lt;sup>3</sup> A positive listing approach can be described as listing the foods to which micronutrients may be added, which micronutrients may be added, and the level to which they may be added.

within government and the nutrition scientific community for a comprehensive national nutrition survey continued. Dr. Z. Sabry conducted a feasibility study to develop the survey design and methodology through consultation with provincial departments of health, university departments and others to develop an implementation plan. The recommendation to undertake a Nutrition Survey was accepted by government and Treasury Board funding approval was received in 1969. The National Department of Health and Welfare funded all the survey costs (Nutrition Canada). The Canadian Council on Nutrition and the Dominion Provincial Nutrition Committee were discontinued in 1969 (Health Canada).

The Canada Pension Plan, which provided social-insurance protection for retirement, disability and survivors' benefits was developed and passed in 1965. The Canada Assistance Plan of 1966 consolidated previous cost-sharing programs and extended the federal cost-sharing presences in provincial social welfare programs. After the passing of the Medical Care Act in 1966, the consensus was that the Canadian welfare state was finally complete and all categories of risk identified in the five reports listed on page 34 were provided for in some way (Rice and Prince).

### 1970s

In the 1970s, industrialized economies around the world began to experience economic difficulties as indicated by a reduced Gross National Product, reduced trade, increased unemployment and inflation. The emphasis shifted from development of new social programs to evaluation of existing programs (Turner 80-95). Neoclassical liberals complained that welfare liberal

economic systems could no longer function with increasing levels of taxation to support the welfare state. After a critical review of the welfare state, many welfare liberals agreed with this analysis (Ball, Terence et al 38-78; Rice and Prince). Different approaches to liberalism were proposed, leading to experimentation with a number of macroeconomic approaches to reduce inflation (Bradford 193-215).

Between 1941 and 1970 in Canada, it was noted that the health of individuals improved as indicated by an increased life expectancy and a decreased infant mortality rate. Life expectancy at birth for males rose from 63 years in 1941 to 69 years in 1970 and for females from 66 to 75 years. The infant mortality rate of 61.1 per 1000 live births in 1941 dropped to 18.8 per 1000 live births in 1970. Diseases in which nutrition was implicated as an etiologic factor became the major causes of death in Canada. Ischemic heart disease due to atherosclerosis was the leading cause with a death rate of 230/100,000 population. Other major causes of death were cerebrovascular disease (74.3/100,000 population) and diabetes mellitus (13.6/100,000 population) (Nutrition Canada). In the 1970s, Ancel Key's ground breaking research linking dietary fat and coronary heart disease began to be taken seriously by the public and by some policy makers (Ostry 143).

Per capita food consumption data indicated that eating patterns had changed since 1949. The consumption of cereals and dairy products declined while that of meat and poultry, and fats and oils (excluding butter) increased. This food consumption data indicated that the increased ability for food to travel and increased use of preservatives changed the eating habits of Canadians. More

foods were now imported ensuring that Canadians had a year round supply of fresh produce (Nutrition Canada). In 1971, the Canadian Public Health Association recognized the need for an advisory body to address nutrition concerns among public and professional groups and improve the capacity of government to take action. A resolution passed recommending that the Minister of National Health and Welfare "reconvene the Canadian Council on Nutrition or convene a similar body to serve as an advisory body on matters pertaining to nutrition in Canada as soon as possible" (Sherrington 1-85). Rather than pursuing this, the Nutrition Division of the Department of Health and Welfare was phased out at the end of 1971 and its duties were assigned to other areas within the Department. The Health Services Bureau of the Health Programs Branch took over consultation services in dietetics and clinical nutrition. The Nutrition Bureau within the Health Protection Branch took over education, publications and the Canadian Dietary Standard. Nutrition programs within the Research Laboratories and the Food Advisory Bureau related to the Food and Drug Act were maintained (Nutrition Canada). When federal, provincial and territorial (F/P/T) nutritionists met in the early 1970s, their focus was on determining roles in the Nutrition Canada survey. In 1972, a committee was established to revise the 1964 Dietary Standard. The committee agreed that it would accept recommendations from FAO/WHO Expert Groups. The 1973 Dietary Standard of Canada contained recommended daily intakes for energy and for 17 nutrients. This represented an increase of 12 nutrients compared to the number included in the 1964 Standard (Department of Health and Welfare).

The world food situation in the early 1970s was marked by extreme food shortages in many developing countries indicating a lack of progress to reduce hunger and malnutrition. In 1973, the United Nations General Assembly convened a conference to address global food problems. In developed countries, rising food costs as a result of international crop failures and inflation affected consumers and were reflected in the federal Speech from the Throne on January 4, 1973. By way of response the federal government established a Special Committee on Trends in Food Prices on January 23, 1973 "to inquire into and make recommendations upon the trends in food prices in Canada and factors domestic and foreign which account for these trends". The first report recommended the establishment of a Food Prices Review Board and a comprehensive long-term food policy (Anti-Inflation Board 1402). The Food Prices Review Board (FPRB) was established in 1973 and reported to Parliament through the Minister of Consumer and Corporate Affairs. Its initial mandate was to provide detailed and timely information and analyses related to price movements amongst food products. In 1974, its mandate expanded to include publication of reports and inquiry into food price increases (Food Prices Review Board 0-114). Federal/Provincial agriculture policy shifted to stabilize prices by extending income support programs and establishing price stabilization for food products not covered under the Canadian Wheat Board to stabilize prices. An innovative policy to allow producers to fix and determine the prices of commodities through marketing boards was introduced (Skogstad 1-8).

During 1973 and 1974, inflation reached double digits indicating that

Canada was not successful in attaining its macroeconomic objectives of high
employment and price stability. Food prices continued to increase, by 15 per cent
in 1973 and by 16 per cent in 1974. The excess demand and short supply of
agricultural products were compounded by the sudden upward shift in energy
costs due to the 1973 oil crisis (Anti-Inflation Board 1402). In response, the
September 1974 Speech from the Throne described objectives for a food policy to
mitigate the influence of inflation on food prices by increasing production and
supply. The objectives included: an adequate and dependable supply of quality
food for a growing population in Canada enjoying a rising standard of living;
reasonable food prices; and a continuing supply and increasing production of
those food products in which Canada has a competitive advantage for export to
commercial markets and for a contribution to international food aid. Appendix 2
lists the policy instruments suggested (Food Prices Review Board 0-114).

In 1974, the findings of the first comprehensive national nutrition survey became available. Data from medical, dental and anthropometric examinations, a 24-hour dietary recall, and biochemical tests assessed the nutritional status and dietary intakes of the Canadian population. The survey was based on a three-stage, stratified national probability sample of 12,795 people responding to an initial invitation and attending a survey clinic, representing a 46 per cent response rate. There was also a volunteer sample of 3,295 individuals. One of the most significant findings was the lack of clinical evidence of widespread deficiency disease. Native people, the elderly and those with the lowest income were

identified as groups with the least satisfactory nutritional status and at the highest risk for vitamin and mineral deficiencies such as rickets (linked to low vitamin D intake). The survey also revealed that approximately 50 per cent of Canadian adults were considered to be overweight based on ponderal index values calculated from height and weight. The following priorities were identified *Nutrition Canada Report*: the important role of government regulation to ensure that the Canadian food supply is nutritionally adequate; education and motivation of individuals to make healthy food choices; and the need for a sound National Nutrition Policy to be based on accurate up-to-date assessment of the nutritional status of the population. Of note, the final recommendation identified that the "ultimate responsibility lies with the consumer" (Nutrition Canada).

In 1974, the Minister of Health and Welfare released *A New Perspective on the Health of Canadians*, also known as the Lalonde Report which put forward the view that establishment of universal health insurance was only one component of an overall strategy to improve the health of Canadians. The Health Field concept was introduced and suggested that a broad range of factors such as human biology, lifestyle, social and physical environments in which people live have more influence on health than the organization of health care (Health and Welfare Canada). It was observed that Canada was the first national government to develop policy accepting responsibility for promoting the health of its population and establishing a framework through which reform might emerge. Critics did not think that attention to lifestyle or environment would improve health status any more than medical care would (Evans 325-344).

The February 1975 FPRB report What Price Nutrition? recommended that nutrition issues related to health should be a central concern of public policy and any food policy should address the nutrition requirements of Canadians. Other recommendations included increased education efforts to improve nutrition and food buying practices; reallocation of public resources from treatment to prevention of nutritional disorders; further fortification and enrichment of food; review of the social security system to ensure adequate consideration of cost of a basic nutritious diet; release of additional findings from the Nutrition Canada survey; establishing a Nutrition Advisory Body; and coordinating efforts to study and alleviate nutrition-related health problems. It was recommended that the food industry accept responsibility for producing food of the highest nutritive value possible and provide better quality nutrition information to consumers (Food Prices Review Board 0-114). A second FPRB paper also supported the inclusion of nutrition as part of a Canadian food policy and suggested that a Royal Commission on the Effects of Diet on Health be established to identify major influences on Canadian eating patterns and recommend desirable changes in these patterns (Wirick 1-55). When the FPRB was disbanded on October 14. 1975, a new Ministry of Finance federal anti-inflation program was introduced to reduce the rate of inflation while permitting a modest economic recovery. The Anti-Inflation Board administered mandatory controls on compensation and prices including food products (Anti-Inflation Board 1402; Food Prices Review Board 0-114).

Members of the national nutrition policy community continued to advocate for a national nutrition policy and creation of a National Nutrition Council to replace the Canadian Council on Nutrition disbanded in 1969. On May 7, 1975, the Canadian Public Health Association (CPHA) and Science Council of Canada cosponsored a National Seminar entitled *Nutrition: Issues and Priorities*. The purpose was "to reemphasize the need for a concentrated effort to overcome the obstacles to further improvement of the nutrition standards of the Canadian population" (Sherrington ). In opening remarks the Assistant Deputy Minister from the Health Protection Branch, Health and Welfare Canada stated:

There is a point beyond which government regulation cannot go, and there is a point at which government regulation becomes unacceptable. The right to select one's food is, I suggest, beyond that point, and we must rely on persuasion and the power of our arguments to influence people away from their more suicidal dietary habits. (Sherrington ).

Other speakers identified the importance of a national nutrition council to coordinate activities, ensure consistent messages between government departments, provide leadership, offer advice and develop a holistic view of problems. One speaker opposed the development of a National Nutrition Policy as it would suggest a static situation and predetermined solutions. The federal Department of Health and Welfare was criticized as nutrition programs within the Health Protection Branch had both regulatory and promotion functions (Sherrington 1-85).

The 1964 Dietary Standards were revised and the 1975 edition were defined as the daily amounts of energy and essential nutrients considered adequate on the basis of scientific data, to meet the physiological needs of

practically all healthy persons in the population (Department of Health and Welfare). Between 1973 and 1976, regulations of *The Food and Drug Act* were revised to include mandatory enrichment of bread, milk and flour with thiamine, riboflavin, niacin and iron. Requirements for food labelling became more stringent with new guidelines for the format of the ingredient list, net quantity of food and addition of a lifedate (Health Protection Branch, Health and Welfare Canada 46; Nathoo, Holmes and Ostry 375-382). Agriculture Canada noted that eating habits of Canadians had significantly changed, with more meals eaten away from home. Eighteen per cent of disposable income in 1976 was spent on food by Canadians comprised of fourteen per cent spent for food consumed in the home and four per cent on meals eaten in restaurants, hospitals and other institutions (Agriculture Canada and Consumer and Corporate Affairs Canada 1-21).

In 1977, the Health Protection Branch of the Department of Health and Welfare convened an expert Committee on Diet and Cardiovascular Disease<sup>4</sup> to advise government on the relationship between cardiovascular disease and diet and identify advice for the public. The Committee made suggestions to improve the Canadian diet, such as decreasing consumption of saturated fat, dietary cholesterol, alcohol, salt and refined sugars and increasing consumption of whole grains, fruits and vegetables. The following actions were also recommended for government and the food industry to prevent diet-related chronic diseases: the active and continuous promotion of the recommendations for dietary changes; the development and production of food products consistent with the dietary recommendations and clearly labelled for adequate consumer information; and

<sup>&</sup>lt;sup>4</sup> The Committee was chaired by Dr. J.F. Mustard and members included mainly cardiologists.

encouragement and support for nutrition and agriculture research (Morrison 26-30; Murray 1390-1393). Also in 1977, Canada's Food Guide was revised to meet the 1975 Dietary Standards but retained the goal of preventing nutrient deficiency. A new visual design was used to increase interest and four food groups, instead of five, appeared - fruits and vegetables were combined since their nutrient contributions overlapped. Other changes that reflected the changing food supply were that the milk group became Milk and Milk Products, to include other dairy food choices and Meat and Alternates replaced Meat and Fish. A number of professional organizations such as the Canadian Dietetic Association, Canadian Dental Association, Canadian Medical Association and Canadian Home Economics Association contributed to this revision (Health and Welfare Canada 1-235; Office of Nutrition Policy and Promotion).

Also in 1977, the federal government initiated a food strategy in follow-up to public concerns about adequate nutrition, food additives, food prices, income stability for farmers and fishermen, conservation of land and fishery resources. Agriculture Canada and Consumer and Corporate Affairs led the development of *A Food Strategy for Canada* to fit with the direction of economic policy to improve the operating efficiency of markets and enhance the attainment of social goals within a framework of less direct government intervention in the economy. The intent of the *Food Strategy* was "to assure all Canadians that its policies and programs ensure adequate supplies of safe and nutritious food at prices which are reasonable to both producers and consumers". The Strategy focused on six major policy areas where federal or provincial programs relate to the Canadian

food system: Income stabilization and support; Trade policy and safeguards; Research, information, and education; Marketing and food aid; Processing, distribution, and retail sectors; and Consumer concerns (price stability, nutrition, and food safety). (Agriculture Canada and Consumer and Corporate Affairs Canada 1-21) After the release of the Strategy paper, a Deputy Ministers' Committee on Food Policy and an Interdepartmental Steering Group on Food Policy were convened to develop Work Programs. Federal Departments involved included Agriculture, Consumer and Corporate Affairs, Fisheries and Oceans, Industry, Trade and Commerce and National Health and Welfare. Nutrition was a small part of the Food Strategy which raised concern from the Canadian Dietetic Association and nutrition researchers that nutrition and health perspectives would not be included. Concern was also raised about the dual purpose of the proposed Food Strategy to feed Canadians nutritiously and contribute to the nation's economic well being through a focus on efficiency. Jennifer Welsh asked "how will policy makers measure efficiency?" and "to what end is the efficiency directed" (Welsh 16-19).

In February 1978, a National Food Strategy Conference was convened by the federal government to discuss food problems, opportunities, programs and policies. Over 400 representatives of all sectors of the food system including consumers participated. Ministers from each of the Ministries involved in the Steering Group made presentations. As a result of complaints and high interest in nutrition by participants at the Conference, an increased emphasis was placed

on the role of nutrition within a Food Strategy. The Minister of National Health and Welfare stated

the government's intention to take full account of nutritional factors in its policies and programs for the food system in order to bring about dietary change in accordance with Canada's Food Guide and the government's dietary recommendations (Morrison 26-30).

After the Conference, the Steering Group concluded that additional work was required in the following areas: consultation, agricultural development and stabilization, market development, marketing boards, fisheries development, processing, distribution and retailing, consumer initiatives, nutrition and food safety (Agriculture Canada and Consumer and Corporate Affairs Canada 1-21).

In 1978, the federal government stated that Canada had a set of policies and programmes which constituted a comprehensive food policy committed to improving the performance of food systems. Two follow-up papers to the Conference, *Recent Developments of the Food Strategy* and *Integration of Nutrition into the Food Strategy* were published. The first report described a number of Department of Health and Welfare activities as a result of the Conference: to establish a nutrition advisory committee and develop guidelines on the acceptability, from a health standpoint, of new foods and new food components; review food additive policy for safety and effectiveness of additives; intensify F/P consultations concerning nutrition guidelines; nutrition education programs appropriate for schools, training of professionals and vulnerable groups; food advertising; nutrition as part of the health care system; monitoring nutrition problems; and improved microbiological quality of foods (Agriculture Canada and Consumer and Corporate Affairs Canada 1-18; Begin 1-15). The second report

identified that a key objective of the government's nutrition policy was a food supply available to all which permits adherence to national recommendations and a public sufficiently informed to choose wisely (Begin 1-15). A proposal to assess the impact on nutrition of planned government actions was developed although it was noted later that it was only used once (Beaton 10-12).

Food price inflation continued to increase rapidly over the spring and summer of 1978. The federal government reviewed food prices at the end of the summer and decided that prices should be allowed to reflect market conditions. A policy decision was made to directly assist those most disadvantaged, such as the elderly and low income families with children, through the expansion of social program funding. The Guaranteed Income Supplement was increased and a refundable Child Tax Credit established (Agriculture Canada and Consumer and Corporate Affairs Canada 1-18). Also in 1978, nutrition services in the Department of National Health and Welfare were reorganized to include a Nutrition Education division as part of the Prevention and Promotion Directorate of the Health Services and Promotion Branch. This new division focused on developing nutrition and health education programs for consumers, health care and allied workers (Begin 1-15). The federal government recognized that the 1977 Diet and Cardiovascular Disease Recommendations could be applied more broadly and were adopted as population based recommendations. These recommendations were also endorsed by P/T departments of health and more than 50 national professional associations, organizations, agencies and industries concerned with health, education and fitness (Murray 1390-1393).

Food borne pathogens such as Campylobacter, Salmonella, Escherichia coli, Cryptosporidium parvum and Norwalk-like viruses were identified in the US food supply (Centres for Disease Control and Prevention 905-913). Questions were raised about the quality of the Canadian food supply. In 1979, the Health Protection Branch of Health and Welfare Canada undertook a Consumer Survey to ask Canadians their opinions about food additives. The survey results identified that food additives, bacteria and pesticides and industrial pollutants were major concerns. The majority of respondents identified that they did not think government regulations and current safety testing for additives were adequate. A conclusion of the report was that the role of additives in food was not well understood by Canadians (Health Protection Branch, Health and Welfare Canada 1-57).

In 1979, a minority Progressive Conservative government came to power ending 16 years of Liberal government at the federal level.

### II. Analysis

New ideas from Keynes regarding the role of government and changes in social norms resulting from the depression and World War I influenced a change in public policy direction towards welfare liberalism. The federal government began to play a more active role in managing the economy toward goals of high and stable levels of income and employment (Rice and Prince). The scope of government slowly expanded to financing, organizing and delivering varying levels of health care, housing, education, income support and social services.

It has been noted that Canada was slow to implement a Keynesian approach. A community of reformers, intellectuals and public administrators played an important role in defining the role of the welfare state and shifting the thinking of a reluctant federal cabinet toward macroeconomic experimentation. It took ten electoral mandates; from the end of World War II to the early 1970s before virtually all categories of risk identified in the five government reports written between 1940 and 1945 had been implemented. This has been described as a directed incrementalist approach, whereby a sequence of actions by government was implemented over time and were guided and connected by general concepts of the social role of the state (Ball, Terence et al 38-78; Rice and Prince). During this time, the Dominion government also expanded the organizational capacity of the Department of Health to address food and nutrition by establishing a Nutrition Services Department in 1941. Although the capacity was reduced in the late 1960's, a major effort to collect nation wide nutrition data took place in the 1970's.

Implementation of the welfare state and the improved economy reduced concerns about food and nutrition during the 1950s and 1960s. In the 1970s food and nutrition returned to the agenda as a result of high food prices and increasing rates of obesity and chronic disease. Table 2 summarizes nutrition-related policy instruments considered or implemented between 1940 and 1979 using Hood's ideas of governing resources. The shift to welfare liberalism changed the choice of policy instruments available for use to reflect a larger role for government to ensure that citizens enjoy relative equality.

Table 2: Policy Instruments affecting Nutrition between 1945 and 1979		
Policy	Welfare Liberal Content	Neoclassical Liberal Content
instrument	(Positive Freedom)	(Negative Freedom)
categories		
Nodality	<ul> <li>Food production research during World War II</li> <li>Canadian Weight-Height Survey 1953</li> <li>Revised Dietary Standards 1949, 1964, 1973</li> <li>Federal/Provincial/Territorial Nutrition Committee reestablished in the 1970's</li> <li>Nutrition Canada survey results released 1974</li> <li>Developed Nutrition Recommendations 1977</li> </ul>	<ul> <li>Market responds to consumer demands</li> <li>Consumer responsible for making healthy food choices</li> <li>Canada's Food Rules 1942, 1944, 1961,1977</li> </ul>
Treasury	<ul> <li>Income supports for veterans, family allowance, unemployed and pension plans expanded to include universal entitlement</li> <li>National Health Grants Programs 1948</li> </ul>	<ul> <li>Fiscal Arrangements and Established Programs Financing Acts 1977</li> <li>Guaranteed Income Supplement and Child Tax Credit 1978</li> </ul>
Authority	<ul> <li>Changes to the Food and Drug Act 1949, 1964, 1973,1976</li> <li>Hospital Insurance and Diagnostic Services Act 1957</li> <li>Medical Care Act 1966</li> </ul>	
Organization	<ul> <li>Established</li> <li>Nutrition Services in the Department of Health 1941</li> <li>Dominion Provincial Nutrition Committee (1945)</li> <li>Food Price Review Board 1973-1975</li> <li>Anti-inflation board 1975-1977</li> <li>Health Promotion Directorate 1978</li> </ul>	<ul> <li>Expanded pluralism includes food industry, health professionals and non-government organizations</li> <li>Nutrition Division assigned an advisory, consulting and coordination role 1964</li> <li>Canada Council on Nutrition and D/P Nutrition Committee disbanded 1969</li> </ul>

The analysis now turns to the four issue areas of specific interest in this research: nodality instruments introduced to address nutrition; discourse related to adequate quantities of food related to wartime and depression; and agriculture approaches to address food quality. A new issue related to food fortification and nutrition labelling was introduced during this period.

# Nutrition (nodality).

Canada's Official Food Rules were introduced in 1942 to assist consumers choose foods, promote nutritional adequacy and reduce variations in nutritional messages. The impact of wartime food shortages was seen in the content of these consumer guidelines as the Official Food Rules recommended consumption of only 70 per cent of what was required for health as a result of food rationing (Office of Nutrition Policy and Promotion). In 1944, the name was revised to Canada's Food Rules and the quantity returned to 100per cent of what was recommended in the 1938 Dietary Standard.

After World War II, a change in thinking about disease causation occurred when it was noted that incidence rates of some diseases was reduced after a restricted war time food supply. Researchers began to study the linkage between food intake, physical activity and cardiovascular disease. During the 1960s, dietary guidelines for consumers and health professionals were updated and retained the goal of preventing nutrient deficiency. Organizational changes in the 1960s reduced the federal governments' ability to respond to nutrition issues as the role of the Nutrition Division was reduced in 1964. Two long standing government supported members of the policy community, the Canada Council on Nutrition,

established in 1937 to advise the Minister of Health on nutrition issues and the Dominion Provincial Nutrition Committee established in 1945 to coordinate efforts across Canada were discontinued in 1969. No explanation could be found as to why these two committees were discontinued. Although the F/P/T Nutrition Committee was re-established in the 1970s, a new Ministerial advisory committee was never established despite policy community efforts.

In the 1970s, chronic diseases such as cancer, heart disease and stroke (which included nutrition as an important risk factor) replaced communicable diseases as the leading causes of mortality in Canada. The 1974 Nutrition Canada findings identified that Canadians were not suffering from deficiency diseases as expected except for vulnerable populations such as First Nations people, the elderly and low income groups. The findings identified that approximately 50 per cent of Canadians were obese. The priorities for action listed in the Nutrition Canada report reflected both types of liberalism. The use of the federal government regulatory role to develop nutrition standards and increase nutrition surveillance to ensure national nutrition policy is based on current information reflects a welfare liberal approach. Education for health professionals and consumers and a strong emphasis on responsibility of the individual to make healthy food choices reflects a neoclassical approach. The government of the day also emphasized the role of the individual at the CPHA Nutrition: Issues and Priorities conference in 1975 when it was stated that tools such as information and persuasion were more appropriate to influence people's eating habits as it was not acceptable for government to regulate food intake.

During the 1970s, nutrition policy goals shifted from a focus on preventing nutrient deficiency to minimizing nutrition-related risk factors for the development of chronic disease (Office of Nutrition Policy and Promotion). This change in nutrition policy goals was consistent with the change in disease burden and new direction that federal health policy was moving with introduction of the health field model in the 1974 Lalonde Report. Despite a change in nutrition policy goals, the policy instruments implemented by government did not change as the 1977 Canada's Food Guide retained the goal of preventing nutrient deficiency.

In response to the research identifying a link between dietary fat and heart disease, Health and Welfare Canada established an Expert Committee on Diet and Cardiovascular Disease in 1977. This Committee, composed of mainly cardiologists, made suggestions to government to prevent diet related chronic diseases in Canada. Recommendations also reflected both types of liberalism. Recommendations for consumers to improve the quality of their diet reflected a neoclassical liberal approach and those to government and the food industry to improve the information consumers had to make healthy choices and improve the quality of the food supply reflected a welfare liberal approach. In 1978, the recommendations from this Expert Committee were accepted as broad population recommendations and adopted to improve the health of the general Canadian population (Health and Welfare Canada). A number of non-governmental organizations and health professional associations such as the National Institute of Nutrition and Canadian Dietetic Association were also asked to endorse these guidelines, increasing the size of the policy community. The 1975 FPRB report

also suggested that the food industry accept responsibility for producing food of the highest nutritive value possible to ensure consumers have access to safe and healthy food (Wirick 1-55). This was the beginning of the discourse that obesity might be caused by societal failure and an introduction to concerns about the food industry producing a poor quality food supply.

In summary, nutrition problems shifted from concerns about inadequate nutrient intake to concerns about excess food intake and its role in chronic disease. This suggests that nutrition policy instruments should also have changed to address new problems, but they remained focused on preventing nutrient deficiency. A new problem definition stage was starting and is reflected in the larger health discourse regarding health promotion and the nutrition policy discourse regarding causes of obesity.

# **Nutrition (Adequate Quantities)**

With the onset of World War II, there was again a short term need for adequate quantities of food to meet domestic and internationals needs. *The War Measures Act* was invoked again to ensure government control of the food supply. In 1941, the federal government recognized the need to have a government department responsible for nutrition to play a leadership role in research, community education and inspecting food facilities. As a result, the Nutrition Services Division was established within the Health Department with a major goal of ensuring that Canadian workers and soldiers had enough healthy food to eat during the war.

After the war, one of the federal government's policy solutions to malnutrition became the use of treasury based policy instruments that redistributed income to veterans, the unemployed, seniors and families with children to ensure the ability to purchase adequate quantities of food. It was expected that implementation of social policy measures would significantly reduce insecurity and poverty by providing a level of protection against unemployment, injury, sickness, old age and disabilities and mitigating market-generated income inequalities (Rice and Prince). There was less concern about access to adequate quantities of food in the 1950s and 1960s as a result of an improved economy and increased agriculture production. The health of Canadians also improved as an increase in life expectancy and reduction in infant mortality rate was documented between 1941 and 1969.

In the 1970s, rising food costs as a result of domestic inflation, international crop failures and oil crisis led to experimentation with different policy approaches to achieve price stability. One approach was the establishment of a Special Parliamentary Committee on Trends in Food Prices in the 1973 Speech from the Throne to make recommendations regarding reduction of food prices. Another was the establishment of the FPRB to track, analyze and communicate food price movements. The FPRB suggested policy instruments that reflected mainly welfare liberal approaches such as health promotion, a regulatory role for government in the form of nutrition standards, provision of nutrition surveillance information, reallocation of public health resources from treatment to prevention and a review of the social security system (Food Prices Review Board 0-114;

Wirick 1-55). During the 1970s, the nutrition policy community increased in size as elected federal officials and multiple government departments joined in response to public consumer concerns regarding costs and the experimentation with different policy approaches. Increased availability of information through access to the research done by the FPRB was identified as one factor contributing to the expanded policy community (Food Prices Review Board 0-114; Loyns).

In 1978, the federal government decided that food prices should reflect market conditions but that assistance should be provided to those most disadvantaged. The enhancement of the Guaranteed Income Supplement and the establishment of the Child Tax Credit represented a policy shift from a population-based approach to a targeted individual approach to ensure that high risk populations (the elderly and low income families with children) could purchase healthy food.

In summary, the welfare liberal approach of ensuring adequate personal income and ability to purchase food was successful in reducing malnutrition during post war reconstruction into the 1960s. In the 1970s, high inflation and international factors increased food costs for Canadians bringing food and nutrition issues back on the government agenda. In 1978, the federal government shifted the policy approach to ensuring adequate food from a welfare liberal approach using treasury instruments to a neoclassical approach using treasury instruments for high risk individuals only.

### Agriculture

During World War II, food shortages occurred domestically and internationally and *The War Measures Act* was invoked again. Within agriculture, food technology research and public information programs contributed to the war effort to ensure an adequate food supply for Canadians at home and abroad. During this time, government departments of health, agriculture, fisheries, wartime information and trade shared policy goals of efficiency to ensure adequate production of food for wartime domestic and international markets. The needs of the agricultural community and producers were similar to the state interest during the war effort. This is similar to the UK experience as described by Tim Lang, whereby a number of policy changes were made to ensure that the UK could produce enough food to feed its population during World War II. Lang suggests that the state intervention was accepted by industry because of the war effort (Lang 169-185).

After World War II, Canadian agriculture policy focused on increasing productivity and competition between farmers. In the 1960s, advances in technology meant that food could safely travel over long distances and agricultural markets expanded. During the 1970s, large scale public concerns resulting from inflation and high food costs meant that policy makers needed to consider different policy instruments to ensure affordable access to healthy food. This was a period of policy experimentation broadly and a number of different policy approaches were implemented by government to ensure Canadians could afford to buy food. Recommendations from parliament and Agriculture tended to

reflect neoclassical liberal approaches to increase food production and supply through approaches that increased market efficiency such as the food policy described in the 1974 Throne Speech. Mainly treasury-based instruments in the form of loans or incentives to assist food producers, farmers and fishers to earn an adequate income or regulation to aid trade and organization to improve the grain transportation system were recommended (Food Prices Review Board 0-114). When implementation of a public health insurance system was complete in 1974, it was recognized that access to medical care did not address all the nation's health concerns. Recommendations from Health and the FPRB tried to shift the focus from medical care to a broader lifestyle approach to ensure access to information, health promotion and surveillance through increased government intervention. In the late 1970s, efforts to develop a Food Strategy to address both food and nutrition issues may have been governments attempt to better align agriculture and health policy.

In the late 1970s, the development of a Food Strategy under the leadership of Agriculture Canada and Consumer and Corporate Affairs was meant to align with government goals of improving the operating efficiency of markets and attaining social goals with less government intervention (Agriculture Canada and Consumer and Corporate Affairs Canada 1-21). Five of the six policy goals were related to food systems and one of the six were related to consumers concerns, listed as nutrition, price stability and food safety. The nutrition policy community registered their concern that nutrition was a very small part of the original Food Strategy. When the 1978 *National Food Strategy Conference* was held, the

Department of National Health and Welfare was more involved and presented a number of options to integrate nutrition into Food Strategy recommendations for the food system. After the Conference, the federal government reported that nutrition was included as part of the newly established federal Health Promotion Directorate established to implement the Lalonde Report, health professional and consumer education focusing on diet and cardiovascular disease recommendations, continued publication of Canada's Food Guide and release of the findings of the Nutrition Canada Survey (Begin 1-15).

In summary, during wartime, agriculture and health shared similar policy goals to ensure adequate production of food for domestic and international needs. After the war, agriculture policy shifted to increase productivity of farmers and technological advances began to shift consumer eating habits. In the 1970s, government combined agriculture and health policy through the development of a National Food Strategy, but encountered barriers from both government structures and policy community members.

# **Nutrition (Food Fortification/Nutrition Labelling)**

The increased availability of food produced by industry to be purchased in stores and technological advances resulted in new opportunities for vitamins and minerals to be added to food and public needing information regarding content. The 1939-1940 dietary survey identified vitamin deficiencies in a large proportion of the Canadian population. The increased scientific understanding of the role of vitamins and minerals in health and advanced food production technology led industry to add vitamins and minerals to foods to increase nutrient content. In

response to industry actions, the federal government established regulations to restrict additions of vitamins/minerals in the food supply by establishing minimum levels in 1942 and maximum levels in 1949. Also in 1949, regulations were revised to allow the addition of vitamin D to milk and vitamin C to apple juice.

During World War II, although the US and UK decided to fortify flour with vitamin B<sup>1</sup>, Canada decided to develop a high extraction milling technique to retain the vitamin content instead. In the 1950s, enrichment of white bread with vitamin B and iron was permitted to correct or alleviate a real or potential nutrient deficit (Health Protection Branch, Health and Welfare Canada 46). This represented a major policy shift from World War II when the federal government developed new food processing techniques rather than add vitamins and minerals to flour. It was identified that shifting disease patterns related to quality of food consumption, improved knowledge regarding nutrient requirements and trade considerations resulting from Newfoundland joining Confederation may have influenced this policy shift (Nathoo, Holmes and Ostry 375-382).

In 1964, *Food and Drug Act* regulations changed to include a positive listing approach to fortification with more detailed guidelines regarding the addition of vitamins and minerals to foods. The effectiveness of Vitamin D fortification of fluid milk was proven, when inadvertently a regulation change led to a cessation of vitamin D fortification and an increase in rickets. The regulations were changed back to the original (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). Enrichment of bread, milk and flour became mandatory in the 1970s. In 1974, the Nutrition Canada results found that fewer Canadians had nutrient

deficiencies suggesting that policy instruments including fortification were successful.

During this time period, a change in food supply was noted. After the war, families were less self-sufficient in regards to food and took advantage of the affordable basic food commodities to cook with including flour, white sugar, meats, canned vegetables and fruit, dairy products, packaged cereals, bakery products and convenience foods (Tillotson 617-643). Technology such as refrigeration, allowed food to be stored at home and transported longer distances from suppliers. Storing and transporting foods longer distances meant food needed chemicals added to give them a longer shelf life and maintain flavour, therefore there was increased use of chemicals or additives. The Expert Committee on Diet and Cardiovascular Disease recommended that foods should be clearly labelled for adequate consumer information. A 1979 Consumer survey regarding food additives suggested that the public had many concerns regarding the use of additives in the food supply and the report concluded that their role in foods was not well understood.

In summary, food fortification was established to address malnutrition and expanded in response to changing knowledge of nutrition needs and ability of industry to apply new technology. Food fortification was found to be an effective collective policy solution that contributed to the reduction of nutrient deficiencies in Canadians. There were increased demands for information on food labels given the increased consumption of food purchased in stores.

#### III. CONCLUSION

At the beginning of this time period, the federal government had expanded its structure to formulate, make decisions and implement policy options to address malnutrition. During wartime, a number of government departments including agriculture and health shared goals to ensure adequate production of food for domestic and international needs. After World War II, the government implemented a welfare liberal approach to economic and social policy with a strong focus on treasury instruments such as transfer payments to redistribute income to individuals. Agriculture focused on increasing food production and health focused on establishing a public health insurance system. Nutrition nodality instruments provided information to consumers and health professionals and authority instruments standardized food fortification. By the 1960s, the combination of an improved economy, increased agriculture production and policy instruments resulted in the improved health of the population. Malnutrition had disappeared except in high risk populations; therefore nutrition became a lower priority and government nutrition structures were discontinued.

The discourse changed during the 1970s, as the economy worsened leading to dissatisfaction with welfare liberal macroeconomic approaches and experimentation with neoclassical liberal approaches. Canadians were suffering from increased rates of obesity and chronic disease and reduced access to food due to high food costs. The policy discourse and policy community increased in size when consumer concerns about food costs triggered the involvement of parliament and other government departments in food and nutrition. Policy

community members identified the importance of lifestyle and societal factors such as a more processed food supply as a cause of nutrition problems and suggested policy instruments more consistent with a welfare liberal approach. The policy solution to address adequate quantities of food shifted from a collective approach using transfer payments to an individual approach supporting tax credits for high risk groups. In 1977, multiple government departments began to develop a National Food Strategy to coordinate agriculture (food) policy focused on market efficiency and health (nutrition) policy focused on health promotion. A number of barriers from government structures and policy community members were encountered. Nutrition was again on the agenda but the problem definition had changed from societal to individual failure, consistent with a neoclassical liberal approach. Government returned to a policy formulation period to identify options to address nutrition within a new public policy approach.

# **CHAPTER 4: NUTRITION HISTORY AND ANALYSIS: 1980-2000**

This chapter describes the public policy discourse in Canada between 1980 and 2000. This period included a change in the scope of government and reduction in provincial transfers and social welfare programs as a result of the ideological and political shift towards neoclassical liberalism. It was marked by economic instability and a consolidation/internationalization of the agri-food sector. The first section describes the scope of government policy, the nutrition policy instruments developed and the distributive dimensions of the state. The second section assesses the relationship of nutrition policy within a changing liberal discourse.

## I. Policy Context

In 1980, the minority Progressive Conservative government fell and the Liberal party was returned to power with a majority government. The 1980s began where the 1970s left off, with double-digit inflation followed by the most severe economic recession since the 1930s. The result was high unemployment, reduced economic growth, sharp declines in tax revenue and corresponding increases in government deficits. Neoclassical liberal ideas had already begun as they had experienced a resurgence in the 1970s with the Thatcher government in the UK and continued in the 1980s with the Reagan government in the US (Ball, Terence et al 38-78). The core concepts of neoliberalism for North America were developed by a number of economists, notably Milton Friedman at the University of Chicago. Neoliberalism identified that governments not markets were prone to failure and that individuals were responsible for their own labour market

circumstances and well being. Left alone, the private economy supplied the incentives and disciplines for optimizing behaviour of workers, firms and communities (Bradford 193-215).

The *Food Strategy* developed in the late 1970s was not implemented after changes in government administration in 1979 and again in 1980. Instead in 1981, a *Strategy for the Agri-food Sector Discussion Paper* introduced a new framework outlining a range of activities "required for the food and agriculture sector<sup>5</sup> to maximize its contribution to the growth and development of the Canadian economy and play an enhanced international role". It contained three components: strategies for market development, mission-oriented research and resource base improvements (Whelan 194).

In 1982, an international food movement began to raise concerns about the current situation where food production costs were not borne by producers (internalities) but were passed on to others outside or external to the production process (externalities). This loose collection of public health professionals, specialists and nongovernmental organizations promoted legislative and institutional reform in three key areas: food adulteration, public health, and reform of state institutions (Howlett and Ramesh 87-117; Lang 169-185). The international discourse shift from a focus on food supply to food demand and the focus expanded to entitlement, risk and vulnerability (Maxwell and Slater 531-553). Hunger and poverty again emerged as an issue in Canada in the 1980s, when community food banks and school feeding programs were established.

<sup>&</sup>lt;sup>5</sup> Defined as input suppliers, farmers, processors, distributors, retailers and governments

The 1977 Report of the Committee on Diet and Cardiovascular Disease and findings from an evaluation of the 1977 Food Guide and Handbook, prompted the 1982 revision of Canada's Food Guide. In the evaluation, health professionals expressed interest in the integration of the national nutrition recommendations into the Food Guide. Canada's Food Guide was revised to include new messages about the importance of energy balance (balancing energy intake and output) and moderation (reduced fat, sugar, salt and alcohol intake) (Health and Welfare Canada 1-235; Office of Nutrition Policy and Promotion). In 1983, the newly revised Dietary Standards were renamed the Recommended Nutrient Intakes (RNI) to reduce confusion among the dietary guidelines that described patterns of food use rather than individual nutrient requirements. The RNI's were defined as "the level of dietary intake thought to sufficiently meet requirements of almost all individuals in a group with specified characteristics" (Committee for the Revision of the Dietary Standard for Canada; Murray and Beare-Rogers 391-393). A process to review the nutrition labelling guidelines was initiated in 1983. Criteria for rating nutrient content of food based on two different reference standards was proposed and rejected for being too complicated. This proposal was not pursued (Committee on Use of Dietary Reference Intakes in Nutrition Labelling).

In 1984, the Progressive Conservative party which supported a neoliberal adjustment agenda was elected to govern Canada. The 1985 Report of the Royal Commission on the Economic Union and Development Prospects in Canada (the Macdonald Commission), endorsed the economists argument related to market

superiority and advocated for continental free trade, natural unemployment rates and reduction of social welfare expenses (Bradford 193-215).

In the early 1980s, concern was growing about the focus of health promotion on lifestyle. Robert Evans argued that personal lifestyles were not freely determined by individual choice, but rather existed within social and cultural structures that influenced behaviour. This social or population health perspective viewed the maintenance and improvement of health of a particular population as a collective social enterprise (linked to the right to health care). The alternative neoclassical liberal view assumed consumer sovereignty and that health care use should be determined by individual rather than collective preferences and choices. Evans noted that some of the ideas in the Lalonde Report were based on consumer sovereignty principles (Evans 325-344; Health Canada 7-26). This public health discourse led to the first International Conference on Health Promotion in Industrialized Countries in Ottawa in November 1986. The conference was sponsored by the World Health Organization (WHO), Health and Welfare Canada and the Canadian Public Health Association. At the conference, the Ottawa Charter for Health Promotion was released and identified five broad health promotion action strategies: build healthy public policy, create supportive environments, strengthen community action, develop personal skills and reorient health services (Health Canada 7-26). The Federal Minister of Health also released Achieving Health for All, a report that suggested methods to shift the emphasis from curative health to health promotion with a strong emphasis on broader determinants of health using strategies such as coordinating healthy

public policy, strengthening community health services and fostering public participation (Epp; Health Canada 7-26).

In the mid 1980s, key policy objectives within Agriculture Canada were to ensure supply; allow producers, processors and distributors to earn more income from their activities; make the marketing system more effective; and increase the economic viability of the industry (Dakers and Forge 1-14). In 1983, the National Institute of Nutrition (NIN) was established to provide leadership in advancing the knowledge and practice of nutrition among Canadians. The nutrition policy community identified that the 1983 RNI's were out of date resulting in a lack of coordination of nutrition messages, programs and materials resulting in public confusion. In 1986, the NIN convened a broad stakeholder meeting which identified that a common set of nutrition recommendations was needed to develop a coordinated national policy on nutrition. Participants included the Canadian Cancer Society, Canadian Heart Foundation, Canadian Diabetes Association, Canadian Dietetic Association, Osteoporosis Society, Hypertension Society, CPHA, Consumers Association of Canada and Grocery Product Manufacturers of Canada (Health and Welfare Canada).

Internationally in November 1986, there was a food safety scare when bovine spongiform encephalopathy (BSE) was identified in the UK after a cow's abnormal behavioural symptoms were recorded in December 1984. Although Britain's Ministry of Agriculture and Food did not know if BSE was transmissible to humans, the British public was assured that British beef was safe and BSE was not a danger to human health. A natural experiment was initiated until the

incubation period for potential human disease provided epidemiologists with enough information to identify the disease agents (MacLachan 40-69).

In response to the 1986 International Conference on Health Promotion, the Health Promotion Directorate budget tripled in 1987 and a number of new initiatives were implemented. The Canadian Heart Health Initiative was an example of a countrywide multi-level strategy to prevent cardiovascular disease through the control of the multiple risk factors over fifteen years (1987-2000). Health Canada worked with the provincial departments of health, Heart and Stroke Foundation of Canada and over 1,000 voluntary, professional, and community organizations to develop, implement and evaluate the Canadian Heart Health Initiative (Health Canada 7-26). Another example was Healthy Weights, a health promotion strategy developed in response to the growing preoccupation of health professionals and the public with weight control. One component was the release of Canadian Guidelines for Healthy Weights, which recommended the use of the Body Mass Index and Waist-Hip ratio as tools to assess weight status and risk of developing health problems. A discussion paper highlighting current evidence and planning around healthy weights from a health promotion perspective was released (Expert Group convened by Health Promotion Directorate, Health Services and Promotion Branch 1-126; Health and Welfare Canada).

In 1987, the Minister of National Health and Welfare appointed two committees to revise nutrition recommendations for health professionals and the

public. The first, a Scientific Review Committee (SRC)<sup>6</sup> updated the scientific evidence that defines a healthful diet for Canadians. *Nutrition Recommendations for Canadians: A Call for Action*, released in 1989, supported a dietary pattern that would promote and maintain health while reducing the risk of nutrition related disease (See Appendix 3) (Health and Welfare Canada 1-235). The second, a Communications/Implementation Committee (CIC)<sup>7</sup> translated the Nutrition Recommendations for use by the public and recommended communication and implementation strategies. *Action Towards Health Eating*, released in 1989, suggested implementation strategies for governments, health organizations, the food industry, the food services sector, and the general public are listed in Appendix 4 (Health and Welfare Canada).

Similar to conferences held in the UK, Europe and US, the Canadian Atherosclerosis Society and Department of National Health and Welfare, convened a Canadian Consensus Conference on Cholesterol in 1988. A series of recommendations were agreed upon in the areas of health promotion, dietary guidelines, role of agriculture and the food industry and clinical standards. The conference recommended that the agriculture and food industry be encouraged to produce foods that will make it possible to achieve lower levels of blood cholesterol in the Canadian population (Health Canada 7-26; Working Goup on the Prevention and Control of Cardiovascular Disease 164). Also in 1988, *Food and Drug Act* regulations introduced voluntary nutrition labelling to standardize

<sup>6</sup> Membership included researchers and scientists.

<sup>&</sup>lt;sup>7</sup> Membership included representation from nutrition researchers; federal, provincial and municipal health and agriculture departments; Grocery Products Manufacturers of Canada; Canadian Dietetic Association and the National Institute of Nutrition.

the content and format of nutrition information on food packages, nutrient content claims and declaration of serving sizes (Health Products and Food Branch, Health Canada 7).

Trade became a central consideration in agriculture and food policy. The protection of Canada's grain, beef and pork created tensions between the Canadian and American governments (Skogstad 1-8). These tensions were identified as an important catalyst in Canada's search for clearer trading rules and a bilateral dispute resolution mechanism under the Canada-US Free Trade Agreement (FTA) that took effect on January 1, 1989 (Brooks and Miljan 22-49). Also in 1989, a major review of the agriculture sector was launched by the Canadian government to identify policy instruments that would better respond to market, health and environmental challenges faced by the agri-food industry. A strategic plan developed by farmers, processors, suppliers, consumers and government promoted a reduction of trade barriers and larger role for the private sector with a vision of market-oriented environmentally sustainable agriculture. Implementation included legislation to change Agriculture Canada's regulatory system, Department restructuring and a new name, Agriculture and Agri-Food Canada (AAFC) to reflect the government's wish to emphasize production of all types of food products, not only primary products (Dakers and Forge 1-14).

Research continued to support the important role of food and nutrition in preventing chronic disease. In 1989, the *Diet and Health Report* released by the IOM, identified an international consensus on the overall contribution of diet in increasing the risk of several major chronic diseases as well as the types of

dietary modifications needed to reduce the risk of diet-related chronic disease at the individual and population level (National Research Council (USA), Committee on Diet and Health.).

#### 1990s

Worsening federal and provincial fiscal situations meant that government could not maintain current levels of support for agricultural programs securing and stabilizing farm incomes. In 1991, the federal government reformed income distribution programs for the grains and oilseeds sector to require producers and provinces to assume a larger percentage of the costs (Skogstad 1-8). In the early 1990s, research from the UK confirmed the protective effects of folic acid against neural tube defects, if taken prior to pregnancy. Scientists also began to raise concerns about the detrimental effects of trans fats and the amounts found in the Canadian diet<sup>8</sup> (Trans Fat Task Force 1-42).

In 1992, the Food and Agriculture Organization (FAO) and WHO convened an International Conference on Nutrition in Rome. One hundred and sixty countries participated and endorsed the *World Declaration and Plan of Action on Nutrition*. The Plan of Action on Nutrition contained four objectives: ensuring continued access by all people to sufficient supplies of safe foods for a nutritionally adequate diet; achieving and maintaining health and nutritional wellbeing of all people; achieving environmentally sound and socially responsible development to contribute to improved nutrition and health; and eliminating famines and famine deaths (World Health Organization / Food & Agriculture

<sup>&</sup>lt;sup>8</sup> The majority of the trans fats in our diet are industrially produced and typically found in foods made with partially hydrogenated oil. These foods are predominantly baked and fried goods such as crackers, cookies, doughnuts, pastries, muffins, croissants, French fries and breaded foods.

Organization). In response to the recommendation that governments incorporate nutrition objectives into policies and programs, the Office of Nutrition Policy (ONP) within Health Canada took a leadership role. An Advisory Committee was formed to develop a Canadian plan of action for nutrition and included representatives from the Government of Canada (Health Canada, Human Resources Development, AAFC), municipal and provincial governments, the public, Canadian International Development Agency, Canadian Dietetic Association and the World Food Day Association of Canada participated on the Advisory Committee (Health Canada.).

In 1992, a new Canada's Food Guide to Healthy Eating was released and recommended selecting foods to meet energy and nutrient needs to reduce the risk of chronic disease. This revised Food Guide was based on a total diet approach which promoted meeting both energy and nutrient requirements, recognizing that energy needs vary. Four food groups remained and the names were changed to Grain Products, Vegetables and Fruit, Milk Products, and Meat and Alternatives. The Guide also introduced the Other Foods category which included foods and beverages that did not fit into any of the four food groups but were part of Canadian diets. This approach represented a shift from former food guides that were based on a foundation approach which identified the minimum food intake required to meet nutrient requirements (Health and Welfare Canada; Office of Nutrition Policy and Promotion). The Canadian Pediatric Society questioned the dietary recommendations on fat consumption in children and worked with Health Canada to develop the 1993 *Nutrition Recommendations* 

Update: Dietary Fat and Children (Health Programs and Services Branch, Health Canada 1-3).

In 1993, the federal Progressive Conservative government was replaced by a Liberal government. Although the liberal electoral platform was based on a commitment to traditional liberal values, when they took power, the new Chrétien administration implemented a deficit and debt reduction agenda (Turner 80-95). In an attempt to realign the role of the state and reduce inefficiencies within the public service, the federal government reformed its financial administration and personnel systems so departments would have more flexibility in the use of money and staff. New public management sought to enhance the efficiency of the public sector and the control that government has over it. The main hypothesis in new public management reform was that a more market like orientation for the public sector would lead to greater cost-efficiency for governments, without having negative side effects on other objectives (Commonwealth Secretariat 143).

The Canada-US trade region was expanded in 1994 as the North
American Free Trade Agreement (NAFTA) included Mexico (Brooks and Miljan
22-49). This regional trade agreement increased Canada-US interdependence in
trade as Canadian agri-food exports to the US rose from 30 per cent in 1984 to 55
per cent by 1993. During the same time period, American imports into Canada
rose from 55 per cent of total agri-food imports to 61 per cent (Skogstad 1-8). In
1994, the federal government released a discussion paper regarding social
security reform. The unemployment insurance system and federal support for
provincial programs of health, welfare and higher education were identified as the

primary targets of reform. Old-age pensions were not included in this discussion (Brooks and Miljan 172-198). Also in 1994, an F/P/T advisory committee adopted a new population health framework proposed in the discussion paper *Strategies for Population Health: Investing in the Health of Canadians*. This approach focused attention beyond the individual and recognized that many determinants influence the health of Canadians such as the social and economic environment, early childhood development, physical environment, personal health practices, individual capacity and coping skills, human biology and health services (Federal, Provincial and Territorial Advisory Committee on Population Health). The Canadian Prenatal Nutrition Program was established by Health Canada in 1994 to develop or enhance programs for vulnerable pregnant women. The program funds community agencies to provide food and food vouchers, health education, social support and referrals to health and social services ("Canadian Prenatal Nutrition Program.").

In the early 1990's, both Canada and the US were considering the revision of dietary standards to reflect new scientific evidence. A multi-sectoral consultation was held to review the advantages and disadvantages of harmonizing Canada's dietary standards with those of the US. The symposium reached consensus in support of harmonization and identified three major advantages for Canada to be involved in the US process. The first was that the science underlying nutrient requirements would be the same. The second was that Canadian participation in a US review would allow Canadian scientists and government to gain expertise related to the increasing knowledge base for

nutrients, food and health. Thirdly, NAFTA suggested that a shared science base underlying nutrition policy could facilitate harmonization of trade related matters such as nutrition labelling. The potential for the harmonization of standards. regulatory requirements and policy in such areas as food labelling, food fortification, nutrition claims and dietary guidance systems was identified (Office of Nutrition Policy and Promotion). In 1995, Canadian and US governments agreed to jointly develop Dietary Reference Intake's (DRI), a comprehensive set of nutrient reference values for healthy populations that can be used for assessing and planning diets. It is anticipated that the DRIs will replace the RNI's in Canada and Recommended Dietary Allowances (RDA's) in the US. The process was overseen by the Institute of Medicine (IOM) and a Standing Committee on the Scientific Evaluation of Dietary Reference Intakes was established to develop the scientific basis for nutrient requirements for the healthy population in both countries (Food and Nutrition Board's Committee on the Scientific Evaluation of Dietary Reference Intakes 332-334; Food and Nutrition).

There had been limited attention to the further development of national information about dietary habits of Canadians since the 1974 Nutrition Canada Survey. The National Population Health Survey (NPHS), conducted by Statistics Canada, measured the health status of Canadians and added to existing knowledge about determinants of health. In 1994-95, the NPHS included nutrition related supplementary questions including healthy eating messages, self-rated eating habits, self-reported height/weight and sources of nutrition information. A sample of 13,400 Canadians 12 years of age and over responded to the survey.

Over two thirds of Canadians over the age of 12 years said they were concerned about the amount of fat in their food. Eighty six per cent of Canadians who were concerned about the amount of fat in their diet did something to reduce their fat intake. NPHS results suggest that the message to increase consumption of cereals, breads, other grain products, vegetables and fruits was being heard and acted upon by many Canadians. Thirty per cent of Canadians between the ages of 20 and 64 were considered to be overweight based on BMI calculated with self reported weight and height (Health Canada 1-8). In the mid 1990s, F/P governments signed a collaborative agreement to collect information about food intakes of Canadian adults. This was led by the Bureau of Nutritional Sciences within Health Canada and Statistics Canada. Unfortunately, data collection and analysis from each province spanned a ten year time period making it difficult to describe the current picture of Canadian eating habits at the national level (Health Canada).

In 1996, *Nutrition for Health: An Agenda for Action* was released as Canada's response to the 1992 FAO/WHO International Conference on Nutrition. The purpose was to ensure integration of nutrition into health, agriculture, education, social and economic policies and programs. The Agenda reinforced the importance of healthy eating practices, the need to monitor nutritional health through the development of appropriate indicators, and development of national food based dietary guidelines. See Appendix 5 for a list of key actions (Health Canada.). Coinciding with the release of the *Nutrition for Health: Agenda for Action*, the Centre for Science in the Public Interest (CSPI), an influential

American advocacy group with a nutrition policy and research mandate, opened a Canadian office. In December 1996, CSPI issued a call to Health Canada to reform nutrition labelling as current voluntary regulations were not adequate as key nutrients were often omitted and information was not in a standard, easy-to-read format (Centre for Science in the Public Interest - Canada).

Internationally in March 1996, food safety became a concern again when 10 cases of variant Creutzfeldt-Jakob disease were confirmed in people under the age of 42 living in the UK. Although there was no proof that BSE was transmitted to humans by beef consumption, the most likely explanation was that these cases were linked to exposure to BSE before bovine offal products (brain, spinal cord, spleen, thymus, tonsils, and intestines) were banned for human consumption in 1989. One week later, the European Union prohibited the export of all live cattle and beef products from the UK (MacLachan 40-69).

In June 1996, a Canadian Forum on the World Food Summit was convened in Ottawa by the Minister of Agriculture and Agri-food and the Director General of the FAO. Representatives from a number of sectors met to review the FAO drafts and provide advice to the Canadian Government on its paper. In November 1996, the FAO hosted 186 Heads of State at a World Food Summit to discuss and combat world hunger. The Summit introduced a new concept of food security to expand thinking beyond hunger to include health, access and agriculture production. Food security was defined as access at all times to the food required for a healthy active life for all of the world's people. The Rome Declaration on World Food Security and the World Food Summit Plan of Action

called for each nation to develop and implement a national plan of action to achieve food security domestically and internationally. In response, the AAFC convened a Joint Consultative Group to develop Canada's Action Plan for Food Security. The Joint Consultative Group included representatives from a wide range of provincial and federal government departments, Universities, food banks, food processors, non-governmental and professional organizations. The following priorities for action were identified: the right to food; reduction of poverty; promotion of access to safe and nutritious food; food safety; traditional food acquisition for Aboriginal and coastal communities; food production; emphasis on environmentally sustainable practices; acknowledgement of peace as a precursor to food security; fair trade; and a monitoring system for food insecurity (Agriculture Agrifoods Canada). Civil society representatives were critical of the consultative approach used to draft Canada's Action Plan for Food Security. They identified it was "ineffective and served to legitimize existing decision making rather than being a real process for participation" (Drafting Committee 1-13). A Food Security Bureau within the Market and Industry Services Branch of AAFC was established to coordinate information on food security, monitor implementation of the Action Plan, and report on progress to the World Food Summit (Agriculture Agrifoods Canada).

Although health promotion and population health theory have much in common in terms of goals, they operate from different theoretical bases and assumptions. In 1996, a 'population health promotion' model was developed by Health Canada to unify concepts for federal government policies and programs.

The new model combined the health promotion strategies of the Ottawa Charter with the major health determinants and population groups (Health Canada 7-26). Also in 1996, a federal process to review health claims and consider messages about food and health disease relationships on food products was initiated. It was proposed that Canada adopt generic claims which could apply to groups of foods with specific nutritional attributes and utilize the standards of evidence to assess new claims developed by the US (National Institute of Nutrition 1-5).

In 1997, the Canadian Food Inspection Agency (CFIA) was established as a comprehensive agency that combined the food inspection activities previously carried out by AAFC, Health Canada and Fisheries and Oceans Canada(Dakers and Forge 1-14). Food safety education was supported through the establishment of the *Canadian Partnership for Consumer Food Safety Education*. This partnership was incorporated in April 1998 and included over 60 industry, consumer, government, environmental and health organizations. The organization works to reduce microbial food-borne illnesses by increasing awareness of safe food handling practices through coordination and provision of food safety education programs to consumers (Canadian Partnership for Food Safety Education).

In late 1997, Health Canada met with stakeholders interested in nutrition labelling to discuss the establishment of an Advisory Committee with a mandate of identifying and defining relevant nutrition labelling issues; examining findings from consultations and research; and providing advice to Health Canada for their decision-making. In February 1998, the federal Minister of Health announced a

nutrition labelling Policy Review in response to *Nutrition for Health: An Agenda for Action*. The goals are to improve the usefulness of nutrition labelling, increase its availability and broaden public education on its use. An Advisory Committee of nine stakeholders was formed to "provide advice and guidance from many perspectives--industry, public health, consumers, education, health policy, nutrition, disease prevention and communication." Stakeholder consultation included input from the public, food industry and expert groups such as science, health and literacy professionals and packaging designers. Consensus was reached on the importance of consistency in appearance of the label and use of an easy-to- read format similar to the US standardized "nutrition facts" panel. Consumers and health professionals supported mandatory listing of nutrition information (core list) on food products while industry supported a voluntary approach (Health Products and Food Branch, Health Canada 7).

Folic acid fortification of white flour, enriched pasta and cornmeal was permitted at an equivalent level to the US in December 1996 and became mandatory in November 1998 (Liu et al. 1-15). There was a growing interest in the role that nutrition plays in health and food manufacturers sought to address consumer demand by developing foods that promote good health such as functional foods and nutraceuticals. In 1998, Health Canada released A *Policy Paper on Nutraceuticals/Functional Foods and Health Claims on Foods*. A nutraceutical was defined as a product isolated or purified from foods generally

sold in medicinal forms not usually associated with food, such as probiotics<sup>9</sup>. A functional food was defined as a product similar in appearance to, or may be a conventional food, is consumed as part of a usual diet, and demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions, such as oats or cranberry juice. After two years of consultation on health claims for foods and messages about health-disease relationships, it was recommended that structure/function and risk reduction claims should be permitted and the claims could be generic or product- specific. It was recognized that the effect of a food or its ingredients would not be generalized to other similar products unless acceptable supporting evidence was provided (Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch 1-24).

Also in 1998, Health Canada began a separate review to develop policy options to regulate the addition of vitamins and minerals to foods taking into account the public health role of nutrient addition to foods, consumer needs and expectations and industry concerns that current Canadian food fortification policies were too restrictive and limited the development of new products (Health Canada.). A 1999 Report proposed that the current policy of adding vitamins and minerals to foods to maintain and improve the nutritional quality of the food supply through restoration and nutritional equivalence of substitute foods be retained. It was recommended that fortification programs be expanded to allow for a wider range of fortified products which would provide for more food sources of nutrients

<sup>&</sup>lt;sup>9</sup> Probiotics are live microorganisms that, when ingested in appropriate quantities, have a beneficial effect in the prevention and treatment of specific medical conditions by improving the host's intestinal microbial balance.

to help Canadians meet the DRI's (Committee on Use of Dietary Reference Intakes in Nutrition Labelling).

In 1999, AAFC submitted the first report following the FAO World Food Summit, Canada's Progress Report to the Committee on World Food Security in Implementing the World Food Summit Plan of Action. The report described that Canada has a safe, stable and abundant food supply that is available at affordable prices in most parts of the country. Poverty was identified as one of the major factors that reduced access to sufficient, safe and nutritious foods. Groups most likely to be vulnerable to food insecurity were Aboriginal people, single mothers and their children, persons with disabilities and recent immigrants. It was reported that individuals who had not completed high school generally had low incomes and were not able to meet their food requirements without compromising other basic needs (Agriculture and Agrifood Canada 1-43).

Bradford identified that a renewed macroeconomic debate emerged in the late 1990s as support for neoliberalism began to decline. The question related to the role of government in countering market outcomes was reopened as fiscal circumstances of the federal government and most provinces improved. There was a growing awareness of social consequences of neoclassical liberalism such as increasing social polarization in the face of growing earnings inequality.

Concerns were also raised about the quality of health care and post secondary education systems (Bradford 193-215). The Government of Canada implemented a series of policy initiatives to better integrate economic, social and health policies. In 1998 the National Child Benefit, a tax credit program was aimed at

preventing and reducing child poverty, promoting labour market attachment and reducing duplication by harmonizing program objectives and benefits across jurisdictions. The National Children's Agenda in 1999, was another intergovernmental policy that promoted good health, safety and security, success at learning, social engagement and responsibility for children. Also in 1999, the Social Union Agreement, signed by F/P/T governments identified a collaborative framework with principles and processes to achieve integrated social policy development (Health Canada 1-15).

The Second Report on the Health of Canadians released by the F/P/T Advisory Committee on Population Health in 1999 identified that Canadians were generally in good health. Life expectancy in Canada had reached a new high: 75.7 years for men and 81.4 years for women. The Report also identified that inequalities continue to exist in the health status of different population groups. Those with relatively low incomes and levels of education suffered more illnesses and died earlier than those with higher incomes and levels of education (Federal, Provincial and Territorial Advisory Committee on Population Health 1-50). A Food and Nutrition Surveillance Working Group with membership from Health Canada and the F/P/T Group on Nutrition was established in 1999. A Environmental Scan on Food and Nutrition Surveillance, defined as the tracking and forecasting of nutrition-related health events and determinants, provided a foundation to improve food and nutrition surveillance in Canada (Health Canada). Obesity Canada, a not-for-profit organization aimed at improving the heath of Canadians

by reducing the occurrence of obesity through research, education and service, started in 1999 (Lau, D. C. W. 503-505).

Despite international recognition that Canada has a food supply that is safe, nutritious and of high quality, the method of evaluating the safety of the Canadian food supply is not well-described. There is limited data regarding the burden of food borne illness and indicators used to determine a safe food supply (Organisation for Economic Co-Operation and Development 17-25).

In 2000, the Government of Canada established the Canadian Institute for Health Research (CIHR) to better address health needs and priorities of Canadians. The CIHR reports to Parliament through the Minister of Health and focuses on four types of research: biomedical, clinical, health systems and services and population and public health (Canadian Institute of Health Research). In June 2000, a consultation document on *Standards of Evidence for Evaluating Foods with Health Claims: A Proposed Framework* was released. Policy options were proposed to ensure that foods with health claims were supported by appropriate evidence to ensure product safety and claim validity, quality assurance and procedures and methods for testing the product. In August 2000, another consultation on *Generic Health Claims for Foods* outlined five generic diet-based disease risk reduction claims being considered for adoption in Canada<sup>10</sup> (Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch 1-24).

<sup>&</sup>lt;sup>10</sup> Generic health claims include 1) A healthy diet containing foods high in potassium and low in sodium may reduce the risk of high blood pressure, a risk factor for stroke and heart disease; 2) A healthy diet with adequate calcium and vitamin D, and regular physical activity, help to achieve strong bones and may reduce the risk of osteoporosis; 3) A healthy diet low in saturated and trans

Although the central role of environmental and population level factors in the development of obesity and chronic disease has been recognized by researchers, translation into policies and programs has been limited. In 2000, Smedley and Syme proposed the use of a social environmental approach to health and health interventions based on the ecological model, to assist in policy and program development. The model suggests that intervention efforts should address not only "downstream" individual-level phenomena (e.g., physiologic pathways to disease, individual and lifestyle factors) and "mainstream" factors (e.g., population-based interventions), but also "upstream," societal-level phenomena (e.g., public policies) (Committee on Capitalizing on Social Science and Behavioral Research to Improve the Public's Health, Division of Health Promotion and Disease Prevention and Institute of Medicine).

The Canadian Community Health Survey (CCHS) data gathered in 2000/01 and released in 2003 identified that obesity and overweight rates as measured by BMI continued to increase. Information from 135,000 individuals, aged 12 and older, in all provinces and territories was collected and analyzed. In 2000/01, 14.1 per cent of the adult population aged 18 and over was considered obese and 32.4 per cent overweight. By 2003, 14.9 per cent of adult Canadians were considered obese and 33.3 per cent were considered overweight. An estimated 46.7 per cent were in the normal range, and about 2.7 per cent were underweight. In 2000, the percentage of men who were overweight

fats may reduce the risk of heart disease; 4) "A healthy diet rich in a variety of vegetables and fruit may help reduce the risk of some types of cancer 5) "Won't cause cavities" or "Does not promote tooth decay" or "Does not promote dental caries" or "Non-cariogenic" (applicable only to certain chewing gum, hard candy or breath freshening products)

was 1.4 times higher than women. Rates of obesity were highest in the age group 45 to 64. (Canadian Institute for Health Information) CCHS respondents aged 12 or older were also asked if, because of a lack of money, in the previous year they or someone in their household had not eaten the quality or variety of food that they had wanted; had worried about not having enough to eat; or had actually not had enough to eat. Respondents were considered to be living in a food-insecure household if they had been in at least one of these situations because of a lack of money. According to this definition, an estimated 3.7 million Canadians, or 14.7 per cent of the population aged 12 or older, had experienced food insecurity in the previous year (Statistics Canada).

### II. Analysis

During this time period, macroeconomic problems from the 1970s continued but showed improvement in the 1990s. Discontent with welfare liberalism in the 1970s resulted in the gradual adoption of neoclassical liberal social and economic policy approaches which changed the scope of government and altered its distributive dimensions. It is generally accepted that neoclassical liberalism became the accepted policy direction with the election of the Progressive Conservative government in 1984 and release of the 1985 MacDonald Commission Report. The shift to neoclassical liberalism altered the choice of policy instruments and increased the use of policy instruments that reduced the role of government and increased responsibility of markets. For nutrition, policy goals changed to the promotion of health and prevention of chronic disease. The nutrition policy community continued to be highly involved

and participation of the attentive public increased to include civil society interested in improving food security and researchers interested in reducing obesity rates.

Table 3 summarizes the policy instruments that were continued or developed between 1980 and 2000. A number of policy instruments were continued and updated such as consumer and health professional guidelines. New policy instruments included the FTA, NAFTA, reduction of provincial transfer payments and social programs and establishment of food banks.

Table 3 Policy	Instruments affecting nutrition between	een 1980 and 2000
Policy instrument categories	Welfare Liberal Content (Positive Freedom)	Neoclassical Liberal Content (Negative Freedom)
Nodality	<ul> <li>Dietary Standards renamed RNI in 1983 and revised in 1989</li> <li>DRIs developed between 1997-2004</li> <li>Nutrition: An Agenda for Action 1996</li> <li>Provincial nutrition surveillance 1999</li> <li>Food safety education campaign 1998</li> <li>Canadian Guidelines for Healthy Weights 1988</li> </ul>	<ul> <li>Market responds to consumer demands</li> <li>Increased fast foods and convenience products</li> <li>Revised Canada's Food Guide 1982 and 1992</li> </ul>
Treasury	<ul> <li>Income supports for veterans maintained</li> <li>Canadian Prenatal Nutrition Program established in 1994</li> </ul>	<ul> <li>Universality eliminated in family allowance and oldage security and unemployment insurance</li> <li>Reduced health transfers to provinces</li> <li>Increased number of charity food banks</li> </ul>
Authority	<ul> <li>Canada Health Act 1984</li> <li>Food and Drug Act revised 1988</li> </ul>	<ul> <li>Free Trade Agreement with the US 1989</li> <li>Free Trade Agreement within North America 1994</li> <li>Canada Health and Social</li> </ul>

Organization		

- Increased funding to Health Promotion Directorate 1987
- Agriculture Canada renamed Agriculture and Agri-Food Canada 1989

#### Established

- Canadian Food Inspection Agency 1997
- Food Security Bureau 1998
- CIHR 2000

- Failed National Food Strategy (early 1980s)
- Expanded pluralism including food industry continued
- Expenditure management review and reduced role of the federal public sector 1993/1994

The analysis will now address the nodality instruments introduced to address nutrition, the discourse related to adequate quantities of food, agriculture issues and food fortification/nutrition labelling.

## **Nutrition (Nodality)**

At the end of the 1970s, the federal government began to redefine nutrition policy goals as surveillance data from 1974 identified that approximately 50 per cent of Canadians were obese or overweight. In 1982, the consumer and health professional guidelines were revised and included new goals about energy balance and moderation. A number of different approaches to address nutrition were introduced during this time period such as the healthy weights concept with the goal of increasing the proportion of Canadians who adopt nutrition practices consistent with attaining and maintaining appropriate body weight; use of health promotion concepts described in the *Ottawa Charter* and *Achieving Health for All*; and a clinical approach to nutrition for individuals at high risk of developing cardiovascular disease building on research from the 1980s linking between serum cholesterol and food intake.

In the late 1980s, Health and Welfare Canada established a Health Promotion Directorate to implement both collective and individually determined approaches to improve health. Evans argued that although a new high profile department of health promotion was created, the focus on changing individual lifestyle was maintained and few major policy changes were made due to different interpretations of the Lalonde Report by varying interest groups in the health care sector. Evans stated that government action on health promotion was limited by a number of economic interests that supported lifestyle change for profit within fitness (sports equipment sellers, spas, specialized travel) and nutrition (diet books, bottled water, specialized foods) industries. These economic interests were based on consumer sovereignty principles, supported individual choice and discouraged action that would attack sources of "unhealthy" lifestyle or redeploy resources from health care systems for this purpose (Evans 325-344; Hancock 93-100).

The nutrition policy community continued to be actively involved in policy formulation for consumer and health professionals. In the 1980s, concern related to inconsistent nutrition messages from the NIN, other health provider associations and disease oriented organizations were identified as a catalyst to update dietary guidance through two committees that developed *Nutrition Recommendations for Canadians* and *Action Towards Healthy Eating*. These reports made recommendations that promoted a welfare liberal approach such as developing a food and nutrition policy (organization); developing community-based nutrition intervention programs, increasing research and surveillance

efforts (nodality); and creating supportive environments through legislation (authority). These are similar to recommendations made in the 1970s which suggested that agriculture and the food industry be encouraged to improve the quality of the food supply.

With the release of Canada's Food Guide for Healthy Eating Nutrition in 1992, nutrition policy goals changed to include the prevention of chronic disease. The signing of the FTA in 1989 and NAFTA in 1994, contributed to the agreement between Canada and the US to jointly develop DRIs as nutrition reference values for healthy populations and replace Canadian RNIs. Canada's movement towards chronic disease prevention was consistent with the 2000 WHO *Global Strategy for the Prevention and Control of Non-communicable Diseases*, which emphasized integrated prevention efforts that targeted three main risk factors: tobacco, unhealthy diet and physical inactivity (Healthy Living Strategy; World Health Organization and Food and Agriculture Organization).

The Canadian government expanded its ability to identify population health issues with implementation of health surveys through Statistics Canada and expanded nutrition research through CIHR. The NPHS provided valuable information regarding Canadians concern about the food supply, understanding of nutrition messages and self reported BMI. The CCHS data confirmed that rates of obesity and overweight were increasing in Canadian adults.

In summary, the federal government implemented a number of policy instruments to address healthy weights that responded to neoclassical liberal views that individual failure was the cause of obesity. Government increased its

ability to measure changes in population health status in the late 1990s. This data described that overweight and obesity rates in Canadian adults continued to increase suggesting that policy instruments implemented to promote healthy weights were unsuccessful. The shift suggested by the health promotion and population health approaches to address societal failure was not reflected in the policy tools implemented by government. Researchers suggested the need for upstream interventions in the form of public policy to reduce obesity and chronic diseases.

## **Nutrition (Adequate Quantities)**

Hunger and poverty became a concern in the 1980s as a result of the poor economy and the situation deteriorated when governments reduced income security programs in the 1990s. Food banks were established in the mid 1980s as an emergency measure. It was assumed that once the recession was over and unemployment rates improved food banks would not be necessary anymore. In the early 1990s, the federal government remained in deficit and embarked on a series of cost cutting exercises that resulted in decreased income transfers to provinces and ultimately individuals. After a series of consultations on the future of Canada's social security system and safety net, the *Canada Health and Social Transfer Act* (CHST) was passed in 1995 and replaced the *Established Programs Financing* transfer and the *Canada Assistance Plan*. The effects of these changes were to first decrease, and then stabilize transfers for health, post-secondary education and social assistance. Although this gave the provinces greater power in assigning the funding to health, post-secondary education and social

assistance, the amount of funding was left to the discretion of the federal government (Banting and Boadway 1-78; Turner 80-95). CHST payments to provinces were reduced by 40 per cent over the next three years and had negative effects on health care, education and social assistance at the provincial level (Bradford 193-215; Roberts 18-36).

In the 1990s, the international community introduced the concept of food security, to expand actions to address hunger to include other policy areas such as health, agriculture, environment and food sustainability. The international community acted as a catalyst for the Canadian government to become more involved in the issue of food insecurity through the FAO/WHO World Food Summit in 1992 and a requirement for regular progress reports. The 1996 Canada Action Plan for Food Security identified ten priorities for action which reflected a welfare liberal approach to promote the right to food, poverty reduction, environmental sustainability and traditional practices. A Food Security Bureau was established within AAFC to monitor Action Plan implementation and take a leadership role to coordinate the writing of the 1999 Progress Report to the FAO. Civil society including researchers, nongovernmental organizations and community activists identified that the Food Security Bureau was not active and began to organize around this issue (Drafting Committee 1-13).

Although there was agreement that poverty was a factor in food insecurity, the federal government and civil society had different perspectives about the causes that relate back to the principles of the British "Poor Law" established in

the late 1800's. The principle of perceived needs identified that people may be indigent related to their own choices or related to failures of society and its economic system. Disagreement about the cause of poverty resulted in different perceptions about potential policy solutions. The federal government seemed to think that poverty was related to personal failure and introduced new targeted child tax benefits in the late 1990's to reduce child poverty. It has been argued that the new tax credits did not offset reductions in provincial social assistance programs and low income Canadians did not have enough money to cover basic expenses leading to food insecurity (Raphael). Civil society suggested that the increase in food insecurity was a result of social and economic policies and was a negative consequence of neoclassical liberal policy. Using this problem definition, poverty was considered a societal failure and solutions would be welfare liberal in nature such as those identified in the *Canada Action Plan for Food Security* (Position of Dietitians of Canada 43-46).

Food insecurity has been shown to have other costs to society given the findings of the 1999 Second Report on the Health of Canadians, which identified that although Canadians were generally in good health, concerns related to inequalities of health status within different population groups had emerged. It was identified that individuals with relatively low incomes and levels of education suffered more illness and died earlier that those with higher income (Federal, Provincial and Territorial Advisory Committee on Population Health 1-50). Individuals living in food-insecure households in Canada were more likely to

report ailments such as heart disease, diabetes and high blood pressure (Tarasuk and Vozoris 120-126).

In summary, the expanded definition of food security changed from an emphasis on hunger to include concerns related to economics, health, agriculture and the environment which overlaps a number of policy arenas. During this time period, an economic policy solution to reduce the federal debt in the 1990s by reducing transfers to provinces and individuals created new problems of food insecurity, poor health in specific population groups and increased chronic disease resulting in increased health care costs. Government and an expanded policy community had different understandings of the causes of poverty and food insecurity which affected the discourse regarding most effective policy solutions.

### Agriculture

The collaborative effort by five federal government departments

(Agriculture, Consumer and Corporate Affairs, Fisheries and Oceans, Industry,
Trade and Commerce and National Health and Welfare) to develop a National
Food Strategy for Canada in 1977/78 was not accepted by the short lived new
government. The process to develop the National Food Strategy had not been
smooth. The different departments and their respective policy communities
defined the problems and solutions differently. The main focus had been on food
system issues in follow-up to the 1974 Speech from the Throne. Treasury,
nodality and authority policy instruments had been recommended to address
trade policy, agricultural research, marketing, processing and distribution.

Originally nutrition was a small part of the Strategy and expanded as a result of

policy community pressure. Policy instruments recommended were organization and nodality to improve health promotion. The failure of the Food Strategy may have resulted from different definitions of the problem and therefore disagreement on the potential solutions. A 1981 Agriculture Canada discussion paper went on to introduce the concept of an agri-food industry and identified policy objectives focused on increased income to enhance the economic viability of the food industry. These objectives were consistent with a neoclassical liberal approach. In 1989, an Agriculture Canada Review triggered a change in goals to reflect a vision of market oriented environmentally sustainable agriculture and a new name, Agriculture and Agri-food Canada (AAFC). A subsequent nutrition plan, released by Health Canada in 1996 focused on improving health by increasing nutrition education for the public, including nutrition programs as part of provincial health services and within schools, promoting breastfeeding (nodality) and improving the usefulness of nutrition labelling (authority) (Health Canada.). Food activists and researchers have argued that the divide between health policy focused on the welfare of the population and agriculture policy focused on market efficiency have negatively affected the food supply and agricultural practices. Efficient food production had reduced the cost of food at the point of sale, but did not factor in costs of increased disease or a contaminated environment (Lang 169-185; Tansey 4-12). In the late 1990's, there was increased research and interest in functional foods and nutraceuticals by the food industry. The ability to modify food composition to reduce the risk of chronic disease may prove to be an approach where health and agriculture may share similar goals.

Agriculture was identified as a source of trading tension with the US and one of the factors that led to the development of the FTA in 1989 and NAFTA in 1994. These agreements supported the reduction of trade barriers which resulted in increased trade between countries and an increased variety of food choices across North America. After the NAFTA agreement was signed, Health Canada and the NIN convened a conference to discuss the potential of working with the US to develop joint dietary standards in response to the increased trade between the two countries. In 1995, the US and Canada agreed to work together to develop DRIs, as national standards for nutrition policy. Free trade also accelerated the integration and industrialization of agri-food sectors which resulted in a small number of large firms dominating the market. It has been suggested by Lang and Tansey that globally the development of large international firms has negatively impacted food and nutrition policy in developed states by fragmenting markets and shifting consumer eating habits (Lang 169-185; Tansey 4-12).

Increased disease was linked to a contaminated food supply in both the US and the UK. Although Canada shares its food supply with the US, response to food safety was only the implementation of a food safety education program for consumers. Government was reoriented to establish the CFIA as a stand alone organization to monitor *The Food and Drug Act*. An important lesson from Britain's BSE crises was the need to separate the government department that promotes and supports food commodity producers from the agency responsible for monitoring and enforcing food standards (MacLachan 40-69).

In summary, the attempt to bring food and nutrition policy goals together was not successful, perhaps because agriculture policy goals to achieve market-oriented environmentally sustainable agriculture were not consistent with health goals of improving the health of the population. Implementation of a neoclassical liberal policy, free trade, increased trade and had positive economic benefits to Canada and the agri-food sector. Members of the nutrition policy community identified that free trade had negative effects on the food supply as a small number of large firms dominated the market and the food supply contained more processed foods causing a shift in consumer eating habits.

# **Nutrition (Food Fortification/Nutrition Labelling)**

Developing a more detailed nutrition labelling system was first recommended in the 1974 *Nutrition Canada Report*. Consumer concern regarding additives to maintain freshness during a longer storage period, a changing food supply and increased consumption of prepared products contributed to the need to have more detailed information on food labels to assist consumers make healthy food choices. The first attempt to review nutrition labelling guidelines in 1983 was not successful. In 1988, *Food and Drug Act* regulations were revised to include voluntary nutrition labelling by interested manufacturers. Three subsequent government nutrition planning documents, *Nutrition Recommendations: A Call for Action* (1990), *Canada's Guidelines for Healthy Eating* (1992) and *Nutrition for Health: An Agenda for Action* (1996) recommended substantial changes to the voluntary system. Consumers and health professionals wanted enough information to facilitate healthy food choices.

The food industry identified that the *Food and Drug Act* was too restrictive and limited the type of health information that could be communicated on the food label. Research and technology advances such as nutraceuticals and functional foods increased the opportunity to increase consumer choice and allow foods with specific nutritive properties to be developed and incorporated into the food supply (Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch 1-24; Committee on Use of Dietary Reference Intakes in Nutrition Labelling).

Within Canada enrichment of flour with folic acid became mandatory in 1996 in response to research that identified folic acid consumption before pregnancy could reduce neural tube defects (Tulchinsky and Varavikova 5-54). Tasnim Nathoo identified key differences in the debates over thiamine enrichment of flour in the 1940s and folic acid enrichment of flour in the 1990s. In the 1940s, the debate was about whether foods should be fortified and led to a decision to process foods differently rather than add vitamins to flour. In the 1990s, the debate was not about whether foods should be fortified but was about dosage, safety and effectiveness. Nathoo also suggested that as many women at high risk of developing neural tube defects were socially disadvantaged, increasing access to foods high in folic acid and improving health education was a simpler and cheaper way to reduce neural tube defects than improving the socioeconomic status of the population (Nathoo, Holmes and Ostry 375-382).

Consensus was reached regarding the development of an expanded nutrition labelling system and the federal government established an advisory

committee in 1998. Health Canada began a series of separate but overlapping policy reviews to assist in policy formulation for nutrition labelling, health claims and food fortification. There was general agreement that more nutrition information on labels would assist consumers understand the health benefit of consuming specific food products. Stakeholders agreed with the need for a format to provide consistent information and easy to read labels. Consumers and health professionals thought the core list should be mandatory while industry thought it should be voluntary. The review of policy options for adding vitamins and minerals to foods recommended that current policy be expanded to allow for fortification of a wider variety of foods.

At the end of this time period, no final policy decision had been made by government about direction for additional nutrition labelling. Food fortification continued to be successfully used in Canada and was expanded to include folic acid in flour to reduce neural tube defects in infants.

#### III. Conclusion

At the beginning of this time period, government made a shift to neoclassical liberalism which reduced the role of government and increased the role of markets. Policy instruments implemented between 1980 and 2000 reflected both types of liberalism, but emphasized individual approaches and neoclassical liberalism. Government went through a stage of policy evaluation, and a number of policy learnings related to the type and mix of policy instruments were identified. Implementation of neoclassical liberal policy solutions to reduce federal government expenditures by reducing transfer payments to provinces and

individuals created new problems such as poverty, hunger and poor health.

Implementation of free trade agreements had positive economic benefits to both Canada and the food industry, but negatively affected the structure of the food supply and consumers eating habits. The outcomes of the mix of policy instruments were increasing rates of overweight, obesity, food insecurity, health disparities and chronic disease.

The debate over individual or societal responsibility continued as government and policy community members defined nutrition problems differently thereby affecting potential solutions. Government saw nutrition problems mainly as a result of personal failure, with policy solutions focused on providing information for consumers and health professionals to promote lifestyle change or food banks to feed the hungry. Some members of the policy community and researchers suggested that nutrition problems were related to societal failure and recommended upstream policy solutions such as improving the quality of the food supply, developing coordinated food and nutrition policy and promoting supportive environments for healthy eating. Other members of the policy community saw nutrition as an individual responsibility and promoted the reduction of trade barriers and a larger role for the private sector. In the late 1990's support for neoclassical liberalism was waning, suggesting the need to redefine the problems, causes and potential policy solutions during another transition.

### CHAPTER 5: NUTRITION HISTORY AND ANALYSIS: 2001-2006

This chapter describes the public policy discourse in Canada between 2001 and January 2006. This period began with the September 11, 2001 attacks also known as 9/11 in New York that triggered concerns about safety and security of individuals in North America. The 9/11 attacks contributed to an increased role of the state for public security reasons and increased the amount of data that was produced to contribute to policy debates. The analysis of this period ended with the election of a new federal Conservative government in January 2006 although this stage continues to the present. During this time period, dissatisfaction with neoclassical liberalism was noted and some observers have argued the new challenge is to develop a macroeconomic policy paradigm that will provide for improved economic innovation and social cohesion (Bradford 193-215). The first section describes the scope of government policy, nutrition policy instruments developed and the distributive dimensions of the state. The second section considers the relationship of current nutrition policy to the historical structures and agents involved in nutrition policy described in Chapters 2, 3 and 4.

### I. Policy Context

At the end of the twentieth century, the federal government produced a budget surplus for the first time in 23 years, with more surpluses expected to follow. The budget surplus produced calls to expand federal transfer program funding and reduce the deficit. It was observed by Alasdair Roberts that there was no grand plan for how surpluses might be spent and there was a "policy vacuum"

in federal institutions in regards to how government would choose to move ahead" (Roberts 18-36).

In June 2001, Health Canada carried out a final policy consultation on proposals to improve nutrition information on pre-packaged food labels, including nutrition labelling (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). A second FAO World Food Summit was announced for 2002, in follow-up to the 1998 Rome Summit. In anticipation of this summit, Canadian civil society organizations with an interest in food security held a conference at the Ryerson Polytechnic University in Toronto. Representatives from every province and territory developed strategies to increase Canada's commitment on food security both domestically and internationally. This included passage of a resolution regarding the need for a national Canadian Food Security Network (Drafting Committee 1-13).

At the 2002 FAO Summit, AAFC submitted a Canadian Progress Report based on information received from F/P/T government departments, interested non-governmental and civil society organizations. The following priorities for the Government of Canada were identified: provision of debt-relief for highly indebted poor countries; work with other G-8 countries to develop an Africa Action Plan; and work with P/T governments to develop a new approach to ensure Canada is a world leader in food safety, innovation and environmentally responsible production. The 2002 World Food Summit reaffirmed the international community's commitment to reduce hunger by half by 2015 (Agriculture Agrifoods Canada).

Scientific advances included an increased understanding of the role of genetics in understanding risk, improving quality of life and preventing disease (Schneeman S5-9). Food and nutritional science also moved from its focus of identifying and correcting nutritional deficiencies to designing foods to promote optimal health by reducing the risk of disease (Clydesdale 35-40). With regard to research, nutrition was recognized as a priority issue by the CIHR with the establishment of the Nutrition, Diabetes and Metabolism Institute (INMD). The INMD linked researchers, scientists, community groups, and individuals from around the world who shared an interest in enhancing health in relation to diet, digestion, excretion, and metabolism. Obesity research has been a strategic priority of the CIHR INMD since its inception in 2001 and received funding priority in both the 2002 and 2004-2006 strategic plans (Canadian Institute of Health Research; Institute of Nutrition, Metabolism and Diabetes (INMD)). In March 2002, Health Canada launched a Folic Acid Awareness Campaign to raise awareness of the benefits of folic acid to help prevent birth defects. The campaign included advertisements in national magazines; posters in colleges. universities and fitness centres; information pamphlets directed at women of child-bearing age and resources for health professionals who advise women about pregnancy (Health Canada).

Two issues were noted internationally that may also affect Canadian policy makers. The first involves a concern raised by the US military that potential recruits and current soldiers were increasingly overweight and not meeting basic fitness requirements (Nolte et al. 486-490). There was also a world wide concern

about the potential for malicious contamination of food for terrorist purposes that could have global public health implications. In 2002, the WHO released a position paper to provide guidance to member states for integrating consideration of deliberate acts of food sabotage into existing food safety programs. It suggested that outbreaks of unintentional and deliberate food borne diseases should be managed by the same mechanisms used to protect food supply, a strong surveillance and response capacity (World Health Organization 1-50).

In 2002, Health Canada's vision was to maintain and improve the health and quality of life of Canadians; reduce the risks to the health of Canadians; and maintain confidence in the health system (Health Products and Food Branch 1-69). The Health Products and Food Branch mandate was to take an integrated approach to the management of the risks and benefits to health related to health products and food by minimizing health risk factors for Canadians while maximizing safety provided by the regulatory system for health products and food; and promoting conditions that enable Canadians to make healthy choices and providing information so that they can make informed decisions about their health. The Branch identified the need for action on four themes to address this mandate: building a modern regulatory system, sustaining health care reform, planning a 21st century public health system, and improving First Nations and Inuit health.

Federal/Provincial/Territorial governments identified two related challenges to the sustainability of the Canadian health care system. The first was the increasing rate of chronic disease in Canada and the associated poor health outcomes. Chronic diseases were the leading cause of death with more than 75

per cent of deaths attributable to five chronic diseases: cancer, cardiovascular diseases, diabetes, kidney disease, and respiratory diseases. These chronic diseases share common preventable risk factors, including physical inactivity, unhealthy diet, tobacco use and the environmental determinants that underlie these personal health practices. The second was the continuing disparity in health status as vulnerable Canadians are at high risk for poor health, early death and chronic disease (Chronic Disease Prevention Alliance of Canada). In June 2002, the Conference of Deputy Ministers approved an integrated approach to reducing the burden of chronic disease in Canada. This approach focused on four elements: addressing common risk factors; addressing the relationship between lifestyle choices and social conditions; consolidating prevention efforts within life settings; and engaging partners within and across systems that impact health (Health Canada 1-15). Health Canada funded the Chronic Disease Prevention Alliance of Canada (CDPAC), an initiative of the national non-governmental organizations such as the Heart and Stroke Foundation, the Canadian Diabetes Association, and the Canadian Cancer Society (Health Canada 1-15). In September 2002, the F/P/T Ministers of Health announced a Pan-Canadian Healthy Living Strategy. Healthy Living was defined as making positive choices about personal health practices such as nutrition, physical activity and healthy weights that can apply to both individuals and populations. The aim was to promote good health and reduce risk factors associated with diabetes, cancer, cardiovascular and respiratory diseases (Health Canada 1-15; Healthy Living Strategy).

In September 2002, an Expert Advisory Committee on Dietary Intakes was created to support Health Canada's implementation of the DRIs into dietary guidance policies (Office of Nutrition Policy and Promotion 6). The food fortification policy review initiated in the late 1990s was continued when Health Canada released a 2002 consultation document. There was general agreement on the need to continue mandatory fortification to address public health concerns but the food vehicles for discretionary fortification (the voluntary addition of nutrients to food by manufacturers) still required discussion (Health Canada). Also in 2002, Health Canada released a consultation document. *Proposed* Regulatory Framework for Product Specific Authorization of Health Claims for Foods, to receive comments about a proposal that would enable food manufacturers to receive product-specific authorization of health claims without having to undertake regulatory amendments for each claim. Comments were also requested about a proposal that therapeutic claims (described as claims that a product can cure, treat, mitigate, or prevent a disease of condition) should be regulated and labelled as "Foods for Special Dietary Use" (Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch 1-24).

Changes to the *Food and Drugs Act* Regulations published in December 2002 mandated nutrition labelling on most pre-packaged foods, updated the requirements for nutrient content claims; and introduced a new regulatory framework and process for diet-related health claims. The regulations were mandatory for large manufacturers beginning December 12, 2005 and for small manufacturers beginning December 12, 2007. It was proposed that compliance to

these changes be monitored by the CFIA although no additional funding was provided (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). Also in 2002, the Panel on Macronutrients of the U.S. National Academies of Science, IOM, recommended that trans fat consumption be as low as possible while ensuring a nutritionally adequate diet. Canada became the first country to regulate the mandatory labelling of trans fat on pre-packaged foods. One year later, Denmark became the first country to set an upper limit on the percentage of industrially produced trans fat in food, limiting trans fats from sources other than meats and dairy products to a maximum of 2 per cent of total fat in each food item (Trans Fat Task Force 1-42).

On May 20, 2003 the discovery of a single cow infected with BSE in Alberta resulted in economic disaster for the Canadian beef industry. Over 33 countries closed their borders to Canadian beef out of safety concerns regarding consumption resulting in major disruptions to Canada's cattle market and regional economies. The following year, the Canadian Senate's Standing Committee on Agriculture and Forestry investigated the situation and explored potential solutions with the aim of preventing future recurrences. The Committee concluded that reopening the US border was critical to the beef industry's survival and the federal government should try to convince the US that it is in the best interest of North Americans to show leadership and resume trade based on scientific grounds. The challenge of risk management and a more detailed analysis of why BSE appeared in Canada were not addressed despite

international recommendations regarding the need for a strong food safety surveillance and response system (MacLachan 40-69).

A May 29, 2003 Health Canada update on food fortification identified that policy revision would continue when the information about the new DRIs was available from the IOM in December (Health Canada). Also in 2003, the Office of Nutrition Policy (ONP) of Health Canada announced a review of Canada's Food Guide to Healthy Eating to assess whether the guidance continues to promote a pattern of eating that meets nutrient needs, promotes health and minimizes risk of nutrition-related chronic disease. This review assessed the current science, changes in the food supply and food use patterns, use and understanding of the Food Guide by consumers, intermediaries and other stakeholders. Stakeholders, including non-governmental organizations, consumer groups, food industry, academics and governments, were invited to submit their comments about the Food Guide (Office of Nutrition Policy and Promotion, Health Canada). A majority of stakeholders believed that the Food Guide was somewhat effective in meeting its objective of providing a pattern of healthy eating and the total diet approach was still the right method to promote healthy eating. Concerns were raised about messages related to serving sizes and that many of the foods shown in the Food *Guide* were not representative of those eaten by the diverse Canadian population. The need to provide more information about Other Foods was repeatedly expressed (Office of Nutrition Policy and Promotion, Health Canada).

In 2003, the 1988 Canadian Guidelines for Body Weight Classification in Adults was updated to be consistent with the weight classification system newly

released by the WHO (Health Canada 1-41). Also the Network on Healthy Eating was established by ONP in 2003 to enhance collaboration, cooperation and coordination of efforts to support healthy eating and nutrition. Members included representation from national organizations and associations, advocacy groups, industry, marketing boards, health charitable organizations with a focus on nutrition and healthy eating and Health Canada (Health Canada). Further, the federal Government created a new agency in 2003, Public Safety Canada, to ensure coordination across all federal departments and agencies responsible for national security and the safety of Canadians. Food system security, environmental health and innovation for growth have been identified as important public safety activities by Public Safety Canada (Safe Canada.ca). The Federal Government also appointed a Minister of Healthy Living in October 2003. The Canadian Agri-food Policy Institute (CAPI) was created by the Minister of AAFC on December 5, 2003. As a non-profit organization arm's length from government, CAPI is intended to be an independent voice on agri-food policy issues (Canadian Agrifood Policy Institute). The Government of Canada called for the creation of a Public Health Agency of Canada and the appointment of a Chief Public Health Officer for Canada, reporting directly to the Minister of Health in the January 2004 Speech from the Throne,. This was acted upon and a Public Health Agency of Canada was established to protect the health and safety of all Canadians. Its activities focus on preventing chronic diseases, including cancer and heart disease, preventing injuries, and responding to public health emergencies and infectious disease outbreaks(Public Health Agency of Canada).

Research for this paper identified that agriculture and agri-food systems played an important role in the Canadian economy as they provided one in eight jobs and accounted for 8.1 per cent of total Gross Domestic Product in 2004. Further, it was identified that Canadians enjoyed some of the lowest food costs in the world with food accounting for only 10 per cent of household expenditures (Agriculture and Agrifood Canada 1-128). The food industry recognized that appropriate nutrition was becoming an important issue for consumers and responded by changing the formulation of foods to eliminate trans fat and introducing new products in response to health concerns. As many meals are eaten away from home, some restaurants also changed the type and amount of food served, but consumer's real demand for these foods were low and some restaurants stopped serving them and/or introduced additional high fat items and larger servings (Cash 1-18).

In 2004, Health Canada and Statistics Canada announced that Cycle 2 of the CCHS would gather nutrition information at the provincial level to assess the nutritional status of Canadians. In face to face interviews over 35,000 people were asked to recall what they had eaten during the previous 24 hours, a response rate of 77 per cent. The survey also assessed what they ate (breakfast, lunch dinner and snacks) and where the food was prepared, for example, at home or in restaurants. The purpose was to measure nutritional consumption in terms of food amounts, food groups, nutritional supplements, nutrients and eating patterns. The findings released in 2006, identified that over one-quarter of Canadians aged 31 to 50 consumed more than 35 per cent of their total calories from fat. Seven

out of 10 children aged 4-8 and half of adults did not eat the recommended daily minimum of five servings of vegetables and fruit. More than one-third of children aged four to nine did not have the recommended two servings of milk products a day; by age 30, more than two-thirds of Canadians did not attain the recommended minimums. Canadians of all ages get more than one-fifth of their calories from "other foods" (food and beverages not part of the four major groups). On a given day, 25 per cent of all Canadians ate something prepared in a fast-food outlet. The food consumption patterns of children and adolescents were not as closely associated with household income as were adults (Garriguet 1-43).

Also in 2004, Health Canada posted for public comment a draft set of Nutrition Recommendations which summarized key elements of the DRI reports. Health Canada stated that they received extensive feedback from stakeholders who identified a lack of clarity regarding the purpose, a lack of consistency between the DRIs and what was included in the draft statement and a need for more details about the DRI process. As a result, it was decided not to update the Nutrition Recommendations for Canadians (1990) and instead develop a document to summarize the DRIs including their uses and interpretation (Office of Nutrition Policy and Promotion 6).

In February 2000, the Heart and Stroke Foundation began the annual release of a "Report Card" highlighting a significant health issue. Report Cards in 2000, 2001 and 2003 raised concerns about treatment and prevention of heart disease within Canada. The 2002 Report Card also focused on children at risk and in

2004 it suggested that "fat is the new tobacco" as a result of the increasing number of overweight and obese Canadians (Heart and Stroke Foundation). In addition, the CSPI actively contributed to federal nutrition policies through press releases, submission of briefs to Parliamentary Committees and participation in pre-budget consultations. Some examples of actions they suggested include shifting F/P sales tax from healthful foods to junk foods; banning trans-fat laden partially hydrogenated vegetable oils; mandating percentage-ingredient labelling on pre-packaged processed foods; mandating nutrition information on prepackaged fresh meat labels, and menus at large chain-restaurants; funding a mass media campaign to promote healthy eating and physical activity; cracking down on commercial advertisements that target kids under 13; publicly funding lactation consultants for new mothers and preventative nutrition-counselling services by qualified dietitians; setting respectable nutrition criteria for school and hospital cafeterias, vending machines, and fund-raising activities; and including daily physical activity in school curricula (Centre for Science in the Public Interest - Canada).

The Canadian Council of Food and Nutrition (CCFN) was created in 2004 by combining the mandates of the NIN and Canadian Food Information Council. The mandate of this new national, non-profit organization was to act as a catalyst in advancing nutritional health and well being of all Canadians by championing evidence-based solutions to key nutritional issues affecting the nutritional health of Canadians; advocating for evidence-based nutrition policy and promoting public understanding of food and nutrition issues (Canadian Council of Food and

Nutrition). Internationally, scientists and researchers also contributed to the policy discourse through the publication of a number of books such as, Food Wars: The Global Battle for Mouths, Minds, and Markets by Tim Lang and Michael Heisman, Food Politics by Marion Nestle and Fast Food Nation by Eric Schlosser. These books raised concerns about how the food industry promoted the intake of unhealthy foods and increased agriculture, environmental and energy costs of food production (Lang and Heasman 365; Nestle 469). It was identified that current food production methods are resource intensive and based on industrial inputs such as fertilizers, pesticides and machinery linked to off-farm suppliers (Laidlaw 12-35). Food production has also become increasingly linked to climate change through production of greenhouse gases, air and water pollution and habitat alteration. One analysis identified that 1,071 litres of oil was required to bring a 570 kilogram steer to the table (Brownell 156-189). In 2003, the FAO/WHO released a draft of the Diet, Nutrition and the Prevention of Chronic Diseases Report for consultation. The report concluded that a diet low in saturated fats, sugar, and salt and high in fruits and vegetables, together with an hour a day of exercise will contribute to reducing cardiovascular disease, cancer, diabetes and obesity. The report was critical of the food and soft drink industry for heavy marketing practices of energy-dense, micronutrient-poor foods (World Health Organization and Food and Agriculture Organization). The US government and soft drink industry did not agree with the report's conclusion that sweetened soft drinks contributed to the obesity epidemic in children or the recommendation to reduce added sugar consumption to less than 10 per cent of

total daily intake (Boseley 831-833). It was noted that the final draft of the global plan was not altered by industry pressure and retained its original references to the role of taxation and subsidy in promoting production of healthier food choices, asked industry to limit saturated fats, trans fats, sugar and salt in existing products and called for more responsible marketing practices to children (Fleck 515; Fleck 973; World Health Organization).

Despite the US governments position, childhood obesity was increasingly recognized as a major pubic health issue in developed countries. Within Canada, the prevalence of childhood obesity nearly tripled from 3 per cent to 8 per cent and the prevalence of adolescent overweight and obesity more than doubled, rising from 14 per cent to 29 per cent over a period of 26 years between 1978/79 and 2004. While overweight and obesity among children 2-5 years old remained stable, prevalence of overweight amongst adolescents aged 12-17 years increased by more than twofold, from 14 per cent to 29 per cent (Tjepkema and Shields). It has been suggested that promotion of unhealthy foods to children through TV advertisements, product placements in movies and video games and vending machines in schools could be considered "nutritional instructions" with strong incentives to consume unhealthy foods (Brownell 156-189). The IOM within the US responded to the increasing prevalence of childhood obesity with the release of a report in 2004, Preventing Childhood Obesity: Health in the Balance. The report outlined the extent of the problem from a public health perspective and put forward a prevention-focused action plan to decrease the prevalence of obesity in children and youth. It recommended both individual

efforts and societal changes to address obesity such as declaring obesity a national public health priority; promoting healthful marketplace, media environments, healthy communities, healthful school and home environments; industry cooperation; improving nutrition labelling; revising advertising and marketing; implementing multi-media and public relations campaign and community programs; and involving health care, schools and parents (Committee on Prevention of Obesity in Children and Youth 131-138).

In 2004. Health Canada announced that DRIs would replace RNIs as nutrition standards for Canada (Food and Nutrition Board's Committee on the Scientific Evaluation of Dietary Reference Intakes 332-334). Revisions to Canada's Food Guide to Healthy Eating began in 2004, to incorporate the DRIs, focus on the growing rates of obesity and nutrition-related chronic diseases and address concerns raised in the review about the challenges of making healthy food choices. An internal Food Guide Interdepartmental Working Group<sup>11</sup> was established to work with the ONP to revise Canada's Food Guide to Healthy Eating and supporting materials. An external Food Guide Advisory Committee was also established to provide advice and guidance to the Food Guide Interdepartmental Working Group. Members of the external Committee were appointed as individuals on the basis of their expertise, not as direct representatives of their employer. Members were employed in Universities, provincial governments, regional health authorities, Dairy Foundation, Oilseed Association, Food and Consumer Products Manufacturers of Canada (Food and

<sup>&</sup>lt;sup>11</sup> Includes representation from Health Canada, AAFC, Indian and Northern Affairs, CIHR

Nutrition; Health Canada). At this time Health Canada also announced intent to update the key healthy eating messages in Canada's guidelines to Healthy Eating, update Nutrition for a Healthy Pregnancy and update sections of the Nutrition for Healthy Term Infants (1998). The first sections to be updated were related to duration of exclusive breastfeeding and vitamin D supplementation for breast fed infants (Office of Nutrition Policy and Promotion 6).

In 2004, Parliament became involved in nutrition policy when two Private Member Bills were proposed to Parliament to amend *The Food and Drugs Act*. The first, Bill C-473 proposed banning trans fatty acids in oils and fats intended for human consumption. The second, Bill C-398 proposed additional nutrition labelling for meat, poultry and seafood which were not required to have nutrition information and to have restaurants describe key ingredients (Martin). An opposition motion in the House of Commons in November 2004 called on Health Canada and the Heart and Stroke Foundation of Canada to co-chair a multistakeholder task force with a mandate to develop recommendations and strategies "to effectively eliminate or reduce processed trans fats in Canadian foods to the lowest level possible." The motion passed and a Task Force was formed in early 2005. Membership included equal representation from government, industry and non-governmental organizations in addition to three scientific experts (Health Canada; Health Canada).

In 2004, two efforts were underway to develop a national approach to promote healthy eating. The first was led by the Nutrition Planning Group, a coalition of representatives from F/P/T governments and non-government

organizations. This Planning Group formed as an outcome of a March 2004 meeting co-sponsored by the Primary Prevention Action Group of the Canadian Strategy for Cancer Control and CDPAC. A February 2005 report reviewed national and international nutrition plans and contained a first draft of a comprehensive Pan Canadian Nutrition Strategy for Chronic Disease Prevention and Action Plan (Connolly). The second effort was led by Health Canada and the CFIA to develop a Strategy for the Safety and Nutritional Quality of Food to fit within the National Food Policy being discussed by the F/P/T Ministers of Health and Agriculture (Agriculture Agrifoods Canada).

In 2004, the Canadian Institute for Health Information released two reports identifying potential solutions to address obesity using a population health framework. The first report *Improving the Health of Canadians* featured obesity as one of four national health priorities given the increasing rates and the public health implications. Evidence related to obesity and health, food consumption and physical activity was summarized and Appendix 6 lists the policy approaches suggested to address the problem (Canadian Institute of Health Information). The second report *Overweight and Obesity in Canada: A Population Health Perspective* synthesized the current state of knowledge related to the nature and extent of the problem of obesity, the potential for prevention and control, a population health perspective on the determinants of obesity, and the effectiveness of strategies for addressing obesity and its determinants. The policy options suggested to address obesity are listed in Appendix 7 (Canadian Institute for Health Information).

In 2004, Lindsay McLaren and colleagues surveyed the literature to determine if integrated approaches are working to promote healthy weights, prevent obesity and chronic disease. The following suggestions for integrated policy approaches were made based on correlational or causal evidence from etiological or intervention research and potential to have an equitable impact across the population: regulation of advertising and promotion of foods to children; improvement of the 'walkability' of neighbourhoods; fiscal policies to facilitate healthy lifestyles; school or worksite interventions to facilitate health; and incentives for intersectoral integration in government (McLaren et al. 1-33).

The Ministers of Health were directed by the First Ministers to develop health goals for Canada. The federal Minister of State (Public Health) and Manitoba Minister of Healthy Living were appointed to co-lead the process. After a series of consultations the following overall goal was developed: "As a nation, we aspire to a Canada in which every person is as healthy as they can be — physically, mentally, emotionally, and spiritually". Appendix 8 lists additional goals to address basic needs, belonging and engagement, healthy living and a system for health (Government of Canada).

The Interim Report of the Trans Fat Task Force and The Government Response, released on August 31, 2005 identified that agriculture and the food industry including industry associations, commodity organizations, food processors and food service operators had a strong awareness of health concerns related to trans fat in the food supply and acceptance of the need for change. Appendix 9 lists interim recommendations for government and other

stakeholders based on analysis of current research, consultation with industry representatives and written submissions (Government of Canada 1-6; Trans Fat Task Force 1-5).

After the December 2002 publication of the revised Food and Drug Act regulations, the federal government received many questions from the food industry regarding interpretation of the new labelling requirements. It was recognized that additional regulatory amendments were needed to bring more flexibility to the regulatory framework, clarify the intent and correct inconsistencies of the requirements. In May 2005, the Canada Gazette published Regulations Amending the Food and Drug Regulations (Canada Gazette Registration). In follow-up to Canada's food fortification policy review started in 1998, the Addition of Vitamins and Minerals to Foods, 2005: Health Canada's Proposed Policy and Implementation Plans was released. The purposes of the proposed policy were to protect consumers from health hazards due to nutrient excess, deficits or imbalance; prevent practices that may mislead, deceive or confuse the consumer; maintain and improve the nutritional quality of the food supply. A new provision was proposed to allow discretionary fortification at the discretion of the manufacturer (within defined limits set by Health Canada through regulation) to meet market demand. Manufacturers would be able to identify which of their products are "a source" (<10 % of the Daily Value), "a good source" (10% or more of the Daily Value) or an "excellent source" (20% or more of the Daily Value) of particular nutrients. The defined limits excluded fortification of staple foods such

as bread, flour, rice, milk common in the food supply to protect against excessive nutrient intakes(Health Canada 2).

The Canadian agriculture and agri-food system has been described as a complex integrated market sector which ranges from the primary agricultural sector to food and beverages services sector (Agriculture and Agrifood Canada 1-128). Government support for agriculture is complicated as all levels of government in Canada have a role. Federally, Agriculture and Agri-Food Canada provides information, research and technology, and policies and programs to achieve security of the food system, health of the environment and innovation for growth (Agriculture and Agrifood Canada). The Food Value Chain Bureau within AAFC acts as the primary centre of knowledge of the food industry (the food and beverage processing, distribution and retail sectors) within the department. The Bureau's work focused on assisting the industry to increase its ability to meet domestic and international market demand and encourage and attract investment by promoting the functional foods and nutraceutical industry, supporting environmental initiatives and economic development (Agriculture Agrifoods Canada). Health Canada sets policies and standards for the safety and nutritional quality of food sold in Canada. The CFIA enforces these standards, and sets and enforces standards for animal health and plant protection. At the P/T level, health, agriculture and other ministries enact food safety laws that apply to food produced and sold exclusively within the borders of their province or territory (Agriculture and Agrifood Canada 1-197).

The development and implementation of the new national Agricultural Policy Framework (APF) requires that F/P/T governments to work in partnership with on-farm and post-farm associations and other representatives from the agrifood industry. The objective was to make Canada the world leader in food safety, innovation and environmentally-responsible production. AAFC signed a number of APF Framework Implementation Agreements in 2005 to implement action plans in the following five areas: business risk management, environment, food safety and food quality, science and innovation, renewal and international. The food safety and food quality activities are highlighted in Appendix 10. This component has following goals: protecting human health by reducing exposure to hazards; increasing consumer confidence in the safety and quality of food produced in Canada; enabling industry to meet or exceed agri-food safety and quality; and providing value-added opportunities through the adoption of food safety and quality systems. The processing industry has worked during the past decade to implement Hazard Analysis Critical Control Points (HACCP), a voluntary control and monitoring system that stresses prevention and correction of potential problems at each step of the manufacturing process with financial support from AAFC and technical support from the CFIA. A new activity will be the development of a national, integrated food safety, traceability and food quality system throughout the agri-food chain from field to fork. Another new activity, the development of standards for wine and organic farming as well as a regulatory program to support the organic standard will assist industry's ability to market on the basis of quality (Agriculture and Agrifood Canada 1-197).

In November 2005, the CCFN Obesity Forum brought leaders in research, education, health care, government and the food industry together to discuss how to combat obesity. The following types of policy instruments were suggested: research, evaluation of prevention programs and information to consumers (nodality) and extending nutrition labelling to restaurant and food services (authority). Interventions in school settings and for the food industry to develop products and portions more conducive to healthy eating were also recommended (DiFrancesco 1-13).

In October 2005, Food Secure Canada was established as an unincorporated and unregistered non-profit alliance of organizations and unaffiliated individuals working together to address food security issues within Canada and internationally (Food Secure Canada). In December 2005, the Canadian Obesity Network (CON) was funded by the federal National Centres of Excellence program to bring together researchers, clinicians, allied health care providers and other professionals with an interest in obesity in a unified effort to reduce the mental, physical and economic burden of obesity on Canadians. It is expected that CON would facilitate effective partnerships by removing traditional barriers separating university research, private sector commercialization and public use of research results in order to address obesity (Canadian Obesity Network). In January 2006, the Canadian Association of Food Studies (CAFS) was established to promote critical, interdisciplinary scholarship in the broad area of food systems: food policy, production, distribution and consumption. CAFS recognized the need for coordinated interdisciplinary research efforts in response

to societal needs for informing policy makers, assessing the outcomes of community-based work, and demonstrating the environmental and social impacts of changes affecting food systems and food policies (Canadian Association of Food Studies).

In January 2006, a minority Conservative government came to power ending 13 years of Liberal government at the federal level.

#### II. Analysis

This time period of 2001-2006 (January) is not a complete stage, but seems to be the beginning of a longer transition stage similar to the 1970s. The debate regarding an alternative approach to neoclassical liberal policy continued during this time with no clear resolution. The context for this debate changed as a result of 9/11 and concerns about terrorism and national security. A number of global concerns influenced the policy discourse such as safety and quality of the food supply, the ability of Canadians to feed themselves if the borders are closed, having enough soldiers fit enough to fight and the development of more sustainable agricultural practices. In regards to nutrition, government and the nutrition policy community returned to problem formulation to redefine food and nutrition problems and consider different policy options to improve the health of the population. Table 4 summarizes nutrition—related policy instruments considered or implemented between 2001 and 2006 (January) using Hood's ideas of governing resources. Instruments reflecting both welfare and neoclassic liberal approaches were used although there was an emphasis on neoclassical instruments consistent with individual or market responsibility. Many instruments

were continued or updated such as health professional standards, consumer education guidelines and authority instruments for nutrition labelling/food fortification. New welfare liberal instruments implemented since 2001 included enhanced nutrition research and surveillance, support of interest groups to expand the policy community and new federal structures to address public safety and health.

Table 4: Policy I	Instruments affecting nutrition between	een 2001 and 2006(January)
Policy instrument categories	Welfare Liberal Content (Positive Freedom)	Neoclassical Liberal Content (Negative Freedom)
Nodality	<ul> <li>Nutrition research prioritized by CIHR 2001</li> <li>Agriculture research prioritized by AAFC 2004         Dietary Reference Intakes completed 2004</li> <li>Supported interest groups such as CDPAC 2002;         Network on Healthy Eating and Canadian Agri-food Policy Institute 2003;         Canadian Obesity Network and Food Secure Canada 2005</li> <li>CCHS cycle 2.2 nutrition surveillance 2004</li> <li>Appointment of Trans Fat Task Force 2005</li> </ul>	<ul> <li>Market responds to consumer demands</li> <li>Increased fast foods and convenience products</li> <li>Folic Acid Awareness Campaign 2002</li> <li>Began revisions of Canada's Food Guide in 2003</li> <li>Revised Canadian Guidelines for Healthy Weights 2003</li> <li>Voluntary changes to food products to reduce trans fat by industry</li> </ul>
Treasury		<ul> <li>F/P/T Agriculture Policy Framework established in 2004</li> </ul>
Authority	Amendment to The Food and Drug Act for nutrition labelling 2002 and 2005	Proposed amendment to The Food and Drug Act to ban Trans fat and add nutrition labelling for meat not passed 2004
Organization	<ul> <li>Public Safety Canada created 2003</li> <li>Federal Minister of State (Public Health) appointed</li> </ul>	<ul> <li>Expanded pluralism including food industry continued</li> <li>Pan Canadian Nutrition</li> </ul>

2004 • Public Health Agency of Canada created in 2004	•	Strategy and National Food Policy not supported 2004 Food Value Chain Bureau within AAFC created
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The analysis will now discuss nodality instruments to address nutrition, the discourse related to adequate quantities of food, agriculture and nutrition labelling/food fortification.

### **Nutrition (Nodality)**

Obesity rates continued to increase to 48.2 per cent of Canadian adults and 29 per cent of Canadian children despite increased policy attention. The debate between those that suggested obesity was a result of individual failure or societal failure continued during the early 2000's. This debate is consistent with Lang's view that nutrition means different things to different people and has been divided into two broad streams that he calls biologically reductionist and social reformist (Lang 730-737). The first is defined here as an interest in nutrients as key factors in individually determined health, the better the understanding of which will allow food intake to be tailored to individual needs and is consistent with neoclassical liberalism. The second in which diet, health and supply chains need to be addressed on a population-wide rather than an individualized basis and is more consistent with welfare liberalism. Lang goes on to argue that both types of views on nutrition should and can exist together, but the current emphasis on the individual has reduced the population focus. Hence, it is time to correct the imbalance. In 2002, F/P/T governments identified that both individual and population approaches were necessary to assist Canadians to make positive

choices about personal health practices in the two strategies announced to reduce the burden of chronic disease and promote healthy living. The emphasis on chronic disease prevention and healthy living was consistent with recommendations from two major reports released in late 2002 that reviewed the Canadian health care system. Both the Commission on the Future of Health Care in Canada and the Final Report from the Standing Senate Committee on Social Affairs, Science and Technology suggested the need to reform primary care services, improve the focus on wellness and develop public policies and programs that address non-medical determinants of health (Romanow; Standing Senate Committee on Social Affairs, Science and Technology 1-392). A population approach was also consistent with the view of the WHO Global Strategy on Diet, Physical Activity and Health approved by the World Health Assembly in May 2004. It's overall goal was to promote and protect health by guiding the development of an enabling environment for sustainable actions at individual, community, national and global levels that, when taken together, will lead to reduced disease and death rates related to unhealthy diet and physical inactivity (World Health Organization).

With increased health and nutrition surveillance, the impact of food and nutrition choices on health status, agriculture, the environment and the economy can be more easily measured and assist in defining the problems and evaluating potential policy solutions. The data regarding the increased prevalence of childhood obesity raised public, government and researchers concern about childhood obesity. The role of the food industry was increasingly recognized as

contributing to an environment that promoted the intake of unhealthy foods.

Members of the policy community put forward a number of suggestions to better regulate the food industry such as considering food taxes on energy dense micronutrient poor ("junk") food, limiting food advertising to children, encouraging industry to promote healthy foods to children, placing equal emphasis on diet and physical activity, changing school nutrition policy and acknowledging that personal freedom can be enhanced as the environment becomes healthier (Brownell 156-189; Canadian Institute of Health Information). These recommendations are consistent with a welfare liberal view that an increased role of government to promote equality of access to services was needed.

In summary, there seems to be consensus on the definition of the cause of obesity as being both individual and societal failure and the concerns have expanded to include children. The use of nodality instruments was similar to what has been used historically except for the increase in nutrition research and surveillance. The attentive public and policy network continued to advocate for the view that obesity is caused by societal failure and that enhanced regulation of the food industry is an important policy solution to promote population health. The availability of nutrition surveillance data has informed the policy debate by describing the extent of the problems and enabling evaluation of initiatives.

# Nutrition (Adequate Quantities)

The debate regarding appropriate types of action to promote food security, continued in the early 2000's and was complicated by the expanded definition which overlaps with other policy arenas such as health, agriculture, the

environment and climate change. There were disagreements regarding appropriate types of action to promote food security during the preparation of the progress report for the 2002 FAO World Food Summit. Civil society organized a separate conference in June 2001 to discuss issues and the formation of strategies to increase Canada's commitment to food security from a collective approach. The Canadian Progress Report submitted by AAFC identified that food security programming should be integrated into existing poverty reduction frameworks; a plan was underway to work with P/T governments to develop a new approach to food safety; and civil society was unhappy with the slow nature of implementation to improve food security. Civil society went on to establish two new organizations Food Secure Canada and the Canadian Association of Food Studies to establish interdisciplinary research to bring people together to put forward collective approaches to improve food systems.

A potential opportunity to address food security from a welfare liberal perspective appeared with the establishment of the Public Health Agency of Canada and F/P/T Pan-Canadian Healthy Living Strategy that promoted the health of all Canadians through individual and population health approaches. The resulting 2005 public health goals identified an overall goal of promoting personal health. Food and nutrition were referred to in two sections 1) basic needs: "The air we breathe, the water we drink, the food we eat, and the places we live, work and play are safe and healthy - now and for generations to come" and 2) healthy living: "Every person receives the support and information they need to make healthy choices" (Government of Canada). These statements suggest that

having clean air and water and enough food to eat are important requirements for public health. Access to adequate quantities of safe and healthy food is becoming linked to reducing health disparities and public health goals which are concerned that everyone enjoys relative equality and conditions in life.

In summary, food security does not seem to be high on the government agenda in agriculture. Within health, the promotion of food security is becoming linked to implementation of public health goals and strategies to reduce health disparities. The attentive public established a pressure and research group to bring forth ideas and issues related to collective solutions for food security and expand thinking about broader food systems.

## Agriculture and the Environment

In the early 2000's, the interrelationships between agricultural methods of food production and the impact on environment as well as safety of the food supply expanded the discourse. A new concern after 9/11 was the concept of food terrorism defined by the WHO "as an act or threat of deliberate contamination of food for human consumption with chemical, biological or radionuclear agents for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability". The WHO discussion paper clarified the linkage between food safety, public safety and potential terrorism and provided guidance to countries to ensure prevention, strong preparedness and response efforts are in place in partnership with the food industry and other relevant agencies (World Health Organization 1-50).

There seem to have been two streams of activity within agriculture during the early 2000s, one stream focused on economic goals and maximizing national welfare and the other focused on balancing an efficient agriculture sector with social objectives such as maintaining a family farm (Skogstad 1-8) The first stream has been the focus of AAFC. Currently the Food Value Bureau works closely with industry to increase its ability to meet domestic and international market demand, to encourage investment and improve the safety of the food supply. By funding research, AAFC contributed to the development of a Canadian functional foods and nutraceuticals industry which has been described as having the potential to improve the health of the public, help growers diversify, and contribute to increased sales of value-added products. (Agriculture and Agrifoods Canada) The second stream of activity emerging within agriculture is a view concerned about addressing social objectives with policy approaches such as food safety, public safety or environmental health. Actions to address food safety became a priority in Canada when government became concerned about ensuring public safety to address concerns about food terrorism and when a cow with BSE was found in Alberta in 2003 had negative economic and trade impacts. The activities suggested by the Agricultural Policy Framework included information for consumers and research (nodality), support to industry to develop an integrated food safety, traceability and food quality system from field to fork (treasury) and support from government departments and agencies for coordination and collaboration (organization). These suggestions reflect both streams, a focus on supporting markets and ensuring a safe food supply through

establishing food tracking systems (Agriculture and Agrifood Canada 1-197).

Having a broader perspective with a number of government departments. policy goals and policy communities involved makes it more challenging to define problems and potential solutions. From a health perspective, it has been noted that nutrition recommendations are not always consistent with environmental or agricultural concerns. For example, it is often recommended that consumers eat fish regularly but from an environmental perspective, this advice is problematic since fish stocks are in serious decline. Another example is the recommendation to increase consumption of fruits and vegetables. From an environmental perspective, fruit is usually grown in warm climates and needs to be transported long distances to customers (Lang 730-737; Robertson et al. 1-385). These discrepancies highlight the need to work across government departments and policy communities to better define problems and begin policy formulation across sectors. CAFS, the new interdisciplinary research group established in January 2006 may be a way to begin to bring policy community members from Agriculture. health and the environment together to examine broad food system issues, to identify linkages and potential policy solutions.

In summary, two streams of activity were seen within the agriculture sector in the early 2000s. The first, a focus on individual responsibility and markets has been the traditional focus of the department of Agriculture and is consistent with neoclassical liberalism. The second stream is newer and suggests collective action to ensure a safe food supply in response to BSE and the possibility of food terrorism as well as more sustainable agriculture practices, more consistent with

terrorism as well as more sustainable agriculture practices, more consistent with welfare liberalism. There are tensions between these two streams in regards to addressing domestic concerns and ensuring competition within the global market.

Nutrition (Nutrition Labelling/Fortification)

The use of regulations to ensure standards in providing nutrition information on food labels such as the nutrients fact panel, nutrient content claims and health claims were part of a comprehensive nutrition labelling policy formulation process initiated in 1998. The results of the separate policy reviews were combined into one large regulatory change to the Food and Drug Act regulations in 2001 and published in December 2002. The new regulations that mandated nutrition labelling on most pre-packaged foods beginning by 2005 for large manufactures updated requirements for nutrient content claims and introduced diet-related health claims. This included a requirement to identify the trans fat content of foods (Health Canada). Vogel and Burt identified that in spite of formidable barriers and tight timelines, a high degree of stakeholder convergence was achieved during the policy formulation stage (Vogel and Burt 1-24). Some members of the policy community who were actively involved in the process were concerned that meats and restaurant foods were not part of this regulatory change and continued to advocate for their inclusion.

The food fortification policy review started in 1998 reached consensus on the use of mandatory fortification to address public health concerns such as folic acid in white flour to reduce neural tube defects. In 2002, further consultation about discretionary or voluntary fortification by manufacturers was initiated. The

benefits of discretionary fortification for consumers have been described as increased nutrient availability within the food supply, increased freedom to choose from a wider variety of fortified foods, protections against the hazards of overconsumption of a specific nutrient and reduction of regulatory differences between Canada and the US (Health Canada 4). The risks of discretionary fortification were described as consuming too much of a single nutrient, the potential of misleading consumers if emphasis is placed on a single food product rather than the whole diet and lack of surveillance ability to evaluate the effects of fortification on health status. The Final Policy adopted in 2005 allowed discretionary fortification at the discretion or choice of the manufacturer to meet market demand and improve the quality of the food supply expanding the purpose beyond consumer protection from health hazards due to nutrient deficiency (Health Canada 2). The policy on discretionary fortification include safeguards to ensure safety by identifying parameters for discretionary vitamin and mineral nutrient additions to foods, such as not allowing staple foods to be fortified to prevent against excessive nutrient intakes. This expansion of the scope of food fortification appears to be a shift in public policy that favours industry, by giving them the power to decide whether they want to develop functional foods or nutraceuticals with specific properties to improve health. This is consistent with the biological reductionist approach focused on individual nutrient needs as described by Lang (Lang 730-737).

There was considerable interest in the trans fat content of the food supply during the early 2000's from researchers, consumers, parliament and the food

industry. Scientists had raised concerns about the detrimental effects of trans fats in the Canadian diet since the 1990's. An outcome of the 2002 Amendments to The Food Drug Act that required mandatory nutrition labelling by 2005 was the increased consumer awareness of the health risks of trans fat in the food supply. In response, a number of food manufacturers voluntary reduced or eliminated trans fats from many processed foods sold in grocery stores (Trans Fat Task Force 1-42). It has been suggested that the food industry is voluntarily reducing trans fat as a good will gesture to forestall or prevent mandatory regulations in the future. In 2004 Parliament proposed new legislation to amend The Food and Drugs Act to ban trans fats in food and to expand nutrition labelling to meat, poultry and seafood as well as restaurant foods. Although this legislation was not passed, a Trans Fat Task Force to identify recommendations to reduce trans fat in foods was established. Members of the task force involved equal representation from government, industry and non-governmental agencies and three scientists. The Interim Report from the Trans Fat Task Force identified recommendations to assist food processing and food service industries to reduce trans fat levels and to assist consumers to make healthier food choices. consistent with a neoclassical liberal approach.

Industry concerns that current regulations were too restrictive and limited the development of new products were identified as a catalyst for revision of nutrition labelling and food fortification policies (Committee on Use of Dietary Reference Intakes in Nutrition Labelling). Although increased influence of industry on policy outcomes is consistent with principles of neopluralism and

neoclassical liberalism, it is ultimately the role of the state to define consensus within the mix of demands and make the final policy decisions. In the case of nutrition labelling and food fortification, a review of the outcomes demonstrated that both the public and industry were beneficiaries of the instruments chosen. In regards to nutrition labelling, a mandatory regulatory approach was chosen for pre-packaged foods, although industry supported a voluntary approach. It must be noted that some members of the food industry benefited from the requirement to include trans fat content on the food label as this also served as a product marketing tool. In regards to food fortification, discretionary fortification at the choice of manufacturer to meet market demand was allowed favouring industry.

In summary, after a lengthy policy formulation process involving many policy community members, the federal government made decisions regarding policy directions for nutrition labelling and food fortification. Mandatory nutrition labelling for pre-packaged foods went forward ensuring consumers have access to information regarding the content of food packages and contributed to industry improving the quality of food products. Food fortification policy goals shifted to allow food fortification at the discretion of the manufacturer to promote good health in addition to the traditional goal of preventing nutrient deficiency. The policy community raised concerns about the role of industry in influencing the outcomes of these policy decisions but both the public and food industry could be considered beneficiaries. Discretionary fortification increased the flexibility of the food industry to develop new products to promote health and could be an example of coordinating health and agriculture goals.

### III. Conclusion

There has been no resolution to the larger public policy discourse looking for an alternative to neoclassical liberal policy options. There are also global concerns and pressures to address issues such as potential food terrorism, environmental costs of agriculture production and expanding trade markets. Canada seems to be at the beginning of a policy formulation stage and is considering policy approaches focused on populations to supplements those already in place focusing on individuals. With the expanded scope of the issues, overlaps between policy areas, government departments and larger policy communities, there continues to be disagreement about causes and policy solutions. Within health, the F/P government seems to have resolved the debate between responsibility for obesity and overweight and made a decision to support individual and population health approaches to promote healthy living and prevent chronic disease. Within agriculture, F/P governments continue to promote market efficiency more consistent with neoclassical liberalism, but a new discourse is emerging regarding collective action to address food safety and environmental concerns. Policy instruments implemented during this time period reflect content from both types of liberalism but tended to emphasize neoclassical liberal approaches. The policy communities put forward a number of perspectives identifying both individual and societal causes and solutions to food and nutrition problems.

#### CHAPTER 6: SUGGESTIONS FOR NUTRITION POLICY IN CANADA

This last chapter summarizes the response to the research questions defined in Chapter 1, assesses the validity of the hypothesis and makes recommendations for future nutrition policy in Canada. The first four sections respond to the research questions listed on page 10. The following three sections discuss the research hypothesis, limitations of the method and makes recommendations for nutrition policy in Canada based on the research and review of activities in other countries. The final section identifies future research topics to assist in increasing our understanding of nutrition policy within Canada.

# Question 1: What has been the history of nutrition policy in Canada since 1867? How has the history of nutrition policy contributed to the current structures and policy instruments used in Canada?

Chapters 2, 3 and 4 describe the history of Canadian nutrition policy since 1867. Nutrition policy goals and instruments changed over time and seemed to be influenced by the discourse regarding causes of nutrition problems and potential solutions that varied in emphasis between individual and societal responsibility. The history also provided insight into the process of developing nutrition policy such as when nutrition became a national priority, how nutrition problems were defined over the years, why certain instruments or combinations of instruments may have been chosen and how the policy community was involved. In general, food and nutrition problems and solutions were associated with scientific advances, changing technology, changing food supply and increased consumer interest in health.

Overall a trend was seen in regards to the linkage of nutrition policy with the broader public policy process. Manzer identified that Canadian public policy reflects elements of both types of liberalism and that the policy discourse over time tends to favour one type over the other during particular time periods (Manzer). This research has identified that policy instruments affecting nutrition from all categories and reflecting both types of liberalism have been used in Canada since Confederation (1867). Emphasis on the use of certain types of nutrition policy instruments, such as those that address individual or collective concerns, was consistent with shifts in public policy. The following paragraphs describe how policy instrument choice was linked to documented shifts in public policy.

Policy instruments implemented to address food and nutrition policy were remarkably consistent since Confederation as seen in Tables 1, 2 and 3 on pages 32, 60 and 98 respectively. In the first stage (1867-1939) instrument choice reflected mainly a welfare liberal approach consistent with the establishment of a government and country although classical liberalism was the dominant public policy approach. Government defined the cause of food and nutrition problems as infectious disease related to a contaminated food and water supply. This was deemed to be a failure of society and government responded with coercive authority policy instruments: *The Inland Revenue Act* (1875) and *Adulteration Act* (1885) to regulate the food supply. The incidence of infectious disease was reduced.

At the beginning of World War I and the Depression, nutrition problems had shifted to lack of access to adequate quantities of food and were defined as failure of the individual to provide for themselves or their family. Government and society responded with low coercion treasury policy instruments consistent with classical liberal philosophy such as provision of charity by families and communities, relief camps and targeted income support programs for veterans. The policy community included: The League of Nations, which acted as a catalyst to form the Canadian Council on Nutrition and a number of government departments involved in the war effort. Nutrition came on to the government agenda priority during war times when the food supply for domestic and military populations was limited. During both World War I and II, The War Measures Act was imposed and increased the power of government to address the need for healthy soldiers who were fit enough to fight. It was identified that government became aware of the national security implications of poor health and made nutrition a priority (Ostry 143; Pett 565-570).

After the experience of living through food shortages that resulted from the depression, war, low income and low agricultural production, the definition of malnutrition shifted from individual failure to failure of society and the economic system. Welfare liberal policy instruments which promoted economic stability and increased the role of government were implemented slowly after World War II. A number of new instruments were implemented between 1940 and 1970 related to nodality (research, surveillance, health professional standards and consumer education guidelines), treasury (increased transfers to provinces and individuals).

authority instruments (food fortification) and organization (government structures to address nutrition). These welfare liberal policy instruments in combination with an improved economy, public health insurance and increased agriculture production, contributed to improved population health in the majority of Canadians, the exception being people with low incomes or aboriginal ancestry and the elderly. In the late 1960s, there was a reduction in government nutrition structures when the Canadian Council on Nutrition and Dominion Provincial Nutrition Committee were disbanded, possibly as a response to improved health and change in federal government organization.

In the 1970s, inflationary pressures produced higher domestic food costs and discontent with welfare liberal policy approaches. There was concern within the international community regarding food shortages related to environmental change. Government shifted towards neoclassical approaches to manage issues related to food and nutrition policy. At the same time, the food and nutrition discourse shifted from malnutrition to concerns about the relationship between obesity and chronic disease. This move also saw a shift in attitudes regarding structural factors to a concern about failure of individuals to respond rationally in a neoclassical liberal context. The attentive public component of the policy community expanded with involvement of health provider associations, nongovernmental organizations and disease related charities. The policy network also expanded as other government departments and parliament became involved in two short lived committees to address food prices and develop a National Food Strategy. Although nutrition policy goals changed during this time

period from prevention of malnutrition to prevention of obesity, it is interesting to note that policy instruments remained the same.

In 1985, neoclassical liberal ideas were accepted as the major policy discourse altering the choice of policy instruments available for use. It can be seen that between 1985 and 2000, although many policy instruments were continued, a number of new neoclassical liberal instruments were implemented that reduced the role of government and increased the role of markets such as treasury (reduced transfers to provinces) and authority (free trade). As the 1990s progressed, concerns about the linkage between nutrition problems such as obesity and chronic disease continued to increase. Food insecurity and food safety also increased in importance and saw a return to consideration of collective approaches utilizing treasury and authority measures.

### **Process**

This research assumed that neopluralist assumptions as described by Brooks and Miljan influenced the process of policy making in Canada. These are listed on page 4 and have been helpful in understanding the history of nutrition policy in Canada.

The history identifies that nutrition policy making was influenced by a variety of organized interests starting in the late 1930s when the Canadian Council on Nutrition and D/P/T Nutrition Committee were established to advise the federal and provincial ministers on nutrition and health issues. In the 1970s, government began to utilize a more pluralist approach to policy formulation by organizing consultations such as the National Food Strategy and establishing

committees to interpret the scientific evidence or develop plans. The policy network included a number of government departments, food industry consisting of industry associations (Food and Consumers Products of Canada, Canadian Council of Grocery Distributors, Canadian Restaurant and Food Services Association) and commodity groups (Vegetable Oil Industry, Beef Information Centre) and food/fitness companies. The attentive public included health providers, non-governmental organizations, farmers, consumers and researchers. These actors contributed to the discourse by putting forward their ideas regarding the causes of nutrition problems and potential solutions in research articles, discussion papers and/or meetings. The role of the state was viewed as being essentially democratic and was responsible for making decisions related to policy goals and activities or undertaking policy evaluations.

From a neopluralist perspective, ideas are viewed as a major determinant of policy. In regards to nutrition policy, a number of ideas have contributed to policy formulation. The increased understanding of science which described factors that contributed to health including the role of nutrition contributed to policy instrument choice. This science fundamentally altered the understanding of the causes of infectious disease in the late 1800s and introduced new control techniques such as hand washing, refrigeration and pasteurization. The discovery of the human requirement for vitamins and minerals in the early 1900s, and the technology to add vitamins and minerals to food led to new approaches to food fortification in the 1940s. Postwar research on populations whose health had been affected by food shortages experienced during depression and war time led

to an understanding of how food consumption or nutrition contributed to health status. The postwar spread of technology that allowed food to be transported longer distances and stored at home changed food markets and buying patterns of Canadians.

Evidence of the empirical role of these factors became increasingly evident with the growth of epidemiological surveillance. The 1938/39 Dietary Surveys identified that only 40 per cent of Canadians were adequately nourished. This supported government efforts to enact *The War Measures Act* during World War II, establish consumer guidelines and a food fortification program in the 1940s and 1950s. In 1974, the Nutrition Canada survey identified that the major nutritional issue for Canadians was obesity not nutrient deficiency. This further supported government efforts to implement health promotion approaches and shift the focus of nutrition policy from malnutrition to promotion of healthy weights.

While all of the above factors contributed to these papers findings that nutritional policy in Canada evolved in a number of steps, how discourse evolved in each stage is also of interest. Once the transition to a new stage had been initiated, a circular process between government and the policy community based on ideas that established the foundational assumption of each stage appears to have taken place. This has been described by Geert Teisman as the rounds approach to decision making, where interaction between the different actors resulted in one or more definitions of problems or solutions which are then further developed in other rounds (Teisman 937-956). The history describes that generally nutrition policy was debated at many levels within a large policy

community, before final decisions were made to act or not act. Further, this research identified that the process of developing of a number of policy instruments such as consumer education guidelines, health professional standards, food fortification or nutrition labeling within each stage reflected a rounds approach.

Given this, it is evident that having an overall food and nutrition policy or plan to coordinate activities and goals would have been helpful. This research identified that the only time a fully coordinated approach to nutrition policy in Canada was evident was during World War II when the national government used its legislative authority under the War Measures Act, to ensure domestic and military food supply. After the war, following the suspension of the War Measures Act policy goals became more fragmented with agriculture focused on increasing production and market efficiency while health focused on improving population health. In the late 1970s, the federal government did attempt to bring health and agriculture policy back together in the National Food Strategy initiative. However, this initiative was not successful due to the barriers noted in Chapter 4. The federal government continued to develop separate strategies as agriculture introduced the concept of agri-food and a market focus consistent with neoclassical liberalism while health promoted reforms such as a concern for improved population health consistent with welfare liberalism. This division between health and agriculture goals was also noted in the US by James Tillotson. He observed that agricultural and food industry sectors were generally resistant to the application of nutrition science to government policies due to a

concern about the potential effect of reforms on their business (Tillotson 617-643).

In summary, the definition of food and nutrition problems varied throughout history between individual and societal responsibility consistent with shifts in public policy between welfare and neoclassical liberalism. The transition period between the stages in the 1930s and 1970s, provided an opportunity for the policy community to influence policy direction through the discussion of different types of policy instruments and goals as well as new ideas, such as science and technology.

Within each stage, the problem definition and overall public policy approach determined the choice of policy instruments implemented. A general preference for instruments that addressed societal responsibility was seen between 1945 and the late 1970s when the welfare liberal approach was dominant. A preference for instruments that addressed individual responsibility for food choices was seen in the early 1900s to 1940s and again since the late 1970s when classical and neoclassical liberal approaches were dominant. During all stages, once the overall direction was established, there was consistency in the type of policy instruments chosen as instruments from all categories with both welfare and neoclassical liberal content were used. A number of organized interests contributed to the discourse since the 1930s. Historically, coordinating agriculture and food with health and nutrition goals was elusive, except during wartime, when the country was in a national crisis.

Question 2: How has the discourse among the nutrition policy community been structured since 2001? Have changing conditions opened a discourse related to shifting policy goals?

This answer assesses the public policy discourse using the following components described by Brooks and Miljan, the scope of public policy, choice of policy instruments and distributional dimensions as listed on pages 13 and 14. Chapter 5 describes the public policy discourse from 2001 to January 2006 in detail. Overall, the scope of government and distributive dimensions were consistent with a neoclassical liberal approach that has been in place since the early 1980s. This approach is reflected by preference of market solutions, individual responsibility and a reduced role of government. Some examples include a shared responsibility between government and industry for regulating agricultural standards such as HACCP and the APF, tax relief focused on high risk groups not the whole population and industry responsibility for nutrition labelling with few accuracy checks within government. There is a growing dissatisfaction with the social consequences of a neoliberal approach such as increased unemployment, social polarization resulting from the growing earning inequality and social insurance cutbacks, and concerns regarding the quality of health care and postsecondary education systems (Bradford 193-215).

The policy instruments implemented or considered during this period are found in Table 4 on page 135. Instruments reflecting both welfare and neoclassic liberal approaches were used although there was an emphasis on neoclassical instruments consistent with individual or market responsibility. Many instruments were continued or updated such as health professional standards,

consumer education guidelines and authority instruments for nutrition labelling/food fortification. New welfare liberal instruments implemented since 2001 included enhanced nutrition research and surveillance, support of interest groups to expand the policy community and new federal structures to address public safety and health. The policy community recommended instruments more consistent with welfare liberal approaches such as taxation of "unhealthy foods", changes to improve the quality of the food supply by reducing fat, sugar and/or salt content and restricting marketing of unhealthy foods to children.

In the area of health, there seemed to be a government consensus regarding the importance of using of both individual and population health solutions to promote healthy living and reduce chronic disease and health disparities. Within agriculture, the F/P governments continued to promote market efficiency consistent with neoclassical liberalism, but a new discourse is emerging regarding collective action to address food production and environmental concerns.

Pages 1, 110 and 111 describes the increasing economic, social and environmental impacts of obesity on society in regards to increased health care costs as a result of chronic disease and food insecurity, increased usage of fuel on jets and military concerns regarding finding recruits fit enough to fight.

The consequences of 9/11 and apparent vulnerability to future global nuclear, chemical, or bioterrorism attacks gave the public a new appreciation for the importance of being prepared (Mechanic 421-442). After 9/11, the role and legitimacy of the state was increased giving government the opportunity to

implement increased security measures which may not haven accepted before 9/11. Domestic concerns include the increasing rates of childhood obesity, the presence of BSE in Canadian cattle, concern about high resource requirements of agricultural production, increased oil prices and climate change have raised the profile and suggested societal and economic policy failures as causes of food and nutrition problems.

A number of similarities between this current period and the 1970s, a previous transition period between welfare liberal and neoclassical liberal policy approaches have been noted. In the 1970s, there was unrest in global and economic environments from international food shortages and increased energy costs. Dissatisfaction with the effect of welfare liberal policies on the economy was noted and government began to experiment with different types of policy instruments such as food banks, creation of new organizations within government and coordination of agriculture and health policy, before neoclassical liberalism was accepted in the 1980s. The shift to neoclassical liberalism altered the choice of policy instruments that could be used to those that reduced the role of government and/or increased the role of markets. Since 2001, dissatisfaction with the social outcomes of neoclassical liberalism has been noted and the policy community has suggested a number of different policy instruments to address obesity, although the federal government continues to use mainly a neoclassical approach.

In summary, the public policy discourse between 2001 and January 2006 remained biased towards ideas of neoclassical liberalism. However, a number of

domestic concerns such as dissatisfaction with social outcomes of neoclassical liberal policy approaches, national security concerns, increased health care costs and obesity in children are evident. There are a number of global concerns such as food terrorism, environmental costs of agriculture production and expanding trade markets that are also important. There are tensions regarding potential policy solutions to address both domestic and global concerns. The need for coordinated policy goals addressing food and nutrition within health, national security, agriculture and the environment became more evident. There has also been consensus that nutrition problems require a balance of both individual and population based solutions. Policy has swung too far towards individuals and neoclassical liberalism and more welfare liberalism approaches are needed to balance instruments.

Question 3: How have organized interests/pressure groups been involved in the development of nutrition policy since 2001? How do certain members of the policy community see the future direction of nutrition policy in Canada?

Consistent with a neopluralist approach, organized interest/pressure groups have been involved in the development of federal nutrition policy development in Canada since the late 1970s. Historically, the policy community contributed to the discourse by trying to shift the definition of nutrition problems from individual failure and individual solutions to societal failure and collective solutions. Page 16 describes the two types of participants that make up the policy community, the policy network and attentive public. Since 2001, the policy network and attentive public contributed to nutrition policy development through advocating for food and nutrition to become part of government agendas and

contributing to policy formulation and/or implementation. This was done through participation on advisory committees and consultations established for nutrition labelling/food fortification, revising Canada's Food Guide, developing the food security progress report and participating in the Trans Fat Task Force and APF.

Policy network members have common material interests that facilitate interactions and include government, food industry associations, commodity groups and professional nutrition organizations. Within the federal government, a number of departments and agencies such as AAFC, CIHR, Health Canada and Statistics Canada as well as the newly created Public Health Agency of Canada and Public Safety Canada have responsibilities for formulating, decision making, implementing or evaluating policy instruments related to nutrition. Members of Parliament also became active in regards to trans fat content of food. The federal government expanded the food and nutrition policy community by creating a number of collaborative groups for knowledge translation, communication and coordination such as the Network on Healthy Eating, the CDPAC, Food Secure Canada, Canadian Obesity Network and the Canadian Agri-food Policy Institute. The federal government also supported research through the ONP within Health Canada that highlighted the need for more research into individual and collective determinants of healthy eating. The Canadian Institute for Health Information published two reports summarizing the literature and identifying policy solutions using a population health framework to address obesity (Health Canada). These policy instruments are listed in appendix 9 and 10 and mainly reflect welfare liberal solutions such as surveillance, research, monitoring and evaluation

(nodality), creating supportive environments, regulation of nutrition information on food labels (authority) and leadership from health, enhancing public health, health impact assessment of social policy organization (organization) (Canadian Institute for Health Information; Canadian Institute of Health Information).

Policy network members tended to promote views that reflected the type of liberalism they supported. Some interest groups reflected neoclassical liberal views such as the Canadian Agri-food Policy Institute established by AAFC as "an independent voice on agri-food policy issues". Other interest groups reflected a welfare liberal view such as Dietitians of Canada, which works to influence the future direction of the health care system by promoting approaches that include dietitian's services as part of the health team. The 2004 Canadian Food Information Council Conference suggested policy instruments that reflected both welfare and neoclassical liberal approaches such as research, evaluation of prevention programs, information to consumers (nodality) and extend nutrition labelling to restaurant and food services (authority) (DiFrancesco 1-13). Food industry representatives such as individual companies, industry association and commodity groups have been involved in agenda setting, policy formulation and implementation. Food industry companies and associations recognized that nutrition was important to consumers and voluntarily changed the formulation of food products to reduce trans fat and developed new food products. Industry concerns that current regulations were too restrictive and limited the development of new products were identified as a catalyst for revision of nutrition labelling and

food fortification policies (Committee on Use of Dietary Reference Intakes in Nutrition Labelling).

The literature has identified concerns regarding the influence and involvement of industry in the development of food and nutrition policy given the systematic bias towards organized interest with greater material resources within neopluralism. Some policy community members are concerned that differing policy goals for food, nutrition, agriculture and the environment have increased the power of the markets, reduced food safety and increased resource use to produce food (Koc and Dahlberg 109-116; Lang 335-343). Policy community members with a welfare liberal perspective appear to think that the food industry has contributed to many nutrition related health problems and should be regulated to ensure conditions are met for population health needs. The federal government identified that industry and corporations are part of the solution and established a Bureau within AAFC devoted to support industry.

Internationally, it was noted that in 2003/04, the sugar industry unsuccessfully lobbied the WHO to alter recommendations to prevent chronic disease that focused on reducing sugar intake and marketing of unhealthy food products to children. The book *Food Politics* identifies how industry in the US oppose government regulations, discredits government nutrition recommendations, promote sales through lobbying, efforts in schools, advertising as well as developing alliances with heath providers, government agencies or members of Congress (Nestle 469). Although it is highly likely that these types of activities are undertaken by Canadian industry given the neopluaralist policy

environment, the presence of multi-national companies and the free trade environment, the researcher was unable to find secondary references to support this extent of involvement. In regards to nutrition labelling and food fortification on pages 143-147, this research identified that both the public and industry were beneficiaries of instruments implemented between 2001 and January 2006. Only a limited analysis of actors with market interest such as the food industry was undertaken for this research therefore more detailed conclusions can not be made.

The attentive public may have common policy knowledge but lack the material interests and include civil society, non-governmental agencies, health providers and scientists. The attentive public put forward views reflecting the type of liberalism they supported. Both CDPAC and the Network on Healthy Eating worked towards enhancing collaboration and coordination between organizations with a focus on risk factors such as nutrition or physical activity. The Heart and Stroke Foundation worked to put obesity on the government agenda with its Report Card "fat is the new tobacco" and took a leadership role in the Trans Fat Task Force. CSPI, contributed to the discourse by promoting welfare liberal approaches such as treasury to tax junk foods; authority to regulate food supply and expand nutrition labelling requirements to restaurant food; and reduction of food advertising to children. Food Secure Canada and the Canadian Association of Food Studies brought forth ideas related to collective solutions to food security. A Canadian research group, Mclaren et al, identified evidence-based approaches to promote healthy weights such as regulation to limit advertising and promoting

foods to children or fiscal policies that facilitate healthy lifestyles and intersectoral integration by government (McLaren et al. 1-33). Through its 2004 *Strategy on Diet, Activity and the Prevention of Chronic Disease*, the WHO supported welfare liberal concepts related to an increased role of government in relation to using treasury and authority instruments to promote the production of healthier food choices and an increased role for industry to produce a healthier food supply and restrict marketing practices to children. Obesity Canada and the Canadian Obesity Network had more of a neoclassical liberal approach through its work to facilitate effective partnerships between industry, researchers and health professionals to reduce the burden of obesity.

In summary, actors within the policy community were involved in many aspects of nutrition policy agenda setting, formulation and implementation. Their involvement was enhanced between 2001 and January 2006 as new organizations were established to support both welfare liberal and neoclassical liberal approaches. The role of industry in nutrition policy development was controversial as some policy community members believed that industry was the cause of the problem and should be regulated not endorsed as a partner.

Question 4: What types of nutrition policy instruments have been considered or discussed by the Government of Canada since 2001? What types of instruments have been implemented and how has their impact been viewed in the literature?

Suggestions for nutrition policy instruments reflect a growing dissatisfaction with the outputs of the current neoclassical liberal approach. The analysis section in Chapter 5 identifies the instruments discussed and implemented on pages 134-147. This answer explores the concepts of coerciveness described by

Macdonald on page 17, that there might be two views of coercion if we have two views of liberalism and the extent to which a policy instrument may not be legitimate because it infringes on social values. Whether a policy is perceived as coercive or not may depend on the underlying value perspective of welfare or neoclassical liberalism.

Policy instruments since 2001 were implemented in all four categories and had both welfare and neoclassical liberal content. Instruments with neoclassical liberal content reflected the belief that nutrition problems were the result of individual failure which needed individual solutions. Figure 1 summarizes the degree of coerciveness of the policy instruments implemented since 2001 using MacDonald's categories listed in Appendix 1. All instruments implemented would be considered low coercion as they did not interfere with the market or individual choice. The nodality instruments were considered the least coercive and the creation of new government organizations to provide service would be considered the most coercive.

Figure 1: Instruments since 2001 according to degrees of coercion used (least on the left)

Nodality	Authority	Treasury	Organization
Health provider standards, research, surveillance, interest groups created	Revised Food and Drug Act	Framework	Public Safety Canada and PHAC created, Minister PH appointed

From a neoclassical liberal perspective, actions that impeded markets or increased the role of government would be considered coercive. Conversely, from the welfare liberal view, our current situation with limited oversight of

markets and lack of government leadership and coordination would be seen as coercive as food choices are limited and heavily influenced by the food industry through markets. Opportunities to access foods through non-market options such as growing or purchasing local foods from farmer's markets or local firms are limited.

Although no high coercion policy approaches were implemented, many were suggested by the policy community. Since 2001, no high coercion approaches from a neoclassical liberal perspective such as market or industry self regulation, taxation of high fat/salt/sugar foods, professional legislated bodies responsible for market entry and behaviour were implemented to address nutrition. World War I and II were the only times a high coercion instrument was used when The War Measures Act was passed to control the food supply. Macdonald states that "During the course of both world wars, government used enormously coercive powers, both in terms of their willingness to directly administer the economy and to restrict the liberty of individuals and firms." The limited use of high coercion instruments is consistent with the findings of a review of environmental policy by Macdonald which identified that governments used the most coercive means to deal with only the greatest threats such as sewage by rigorously enforcing bylaws and providing services and the viewpoint that governmental needs a strong response to the greatest threat of all, risk to the continued existence of the state (Macdonald 1161-1187). This is consistent with a view that low coercion instruments are easier to implement as they are cost

efficient and consistent with cultural norms of individual freedom (Howlett and Ramesh 311).

It is not surprising that many of the instruments discussed but not implemented reflected a welfare liberal view that considers law and programs to be positive aids to liberty and not restraints that limit freedom of choice. The policy community recommended that government should play a leadership role to ensure conditions are met for health through implementation of more coercive policy instruments such as developing a coordinated national food and nutrition policy; providing incentives for intersectoral integration within government; establishing a national food and nutrition monitoring and surveillance system; and increasing domestic activity to improve food security. Actions targeted at markets to influence activities of the food industry were suggested such as improving the quality of the food supply; enacting more extensive nutrition labelling requirements for foods; using taxation to promote healthy foods or discourage unhealthy foods; and regulating food marketing. Governments have been reluctant to use more coercive instruments in these areas since they may not be supported by the public as they take away personal choice or not supported by markets which prefer minimal regulation. This type of policy instrument has higher political and economic risk for government and industry, but there is less resistance to coercive approaches to nutrition if the risk to the public can be confirmed (Brooks and Miljan 172-198; Milio 413-423). We will now move to a discussion of the impact of policy instruments on population health.

The history assists in identifying the effect of nutrition-related policy instruments on population health. The first example on pages 99-102 suggests that increasing rates of obesity since the mid 1970s are a result of implementation of policy instruments that emphasized individual responsibility. A second example on pages 102-105 describes how implementation of neoclassical liberal policy such as reduction of transfer payments to provinces and individuals had positive economic effects for government and industry but created other problems such as food insecurity, increased chronic disease and health disparities. The last example relates to results of the CCHS Cycle 2.2 survey completed in 2004 which suggest that the Canadian food supply and intake does not reflect the recommendations within Canada's Food Guide for Healthy Eating. The survey identified that Canadians may not be meeting their nutrient requirements for vitamins and minerals despite energy intakes high enough to cause increasing rates of obesity. Over 25 per cent of Canadian adults consumed more than 35 per cent of total calories as fat (Garriguet 1-43). The increasing prevalence of obesity and food security, and eating habits inconsistent with government education guidelines suggest that the type and combination of policy instruments implemented with a focus on individual responsibility were not successful in promoting healthy food intake or healthy weights.

Given the findings of the research, one could ask why the emphasis on a neoclassical liberal approach to nutrition policy failed to produce effective policy outputs for health. Implementation of mainly neoclassical liberal policies contributes to negative freedom, the lack of ability to achieve something caused

by an external restraint or hindrance. In the case of nutrition, the restraints were policies that promoted and encouraged the development of an unhealthy food supply and limited the production of a healthy food supply. The provision of information to ensure people are informed about food choices may not evenly affect all members of society since the emphasis is on individuals to make healthy choices and populations living in disadvantaged circumstances may not be able to make changes. The outcome of low coercion policy instruments has been an increase in social disparities, obesity, disease and disability which have created obstacles that limit personal freedom and opportunity. The policy community has suggested that agriculture and the food industry improve the quality the food supply to be more consistent with government nutrition recommendations since the 1970s. Agriculture and the food industry have made few changes and have been resistant to the use of more coercive approaches until recently, when the food industry began to make voluntary reductions in the trans fat content of food. Conditions of market failure or breakdown such as imperfect competition, high external costs or benefits to third parties and imperfect information have been met in the case of food and nutrition policy (Cash, Goddard, Ellen W. and Lerohl 605-629).

In summary, nutrition policy instruments since 2001 remain an extension of what was implemented in previous periods. Although no high coercion policy approaches were implemented, many were suggested by the policy community. Since the 1970s, nutrition policy instruments have been more heavily weighted towards neoclassical liberal approaches of a low coercion nature. These policy

approaches created obstacles to achieve individual freedom while supporting markets to produce unhealthy foods with few restraints. Policy has swung too far towards individuals and neoclassical liberalism and more welfare liberalism approaches are needed to provide a better balance instruments. There does appear to be two views of coercion based on the two types of liberalism and how policy instruments infringe on societal values.

### Conclusion

The research suggests that the primarily neoclassical liberal policy approach to food and nutrition used over the last 30 years tolerated the promotion of sub optimal nutrition choices which have negatively affected health. Given the negative health impacts of neoclassical approaches, it could be said that nutrition policy requires a stronger emphasis on collective policy instruments that promote positive freedom for the population. In the case of nutrition, a welfare liberal policy approach could limit external barriers by promoting the idea that everyone enjoys an equal opportunity to succeed and removing obstacles to pursue individual's goals by addressing poverty and illness. People would have the opportunity or freedom to achieve personal goals and be free from dependency as was seen in the 1950s and 1960s when implementation of treasury approaches to ensure individuals had adequate income also improved health and life expectancy. If the cause of nutrition problems were more strongly seen as societal or economic failure, solutions could better emphasize allowing "all members of society to have the freedom to participate directly or indirectly in the decisional process and this involves respect for their voice, influence and rights"

(Sen 3-64). Collective approaches would be considered of higher coercion to neoclassical liberals as limiting food choice by regulating markets and food supply would reduce individual choice and freedom.

The research suggests that the hypothesis was supported as consideration of more coercive policy instruments indicated a shift in the context for decisions related to nutrition policy. Since the 1970s, high coercion approaches to nutrition policy from a neoclassical liberal perspective have been suggested by the policy community but not implemented. The only time a high coercion nutrition policy instrument was implemented was during World War I and II to ensure healthy soldiers were available to fight which required adequate quantities of food domestically and internationally. The shifting global context and the importance of ensuring Canada has enough soldiers fit to fight, the need for a safe domestic food supply if borders are closed, the importance of sustainable agriculture policies to preserve the environment, has raised food and nutrition to a national strategic priority. Between 2001 and January 2006, the policy community expanded and became more vocal regarding the need for government to take a leadership role to address increasing obesity and chronic disease in adults and children, food insecurity in disadvantaged populations and associated health care treatment costs.

Manzer identified that state intervention can be justified by conditions of market failure (Manzer). It is time for governments to use its authority to limit individual and market freedom to assist individuals to gain positive freedom to be healthy and reduce risk of disease by guaranteeing food quality through

regulations, incentives or taxation. The history suggests that during this transition time, there may be a window of opportunity to consider new approaches to nutrition policy and allow instruments to be rebalanced and accommodate both welfare and neoclassical liberal concerns. The debates within the nutrition policy community regarding type of instruments are consistent with the broader public policy concerns regarding outcomes of neoclassical liberal approaches and the search for a replacement that provides for economic innovation and social cohesion. The debate continues between approaches that promote negative and positive freedom.

## IV. Recommendations for Nutrition Policy in Canada

The review of the nutrition history identified that the Canadian federal government has been more likely to define obesity as an individual responsibility and was more likely to use policy instruments targeted at individuals. The new consensus that obesity may also be a societal responsibility expands the type of policy instruments that could be used by government to promote healthy eating. In regards to the future, I would recommend that government continue with current instruments targeted at individuals and develop new innovative instruments that address societal causes of obesity to achieve a balance of policy instruments that reflect both welfare and neoclassical liberalism.

Developing instruments that address societal causes will require work to reframe or redefine food and nutrition problems away from obesity to a broader perspective that includes food, nutrition, agriculture and environment issues. Lori Dorfman suggested that the term obesity is narrow and causes people to think

about individual causes such as a lack of will power that requires an individual response not a public health approach requiring societal action (Dorfman and Wallack S45-S50). A recent position paper from Dietitians of Canada proposed the use of a new concept, Community Food Security, to expand the understanding of factors that assist Canadians to obtain a safe, personally acceptable and nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone. This new concept proposes a broad scope that includes three elements, 1) environmental health, 2) social equity and human health; and 3) economic vitality (Dietitians of Canada 1-13). Another suggestion by James Tillotson is to reframe obesity as an issue where the objectives of long-established agricultural, industrial and economic policies that conflict with health goals and needs resolution at societal levels (Tillotson 617-643).

The following section includes recommendations from international and Canadian policy communities that would address food and nutrition from the perspective of societal failure and solutions. This has been divided into process recommendations related to how to develop food and nutrition policy and recommendations regarding types of instruments and/or content.

### **PROCESS**

There is a need to better coordinate problem definition and policy formulation in a number of policy areas such as agriculture, health and the environment to develop a harmonized approach to potential solutions. After reviewing a number of food and nutrition policies worldwide, the WHO identified

five key elements for successful implementation of national food and nutrition plans and policies. These include official government adoption and political support, including government funds specifically allocated to nutrition; an intersectoral coordination mechanism, located in the government and allocated a budget; priorities set for activities and responsible sectors or ministries designated; ability to transplant plans into action, including strengthening human capacity in designing and planning programs for nutritional improvements and a mechanism for monitoring and evaluation. Obstacles to policy implementation are the lack of political commitment, at both national and local levels; technical expertise and funding (Robertson et al. 1-385). Canada already has a number of these elements such as government responsibility centres for nutrition policy. surveillance and research with funding and a history of translating plans into action with involvement of a diverse policy community. In regards to addressing food and nutrition policy from a structural perspective, the first recommendation is that F/P/T governments shift resources into prevention and health promotion. The second recommendation is that nutrition be formalized as part of the Canadian social policy framework with a high level coordination "mechanism" established to link relevant government departments. This could be accomplished in a few different ways. Rod Macrae recommended that a government department to address food and nutrition be established at municipal, provincial and federal levels and be organized according to food subsystems: consumption, nourishment, and health; distribution and storage; processing; production; and export and import (MacRae). A second approach would be establishment of

Food and Nutrition Policy Planning Groups or Strategic Plans to better coordinate policy making in the areas of food, nutrition, agriculture, public safety and environment. This has been done in successfully in Australia where the federal Government recognized that improvements in nutrition could not be brought about by nutrition education and persuasion alone, but required a focus on prevention. community participation, multiple strategies and action by multiple sectors not only the health sector (Strategic Inter-Governmental Nutrition Alliance of the National Public Health Partnership). A third option to address obesity could be the establishment of a Healthy Living Ministerial Taskforce to provide policy advice to Government and ensure all government departments are involved. The Australian government announced the establishment of such a Task Force in 2007 with membership from six government departments, industry and nongovernment sector (Government of Australia). A fourth option would be the use of health impact analyses of social policies that influence income and financial security to assist in developing an understanding of socioeconomic determinants of obesity. The WHO defines health impact assessment as a process that identifies both the positive and negative affects of policies on health and includes recommendations to improve policies to maximize population health benefits (Canadian Institute for Health Information; Robertson et al. 1-385).

### TYPES OF INSTRUMENTS AND/OR FOCUS

Government should continue to use policy instruments in all categories to address food and nutrition. References to articles or government reports are not

included in this section as they have been referenced throughout the paper. The federal government should consider:

- 1. making food and nutrition research, monitoring and surveillance a priority to ensure data is available to assess food intake, nutrition related health status for program and policy planning, development and evaluation. There is a need to better coordinate research activities across agriculture, health, environment, academic and non-government sectors to assist in knowledge and technology transfer as well as the development of new knowledge, tools and technology. This could be done through developing specialized policy networks.
- 2. Using high coercion authority instruments to improve the quality of the food supply. This could include through encouraging development of new food products, macronutrient or micronutrient enrichment that might reduce chronic disease, and support of local food production and consumption to limit food miles. The existing *Food and Drug Act* could be enhanced to strengthen the regulations to improve nutritional quality of particular foods by reducing allowed trans fat, sodium or sugar content in processed foods or expanding nutrition labelling to fresh meats and restaurant foods.
- 3. Focusing on policy approaches to address childhood obesity such as monitoring and regulating marketing of energy dense micronutrient poor food for children; working with media to provide responsible public information on healthy eating and physical activity; and using schools as important sites for interventions (adequate funds for school catering,

- sufficient facilities for physical activity, restriction of commercial activities in schools).
- 4. Using high coercion treasury instruments such as market incentives for developing and marketing healthier foods, reducing the salt content of processed foods, restricting hydrogenation of oils, and limiting excess sugar content of beverages. Economic approaches that increase the price of a product can reduce demand, and have been very successful in tobacco cessation efforts. From a food perspective, this could mean shifting sales tax from healthful foods to junk foods or considering price subsidies to reduce the price of healthy food choices. Industry might also be supported to develop systems to support food safety, food quality and traceability.
- 5. Expanding nodality instruments to include mass media campaigns on a variety of topics related to food safety, healthy eating and physical activity. The provision of information to food industry associations to assist in modifying food products and ensuring access to laboratories to assist in the analysis of food composition is linked to developing healthier foods.

## V. Strengths and Limitations of the Method

One purpose of the research project was to explore the feasibility of the research method for use in future research. Studying public policy is complex and requires the use of an analytical framework that permits the consideration of the entire range of factors affecting public policy and allows hypotheses to be tested through the empirical analysis of the reality analysts are attempting to

describe and understand (Howlett and Ramesh 311). The neopluralist framework was a useful foundation to think about policy processes. The multi-staged approach using a number of mainstream policy assumptions was useful and allowed the researcher to organize large amounts of information and compare across different time periods. The stages of the policy cycle assisted in organizing and classifying activities of the policy communities and state structures. The taxonomy of governing resources to classify policy instruments was also used by Douglas Macdonald as a framework for environmental policy instruments. Use of the same framework allowed other the researcher to consider and build upon the idea of degrees of coerciveness proposed by Macdonald in regards to instrument choice. The description of the historical discourse allowed the researcher to become comfortable with the method and identify trends that could be used for the current time analysis.

There were a number of challenges resulting from the use of secondary historical documents. The researcher could not always find key information that would be helpful such as why the Canadian Council on Nutrition was discontinued, why the National Food Strategy failed or how the Agri-food strategy developed in the early 1980's was implemented. This type of historical analysis has not been done for nutrition policy post World War I, therefore the research required that information from a number of sectors and sources be compiled to describe activities. All information that was used required the assessment of type of liberalism it employed as well as external and internal criticism to determine authenticity and worth of the data.

In summary, the method was feasible and could be used to study other questions regarding food and nutrition policy in the future.

## VI. Recommendations for Future Research

Another purpose of the research was to provide an overview of the history of nutrition policy within Canada and how it fit within a broader public policy context. This exploratory and descriptive research used a systematic approach to lay a foundation for further research. We now understand the historic stages of nutrition policy development and can dig deeper to explore issues of interests and underlying inter-relationships such as:

- Explanatory research to better understand the underlying factors and/or political economy issues influencing food and nutrition policy
- More detailed inquiry regarding the characteristics of the policy community
   (attentive public and policy network) to better understand their role in
   instrument selection and food and nutrition policy making in general
- A more detailed review of the 1970's, as a transition period between welfare and neoclassical liberalism to understand the impact on food and nutrition policy instruments and policy learnings for our current stage
- The role of ideas and trends in civil society such as technology, food supply and science in influencing food choice by consumers, food production by industry and government food and nutrition policy
- Understanding the connections between agriculture, environment,
   economic and public safety policy on food and nutrition policy and

exploring potential policies approach to achieve balance between these interests and the different types of liberalism

### **Appendix 1: Policy Instruments**

Christopher Hood described governing resources using a basic taxonomy of instrument categories. Table1 presents the classification scheme with examples of the types of policy tools that can be found in each category. These categories are arranged from the least coercive ('nodality') to the most coercive ('organization'). (Hood)

Table 1: Policy Instruments, by Principal Governing Resource

Nodality	Authority	Treasure	Organization
Information,	Command and	Grants and Loans	Direct Provision of
Monitoring and	Control Regulation		Goods and
Release			Services and
			Public Enterprise
Advice and	Self-regulation	User Charges	Use of Family,
Exhortation			Community and
			Voluntary
			Organizations
Advertising	Standard-setting	Taxes and Tax	Market Creation
	and Delegated	Expenditures	
	Regulation		
Commissions and	Advisory	Interest Group	Government
Inquires	Committees and	Creation and	Reorganization
	Consultations	Funding	_

These categories also correspond to the framework described by Douglas Macdonald of encouraging voluntary behaviour change, law, positive or negative financial incentives and organization of services. (Macdonald 1161-1187)

Table 2 uses the four categories of policy instruments and identifies examples of public policy tools that affect the food intake of Canadians. A gap in Macdonald's work, if we have two views of liberalism, is that that there may also be two views of coercion. In order to better understand the two views of coercion, the policy instruments have been broken down into whether they fit with a) welfare liberal perspective and exhibit positive freedom defined as the ability to realize or achieve our ideal or "higher" selves in cooperation with others or b) a neoclassical liberal perspective and exhibit negative freedom defined as policies that rob some individuals of their freedom by forcing them to transfer their property through taxes to others. (Ball, Terence et al 38-78; Macdonald 1161-1187)

Table 2: Policy instruments categorized by type of liberalism and freedom				
Policy instrument categories	Examples of Food and Nutrition Policy Tools			
	Welfare Liberal Content (Positive Freedom)	Neoclassical Liberal Content (Negative Freedom)		
Nodality (encouraging voluntary	Low coercion: state funded public information campaigns regarding healthy eating	Low coercion: market responds to consumer		
behaviour change through information)	High coercion: creation of specialized policy networks to compile and interpret information	High coercion: establishment of industry self-regulation of information provided		
Treasure (positive or negative financial incentives)	Low coercion: interest group funding	Low coercion: grants to industry and/or tax incentives		
	<b>High coercion</b> : redistribution of income to individuals through transfer payments	High coercion: taxation of high fat/salt/sugar foods		
Authority (law)	Low coercion: establishment of regulatory standards to promote health and prevent disease	Low coercion: voluntary self regulation of health professionals, non-governmental organizations and industry		
	High coercion: state legislating body for market entry and behavoiur	High coercion: professional legislated bodies responsible for market entry and behaviour		
Organization (organization of structures)	Low coercion: established state monitoring agency	Low coercion: Family, community or voluntary organization provide services on voluntary basis		
	High coercion: market creation through government licensing schemes	High coercion: market regulation		

# Appendix 2: Policy Instruments suggested in the 1974 Throne Speech for the proposed food policy (Food Prices Review Board 0-114)

The following policy instruments were suggested:

- guaranteed loans for farmers and fishermen to assist in the purchase of equipment;
- amendments to Export and Import Permits Act;
- improving the availability of manpower for food production;
- assistance in the construction of new storage facilities;
- research to make it possible to increase production, improve quality, and lower costs;
- improvements in harbour facilities for fishing fleets;
- incentives to increase Canada's catch of unexploited stocks of fish;
- advance payments on crops to assure producers of timely cash receipts;
- an agricultural stabilization plan to encourage rational production decisions;
- assistance to young farmers to provide sufficient financial incentives for them to establish themselves in farming;
- better veterinary training facilities
- a prairie grain market insurance plan;
- improvements in Canadian grain rail transportation capabilities;
- increased availability of reasonably priced feed grains;
- incentives to increase the production of livestock necessary to provide for Canadian and export markets.

# Appendix 3: Nutrition Recommendations for Canadians: (Scientific Review Committee) A Call for Action 1989

The goal of the Nutrition Recommendations is to give guidance to professionals and the public about what constitutes a healthful diet. In order for these recommendations to be acted upon and implemented, they must first be understood by the public.

### **Nutrition Recommendations for Canadians**

- The Canadian diet should provide energy consistent with the maintenance of body weight within the recommended range.
- The Canadian diet should include essential nutrients in amounts specified in the Recommended Nutrient Intakes.
- The Canadian diet should include no more than 30per cent of energy as fat (33 g/1000 kcal or 39 g/5000 kJ) and no more than 10per cent as saturated fat (11 g/1000 kcal or 13 g/5000 kJ).
- The Canadian diet should provide 55per cent of energy as carbohydrates (138 g/1000 kcal or 165 g/5000 kJ) from a variety of sources.
  - The sodium content of the Canadian diet should be reduced.
- The Canadian diet should include no more than 5per cent of total energy as alcohol, or two drinks daily, whichever is less.
  - The Canadian diet should contain no more caffeine than the equivalent of the containing of the contain
    - Community water supplies containing less than 1 mg/litre should be fluoridated to that level.

# Appendix 4: Recommendations from Communications Implementation Committee: in 1989 - Canada's Guidelines for Healthy Eating and Recommended Strategies for Implementation

The Committee identified that many strategies and partners are required to implement Canada's Guidelines for Healthy Eating. In addition to the eight core recommendations listed below, 98 recommendations were made for action for seven different sectors (Department of Health and Welfare; provincial, territorial and municipal governments; food industry; food services; Canadian public; non-governmental organizations; and nutrition and other health professionals). The overall strategies for implementation fall into the following areas:

- Development of food and nutrition policies;
- Collaboration and coordination among many partners;
- Development of multisectoral, community-based nutrition intervention programs;
- Creation of supportive environments in locations such as schools,
   worksites, restaurants and supermarkets, and through legislation and policy changes where appropriate; and
- and the surveillance efforts.

### - Address Ad Core Recommendations for Action to all sectors

- A1-Initiate coordinated national food and nutrition policy, linking nutrition and health with agriculture, education, fitness, fisheries, social services, environment and other relevant sectors
- A2 Adopt and promote Canada's Guidelines for Healthy Eating as the single set of nutrition recommendations for communication to and implementation by the healthy public over two years of age
- A3= Integrate Canada's Guidelines for Healthy Eating into nutrition programs and materials.
  - A4 Develop and ensure continued availability of targeted nutrition education programs and materials to meet the needs of the population, taking into account sociodemographic and cultural characteristics.
  - A5 Initiate intersectoral initiatives to develop community-based nutrition programs to promote and support the implementation of Canada's Guidelines for Healthy Eating, which include school, workplace, mass media and point-of-purchase intervention programs.
  - A6 Initiate intersectoral cooperation to develop guidelines on the dissemination of health information associated with the sale of food products.
  - A7 Increase research efforts and support a national nutrition surveillance and monitoring system.
  - A8 Review the Nutrition Recommendations and Communications/Implementation Strategies every five years.

# Appendix 5: Key Actions suggested in Nutrition for Health: An Agenda for Action (1996)

- 1. Work to include and maintain nutrition services as part of comprehensive health services in both existing and evolving community-based settings.
- 2. Incorporate nutrition into curricula for children and youth and include quality daily physical education as part of all school programs.
- 3. Include nutrition in both the training and continuing education programs for health and other community service providers.
- 4. Improve usefulness of nutrition labelling, increase its availability, and broaden public education on its use.
- 5. Emphasize practical skill development (food selection, storage and preparation skills) in nutrition education programs for the public.
- 6. Work with the media to provide responsible public information on healthy eating and physical activity.
- 7. Protect and promote breastfeeding and improve access to community-based breastfeeding support groups.

### Appendix 6

Suggested Solutions to the Problem of Obesity: from Improving the Health of Canadians (Canadian Institute of Health Information)

The key messages are that a mix of interventions will be required, given the complexity of the causes and solutions of overweight and obesity. A number of sectors working together on complementary strategies can contribute to reversing the trends. Sectors that could provide leadership include health, education, the private sector and local governments.

- Applying lessons from Tobacco control
- Health Agencies can provide Leadership
- A Healthy Living Strategy could help to prevent obesity
- Strengthening Surveillance
- Enhancing Public Health Capacity
- Informing Policy with Research
- Education Can Play a Key Role
  - o Investing in Schools
  - o Requiring Quality Daily Physical Education
- Industry and Corporations are part of the solutions
- Working with the Food Industry to Monitor and Regulate Food Marketing
- Monitoring and Regulating Nutrition Information
- Planning and Land Use Can Contribute
  - Community Design can Contribute to Health
  - Healthy Official Plans can be a Tool
- The needs of Low Income Neighbourhoods and Remote Communities

# Appendix 7: Suggested Policy Options from the Report – Overweight and Obesity in Canada: A Population Health Approach (Canadian Institute for Health Information)

- 1. Develop a comprehensive, coordinated surveillance system to monitor ongoing rates of obesity, the costs of obesity and impacts of interventions.
- 2. Build upon current commitments to food and nutrition surveillance, including eating patterns and nutrient intake physical measures, through the Canadian Community Health Survey, cycle 2.2, planned to begin in 2004. Commit further resources to exploit opportunities for ongoing surveillance, data analysis, interpretation, and reporting so that the contributions of food intake and physical activity to obesity can be understood and acted upon.
- 3. Develop a comprehensive, coordinated surveillance system to monitor physical activity among Canadians.
- 4. Exploit opportunities for analysis of currently available surveys and develop surveillance mechanisms to fill current gaps in data gathering in order to monitor social trends such as recreation patterns, television viewing, food purchasing patterns, food supply and marketing strategies related to food and physical activity that contribute to the understanding of environmental determinants of obesity.
- 5. Conduct health impact analyses of social policies influencing income equity/financial security to assist in developing an understanding of socioeconomic determinants of obesity.
- 6. Develop policies supportive of weight management for individuals at risk for health problems due to obesity.
- 7. Work with education ministries and school boards to promote healthy weights through schools.
- 8. Work with private and public sector employers to develop a workplace environment that promotes healthy weights.
- Based upon extensive evidence generated from knowledge and experience with other health issues in Canada (such as tobacco) and from other countries, apply promising practices for population-based policy change to promote healthy weights.
  - **a.** Evaluate and measure outcomes of programs and interventions using common indicators of success to increase the evidence base for future public health initiatives.

## Appendix 8: Health Goals for Canada (2006)

In the context of accelerating work on a pan-Canadian Public Health Strategy and engaging across sectors, First Ministers committed to "improving the health status of Canadians through a collaborative process." In September, 2004, First Ministers directed Ministers of Health to take the lead on developing health goals for Canada. The Federal Minister of State (Public Health), and Manitoba Minister Responsible for Healthy Living were appointed to co-lead this process. (Government of Canada)

## Canada is a country where:

Basic Needs (Social and Physical Environments)

Our children reach their full potential, growing up happy, healthy, confident and secure.

The air we breathe, the water we drink, the food we eat, and the places we live, work and play are safe and healthy - now and for generations to come.

### Belonging and Engagement

Each and every person has dignity, a sense of belonging, and contributes to supportive families, friendships and diverse communities.

We keep learning throughout our lives through formal and informal education, relationships with others, and the land.

We participate in and influence the decisions that affect our personal and collective health and well-being.

We work to make the world a healthy place for all people, through leadership, collaboration and knowledge.

### Healthy Living

Every person receives the support and information they need to make healthy choices.

#### A System for Health

We work to prevent and are prepared to respond to threats to our health and safety through coordinated efforts across the country and around the world.

A strong system for health and social well-being responds to disparities in health status and offers timely, appropriate care.

# Appendix 9 – Recommendation from Trans Fat Task Force Interim Report (2005)

## Guidance Related to Food Processing and Food Service Industries

The Task Force recommends that:

- the federal government:
  - underscore the importance to the food industry, including manufacturers and distributors of domestic and imported food products, of meeting the approaching deadlines for modifying their labels;
  - refer the food industry to organizations such as the American Oil Chemists' Society or Standards Council of Canada, which set standards for analytical procedures and provide names of laboratories with established competency for the analysis of trans fatty acids;
  - work with the above mentioned organizations to encourage laboratories to participate in their accreditation programs;
  - work with stakeholders to develop a national list of food processing development centres that can held small and medium-sized enterprises reformulate their products to reduce of eliminate trans fats and/or develop alternative products with little or no trans fats; and
  - o pursue discussions with the US through existing forums such as the NAFTA Technical Working Group on Food Labelling, Packaging and Standards to raise awareness of the public health imperative underpinning the November 2004 direction from the Canadian House of Commons, and determine the US position and share data that could inform any revision of the mandatory declaration of trans trat in the Nutrition Facts table, including what can be declared as "zero" as well as the definitions of trans-related nutrient content claims.
- Industry associations and industry-specific journals and newsletters aid in the dissemination of this information;
- Manufacturers and distributors of domestic and imported food products respect the need for regulations making claims related to trans fatty acids;
- The national food service association, in collaboration with government and other stakeholder groups as appropriate, develop and disseminate a guide on how food service operators can reduce trans fat content;
- Canadian industry associations and Canadian subsidiaries of multinational firms raise awareness among their American and Mexican counterparts regarding the position of the Canadian House of Commons which calls on the government to "enact regulation...that effectively eliminates processed trans fats, by limiting the processed trans fat content of any food product sold in Canada."

### **Guidance Related to Consumers**

The Task Force recommends that

- All parties (e.g. the Network on Healthy Eating health professionals and the media) involved in communicating to consumers about food and nutrition
  - o reflect the following Task Force messages:
    - Any dietary change that focuses on reducing trans fat intake should be made in the context of a healthy lifestyle as outlined in Canada's Food Guide to Healthy Eating and Canada's Guide to Healthy Eating and Physical Activity;
    - Some fatty acids (e.g. omega-3 and monounsaturated) are beneficial to heart health and should be included in a healthy diet, while others (e.g. trans and saturated fatty acids) can increase the risk of heart disease and should be reduced in the diet:
    - The new Nutrition Facts table and fat-related claims can assist consumers in selecting products such as margarines, snack foods, french fries, cookies and crackers that contain less trans fat while avoiding items with significantly higher saturated fat content;
    - It is not easy for industry to replace industrially produced trans fats in all food categories. However low-fat versions of partially hydrogenated fat-containing products such as microwave popcorn, coffee whiteners and croutons are often available:
    - Choosing lower-fat dairy products and leaner meats, as recommended in Canada's Food Guide to Healthy Eating is a good way to reduce naturally occurring saturated and trans fat in the diet.
    - Making healthy choices means more than lowering or eliminating trans fat. Other nutrients and calories should also be considered.
  - Direct individuals to evidence-based information sources that already exist, such as:
    - Health Canada's It's Your Health web page on trans fats
    - The Heart and Stroke Foundation of Canada
    - The Canadian Health Network and
    - The Canadian Restaurant and Food Services Association
- Educate the public on how to use the Nutrition Facts table to select foods that are low in trans fat and saturated fats using such material as Health Canada's information on nutrition labelling and the Canadian Diabetes Association and Dietitians of Canada's Nutrition Labelling Education Webs site; and
- Ensure that Canada's Food Guide to Healthy Eating and Canada's Guide to Healthy Eating and Physical Activity are broadly disseminated.

# Appendix 10: Agricultural Policy Framework – Food Service and Quality Activities (2005) (Agriculture and Agrifood Canada 1-197)

Through policy and program development and research, key partners at the federal departments and agencies, such as Health Canada, the Canadian Food Inspection Agency, and the Canadian Grain Commission, provincial governments, industry and non-governmental organizations are collaborating to implement the Agricultural Policy Framework. Given the shared jurisdiction of agriculture, provinces have developed a variety of programs to implement the following activities:

- Participating in value-chain round tables as a new mechanism for coordination;
- Developing systems to support food safety, food quality and traceability
- Developing policy approaches to certification and recognition;
- Improving understanding of food quality and safety expectations in the marketplace;
- Developing communication approaches to enhance consumer confidence in the quality and safety of food;
- Facilitate collaboration of government, industry and academic partners for improved coordination of research activities, technology transfer and assessment of research implications of food issues;
- Developing new scientific knowledge, innovative tools and technologies to enhance the safety and quality of agri-food produced and process in Canada; and
- Supporting an industry-led, integrated approach to development and implementation of food safety and quality systems along the agri-food chain through the Canadian Food Safety and Quality Program.

#### **WORKS CITED**

- Acheson, E. D. "Food Policy, Nutrition and Government." <u>Proceedings of the Nutrition Society</u> 45 (1986): 131-8.
- Agriculture Agrifoods Canada. 2005-04-21 <a href="http://www.agr.gc.ca/index\_e.phtml">http://www.agr.gc.ca/index\_e.phtml</a>.
- Agriculture and Agrifood Canada. "About Us." <u>Government of Canada.</u> 2007/08/03 2007. <a href="http://www.agr.gc.ca/index\_e.php">http://www.agr.gc.ca/index\_e.php</a>.
- ---. <u>Agricultural Policy Framework Federal-Provincial-Territorial Programs Spring</u> 2005. Ottawa: Government of Canada, 2005.
- ---. Canada's Progress Report to the Committee on World Food Security in Implementing the World Food Summit Plan of Action. Vol. 1. Ottawa: Government of Canada, 1999.
- ---. <u>an Overview of the Canadian Agriculture and Agrifood System</u>. Ottawa: Government of Canada, 2006.
- Agriculture and Agrifoods Canada. "Functional Foods and Nutraceuticals." 2004-07-16 <a href="http://www.agr.gc.ca/misb/fb-ba/nutra/index\_e.php?page=intro">http://www.agr.gc.ca/misb/fb-ba/nutra/index\_e.php?page=intro</a>.
- Agriculture Canada, and Consumer and Corporate Affairs Canada. <u>A Food Strategy for Canada</u>. Ottawa: Government of Canada, 1977.
- ---. Recent Developments in Food Strategy: Discussion Paper. Ed. Warren Allmand and Eugene Whelan. Ottawa: Government of Canada, 1978.
- Anderson, K. <u>A Framework for Environomental Health Policy in Canada: Can it be</u> Applied to Nutrition Policy?., 2004a.
- ---. Influences on the Development of Dietary Guidelines in Canada., 2002b.
- Anti-Inflation Board. <u>Chronicles of the Anti-Inflation Board</u>. 1st ed. Ottawa: Minister of Supply and Services Canada, 1979.
- Archives of Ontario. "Increasing Production: Canada food Board-Educational Division (Canada) "<u>Government of Ontario.</u> 09/05/2006 2006. <a href="http://www.archives.gov.on.ca/ENGLISH/exhibits/posters/production.htm">http://www.archives.gov.on.ca/ENGLISH/exhibits/posters/production.htm</a>>.
- Atkinson, William I. "The High-Tech Menu." <u>Feeding the Future.</u> Ed. Andrew Heintzman and Evan Solomon. Toronto: House of Anansi Press Inc., 2006. 98-123.
- Babbie, Earl. "Research Design." <u>The Practice of Social Research.</u> Seventh ed. Toronto: Wadsworth Publishing Company, 1995. 82-108.

- Ball, Terence et al. "Liberalism." <u>Political Ideologies and the Democratic Ideal.</u>
  Canadian Edition ed. Toronto, ON: Pearson Education Canada, 2006. 38-78.
- Ballantyne, R. M. "Canada's Food Guide- Revised." <u>Journal of the Canadian Dietetic Association</u> 38.3 (1977): 183-6.
- Banting, Keith, and Robin Boadway. "Defining the Sharing Community: The Federal Role in Health Care." Money, Politics and Health Care:

  Reconstructing the Federal-Provincial Partnership. Ed. Harvey Lazar and France St-Hilaire. Montreal: The Institute for Research on Public Policy and the Institute of Intergovernmental Relations, 2004. 1-78.
- Beaton, G. H. "Towards a Process of Harmonization of Food and Nutrition Policies in Canada." <u>Journal of the Canadian Dietetic Association</u> 41.1 (1980): 10-2.
- Begin, Monique. <u>Integration of Nutrition into the Food Strategy: Discussion Paper</u>. Ottawa: Government of Canada, 1978.
- Boseley, S. "Political Context of the World Health Organization: Sugar Industry Threatens to Scupper the WHO." <u>International journal of health services:</u> planning, administration, evaluation 33.4 (2003): 831-3.
- Bradford, Neil. "Governing the Canadian Economy: Ideas and Politics.": 193-215.
- Brooks, S., and L. Miljan. "Chapter 2: Theories of Public Policy." <u>Theories of Public Policy in Public Policy in Canada an Introduction.</u> Ed. S. Brooks and L. Miljan. 4th ed. Toronto, ON: Oxford University Press, 2003. 22-49.
- ---. "Chapter 7: Health Policy." <u>Public Policy in Canada: An Introduction.</u> Ed. S. Brooks and L. Miljan. 4th ed. Toronto, ON: Oxford University Press, 2003. 172-198.
- Brownell, Kelly. "Overfeeding the Future." <u>Feeding the Future.</u> Ed. Andrew Heintzman and Evan Solomon. Toronto: House of Anasi Press Inc., 2006. 156-189.
- Bureau of Nutritional Sciences, Food Directorate, Health Products and Food Branch. Product-Specific Authorization of Health Claims for Foods: A Proposed Regulatory Framework. Ottawa: Health Canada, 2001.
- Canada Gazette Registration. "Regulations Amending the Food and Drug Regulations (1416 Nutrition Labelling, Nutrient Content Claims and Health Claims)." <u>Government of Canada.</u> 2006-11-23 2006. <a href="http://canadagazette.gc.ca/partl/2005/20050507/html/regle4-e.html">http://canadagazette.gc.ca/partl/2005/20050507/html/regle4-e.html</a>.
- Canadian Agrifood Policy Institute. "Canadian Agrifood Policy Institute." 03/27/ 2007 2007. <a href="http://www.capi-icpa.ca/index.html">http://www.capi-icpa.ca/index.html</a>.

- Canadian Association of Food Studies. " About us." 27/01/07 2007. <a href="http://www.foodstudies.ca/">http://www.foodstudies.ca/</a>>.
- Canadian Council of Food and Nutrition. "History ." 2006. <a href="http://www.ccfn.ca/about\_ccfn/history.asp">http://www.ccfn.ca/about\_ccfn/history.asp</a>.
- Canadian Institute for Health Information. <u>Overweight and Obesity in Canada: A Population Health Perspective</u>. Ottawa:, 2004.
- Canadian Institute of Health Information. <u>Improving the Health of Canadians</u>. Ottawa: Government of Canada, 2004.
- Canadian Institute of Health Research. <u>Obesity in Canada, Identifying Policy Priorities.</u>, 2003.
- Canadian Obesity Network. "About Us." 27/01/07 2007. <a href="http://www.obesitynetwork.ca/home.aspx">http://www.obesitynetwork.ca/home.aspx</a>.
- Canadian Partnership for Food Safety Education. "Canadian Partnership for Food Safety Education." 2007. <a href="http://www.canfightbac.org/cpcfse/en/about/">http://www.canfightbac.org/cpcfse/en/about/</a>>.
- "Canadian Prenatal Nutrition Program." 2005-04-19 <a href="http://www.phac-aspc.gc.ca/dca-dea/programs-mes/cpnp\_main\_e.html">http://www.phac-aspc.gc.ca/dca-dea/programs-mes/cpnp\_main\_e.html</a>.
- Caraher, Martin Coveney, John. <u>Public Health Nutrition and Food Policy.</u> Vol. 7., 2004.
- Carpenter, Kenneth J. "A Short History of Nutritional Science: Part 4 (1945-1985)." <u>Journal of Nutrition</u> 133 (2003): 3331-42.
- Cash, Sean B., Goddard, Ellen W., and Mel Lerohl. "Canadian Health and Food: the Links between Policy, Consumers and Industry." <u>Canadian Journal of Agricultural Economics</u>, 54.4 (2006): 605-29.
- Cash, Sean B. Integrating Food Policy with Growing Health and Wellness

  Concers: An Analytical Literature Review of the Issues Affecting Government,
  Industry and Civil Society, Executive Summary. Ottawa: Agriculture and AgriFood Canada, 2004.
- Cassel, Jay. "Public Health in Canada." <u>The History of Public Health and the Modern State.</u> Ed. Dorothy Porter. Amsterdam: Editions Rodphi B.V., 1994. 276-312.
- Centre for Science in the Public Interest Canada. "Centre for Science in the Public Interest Canada." Centre for Science in the Public Interest Canada. 02/ 21/ 2007. <a href="http://www.cspinet.org/canada/">http://www.cspinet.org/canada/</a>>.

- Centres for Disease Control and Prevention. "Achievements in Public Health, 1900-1999. Safer and Healthier Foods." Morbidity and Mortality Weekly Report 48 (1999): 905-13.
- Chenier, Nancy Miller. <u>Health Policy in Canada</u>. Vol. 93-4E. Government of Canada, 2002.
- Chronic Disease Prevention Alliance of Canada. "A case for change." <a href="http://www.cdpac.ca/">http://www.cdpac.ca/</a>.
- Clydesdale, Fergus. "Functional Foods: Opportunities and Challenges." <u>Food Technology</u> 58.12 (2004): 35-40.
- Committee for the Revision of the Dietary Standard for Canada. Recommended Nutrient Intakes for Canadians. 7th ed. Ottawa: Canadian Government Publishing Centre, 1983.
- Committee on Capitalizing on Social Science and Behavioral Research to Improve the Public's Health, Division of Health Promotion and Disease Prevention, and Institute of Medicine. "Introduction." <a href="Promoting Health: Intervention Strategies from Social and Behavioral Research">Promoting Health: Intervention Strategies from Social and Behavioral Research</a>. Ed. Brian D. Smedley and Leonard S. Syme. Washington, D.C.: National Academy Press, 2000.
- Committee on Prevention of Obesity in Children and Youth. "Preventing Childhood Obesity: Health in the Balance: Executive Summary." <u>Journal of the American Dietetic Association</u> 1 (2005): 131-8.
- Committee on Use of Dietary Reference Intakes in Nutrition Labelling. <u>Dietary Reference Intakes: Guiding Principles for Nutrition Labelling and Fortification</u>. Ed. Food and Nutrition Board and Institute of Medicine. Vol. 1. Washington DC: National Academy Press, 2003.
- Commonwealth Secretariat. Profile of the Public Service in Canada, Current Good Practices and New Developments in Public Service Management. 2nd ed. Vol. 2. Huddersfield, UK: Commonwealth Secretaria, 2003.
- Connolly, C. R. <u>A Synthesis Report- Nutrition and Healthy Eating Strategies in Canada and Other Jurisdictions</u>. Vol. Draft for Discussion. Ottawa, Ontario: Chronic Disease Prevention Alliance of Canada, 2005.
- Creswell, J. W. <u>Research Design: Qualitative, Quantitative and Mixed Methods Approaches</u>. 2nd ed. ed. Thousand Oaks, CA: Sage Publications, 2003.
- Dakers, Sonya, and Frederic Forge. <u>Agriculture: The Policy Agenda</u>. Vol. 93-9E. Government of Canada, 2000.

- Dannenberg, Andrew L., Deron C. Burton, and Richard J. Jackson. "Economic and Environmental Costs of Obesity: The Impact on Airlines." <u>Am J Prev Med</u> 27.3 (2004): 264.
- Department of Agriculture. "Office of the Food Controller." <u>Library and Archives Canada.</u> 02/01 2006. <a href="http://mikan3.archives.ca/pam/public\_mikan/index.php?fuseaction=genitem.displayItem">http://mikan3.archives.ca/pam/public\_mikan/index.php?fuseaction=genitem.displayItem</a>.
- Department of Health and Welfare. <u>Dietary Standard for Canada</u>. 5th ed. Ottawa: Supply and Services Canada, 1977.
- Department of National Health and Welfare, Nutrition Division. <u>Proceedings of the Nutrition Conference June 6,7,8, 1945 Chateau Laurier, Ottawa</u>. Vol. 1. Ottawa: Department of National Health and Welfare, 1945.
- Dietitians of Canada. Community Food Security: Position of Dietitians of Canada., 2007.
- DiFrancesco, Loretta. <u>Obesity: New Directions in Policy in Canada Forum Highlights</u>. Toronto: Canadian Council on Food and Nutrition, 2005.
- Dorfman, Lori, and Lawrence Wallack. "Moving Nutrition Upstream: The Case for Reframing Obesity." <u>Journal of Nutrition Education and Behaviour</u> 39.2S (2007): S45-50.
- Drafting Committee. <u>Proposal for the New Canadian Food Security Organization</u>., 2005. <a href="https://www.ryerson.ca/~foodsec/fsc\_proposal\_01.html">www.ryerson.ca/~foodsec/fsc\_proposal\_01.html</a>.
- Drummond, W. M., W. J. Anderson, and T. C. Kerr. <u>A Review of Agricultural Policy in Canada</u>. Agriculture Economics Research Council of Canada, 1966.
- Dubois, Lise. "Food, Nutrition and Pouplation Health: From Scarcity to Social Inequalities." <u>Healthier Societies: From Analysis to Action.</u> Ed. Jody Heymann, et al. 1st ed. 2006: Oxford University Press, 2006. 135-167.
- Epp, Jake. <u>Achieving Health for all.</u> Vol. First. Ottawa ON: Minister of Supply and Services Canada, 1986.
- Evans, Robert. "A Retrosepective on the "New Perspective"." <u>Journal of Health</u> <u>Politics, Policy and Law</u> 7.2 (1982): 325-44.
- Expert Group convened by Health Promotion Directorate, Health Services and Promotion Branch. <u>Canadian Guidelines for Healthy Weights</u>. Vol. 1. Ottawa: Minister of Supply and Services Canada, 1988.

- Federal, Provincial and Territorial Advisory Committee on Population Health.

  <u>Toward a Healthy Future: Second Report on the Health of Canadians</u>. Vol. 2., 1999.
- Federal, Provincial and Territorial Advisory Committee on Population Health. Strategies for Population Health: Investing in the Health of Canadians. Ottawa, ON:, 1994.
- Fleck, Fiona. "WHO Challenges Food Industry in Report on Diet and Health." <u>British Medical Journal</u> 236 (2003): 515.
- ---. "WHO Resists Food Industry Pressure on its Diet Plan." <u>British Medical Journal</u> 328 (2004): 973.
- Food and Nutrition Board's Committee on the Scientific Evaluation of Dietary Reference Intakes. "Origin and Framework of the Development of Dietary Reference Intakes." <u>Nutrition Review</u> 55.9 (1997): 332-4.
- Food and Nutrition. "Health Canada." 2005-04-01 <a href="http://www.hc-sc.gc.ca/english/lifestyles/food\_nutr.html">http://www.hc-sc.gc.ca/english/lifestyles/food\_nutr.html</a>.
- Food Prices Review Board. Final Report "Telling it Like it is". Vol. Final. Ottawa:, 1976.
- Food Secure Canada. "About us." 27/01/07 2007. <a href="http://www.foodsecurecanada.org/about.html">http://www.foodsecurecanada.org/about.html</a>.
- Garriguet, Didier. <u>Overview of Canadians' Eating Habits 2004</u>. 1st ed. Vol. 2. Ottawa: Statistics Canada, 2006.
- Gay, L. R., and P. Airasian. <u>Educational Research: Competencies for Analysis and Application.</u> Sixth Edition ed. Upper Saddle River, New Jersey: Prentice-Hall, Inc., 2000.
- Government of Australia. "Working together for a Healthy Active Australia." Government of Australia. <a href="www.healthyactive.gov.au">www.healthyactive.gov.au</a>.
- Government of Canada. <u>Government Response to the Interim Recommendations of the Trans Fat Task Force</u>. Vol. 1. Ottawa, ON: Health Canada, 2005.
- ---. "Health Goals for Canada." 2007-01-27 2007. <a href="http://healthycanadians.ca/NEW-1-eng.html">http://healthycanadians.ca/NEW-1-eng.html</a>)>.
- Hancock, Trevor. "Lalonde and Beyond: Looking Back at "A New Perspective on the Health of Canadians"." <u>Health Promotion</u> 1.1 (1986): 93-100.
- Harper, A. E. "Evolution of Recommended Dietary Allowances- New Directions?" Annual Review of Nutrition 7 (1987): 509-37.

- Health and Welfare Canada. <u>Action Towards Health Eating.... Canada's Guidelines for Healthy Eating and Recommended Strategies for Implementation the Report of the Communications/Implementation Committee.</u> Ottawa: Supply and Services Canada, 1989.
- Health and Welfare Canada,. <u>Report of the Committee on Diet and</u>
  <u>Cardiovascular Disease</u>. Ottawa ON: Supply and Services Canada, 1976.
- Health and Welfare Canada. <u>Action Towards Healthy Eating, the Report of the Task and Technical Groups on Canada's Food Guide and the Task Group on Food Consumption</u>. 1st ed. Vol. 1. Ottawa: Supply and Services Canada, 1990.
- ---. A New Perspective on the Health of Canadians. 1st ed. Vol. 1. Ottawa ON: Supply and Services Canada, 1974a.
- ---. Report on the Task Force on the Treatment of Obesity. Vol. 1. Ottawa: Minister of Supply and Services Canada, 1991b.
- Health Canada. <u>The Addition of Vitamins and Minerals to Foods: Proposed Policy Recommendations</u>. Ed. Bureau of Nutritional Sciences, Food Directorate, Health Protection Branch. Vol. 55. Ottawa., 1999a.
- ---. *Nutrition for Health: An Agenda for Action*. Ottawa ON: Supply and Services Canada, 1996.b.
- Health Canada. Addition of Vitamins and Minerals to Foods, 2005

  Health Canada's Proposed Policy and Implementation Plans. Ottawa, ON:
  Government of Canada, 2005.
- ---. <u>Canadian Guidelines for Body Weight Classification in Adults</u>. Vol. 2. Ottawa: Government of Canada, 2002.
- ---. Canadians and Healthy Eating: How are we Doing?. Vol. 1., 1997.
- ---. "Food and Nutrition." <u>Government of Canada.</u> 2007-01-15 2007a. <a href="http://www.hc-sc.gc.ca/fn-an/index">http://www.hc-sc.gc.ca/fn-an/index</a> e.html>.
- ---. Food and Nutrition Surveillance in Canada, an Environmental Scan., 2000b.
- ---. "Health Canada Consultation with Members of ECFOL on viable Alternatives to Reduce the Amount of Trans Fatty Acids in the Canadian Food Supply." 2005/04/01 2005c. <a href="http://hc-sc.gc.ca/fod-ailment-e\_trans\_fat\_task\_force\_tor.html.html">http://hc-sc.gc.ca/fod-ailment-e\_trans\_fat\_task\_force\_tor.html.html</a>.
- ---. "Health Promotion in Canada a Case Study." <u>Health Promotion International</u> 13.1 (1998): 7-26.

- ---. "Information Sheet Food Fortification in Canada Updating the Policy." <u>Government of Canada.</u> 2005-07-25 2005. <a href="http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/fortification\_factsheet2-fiche2\_e.html">http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/fortification\_factsheet2-fiche2\_e.html</a>.
- ---. News Release Health Canada Moves Forward on Commitments to Reduce <u>Trans Fat in Canadian Foods</u>. Vol. 2005-19. Ottawa ON: Health Canada, 2005.
- ---. <u>Promoting Health in Canada: An Overview of Recent Developments & Initiatives</u>. Ed. Strategic Policy Directorate, Population and Public Health Branch., 2002.
- ---. "Questions and Answers Food Fortification Proposed Policy." <u>Government of Canada.</u> 2005-07-25 2005. <a href="http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/faqs">http://www.hc-sc.gc.ca/fn-an/nutrition/vitamin/faqs</a> e.html>.
- ---. <u>A Strong Tradition of Collaboration: The Federal/Provincial/Territorial Group on Nutrition.</u>, 2003.
- Health Products and Food Branch, Health Canada. Nutrition Labelling: A Strategic Framework for Public Education. Vol. 1. Ottawa: Health Canada, 2003. <www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/labelling-equetage\_strategic framework-executive summary>.
- Health Products and Food Branch. <u>our Science</u>, <u>our Health Report</u>. Ottawa: Government of Canada, 2003.
- Health Programs and Services Branch, Health Canada. <u>Vital Connections</u>. Vol. 1. Ottawa: Minister of Supply and Services Canada, 1991.
- Health Protection Branch, Health and Welfare Canada. <u>Food Additivies: What do You Think?</u>. Vol. 1. Ottawa: Supply and Services Canada, 1980.
- ---. <u>Health Protection and Food Laws</u>. 5th ed. Vol. 1. Ottawa: Minister of Supply and Services Canada, 1981.
- Healthy Living Strategy. "Public Health Agency of Canada." 2005-02-23 <a href="http://www.phac-aspc.gc.ca/hl-vs-strat/index.html">http://www.phac-aspc.gc.ca/hl-vs-strat/index.html</a>.
- Heart and Stroke Foundation. "Heart and Stroke warns Fat is the New Tobacco." Heart and Stroke Foundation. 2007. <a href="http://ww2.heartandstroke.ca/Page.asp?PageID=33&ArticleID=2916&Src=news&From=SubCategory">http://ww2.heartandstroke.ca/Page.asp?PageID=33&ArticleID=2916&Src=news&From=SubCategory</a>.
- Held, David. "Pluralism, Corporate Capitalism and the State." <u>Models of Democracy.</u> 2nd ed. Stanford CA: Stanford University Press, 1996. 199-232.

- Helsing, E. "The History of Nutrition Policy." <u>Nutrition Reviews</u> 55(Suppl); (1997): S1-3.
- Hessing, M., and M. Howlett. <u>Canadian Natural Resource and Environmental Policy: Political Economy and Public Policy.</u> Vancouver BC: UBC Press, 1997.
- Hood, Christopher. The Tools of Government. London: MacMillan Press, 1983.
- Howlett, M., and M. Ramesh . <u>Studying Public Policy, Policy Cycles and Policy Subsystems</u>. 2nd ed. Toronto: Oxford University Press Canada, 2003.
- Howlett, Michael, and M. Ramesh. "Policy Instruments." <u>Studying Public Policy Policy Cycles and Subsystems.</u> Ed. Michael Howlett and M. Ramesh. 2nd ed. Toronto: Oxford University Press, 2003. 87-117.
- Howlett, M., and M. Ramesh. "Patterns of Policy Instrument Choice: Policy Styles, Policy Learning and the Privatization Experience." <u>Policy Studies Review</u> 12.1-2 (93): 3-24.
- Institute of Nutrition, Metabolism and Diabetes (INMD). <u>INMD Update</u>. 2nd ed. Vol. 2nd. Ottawa, ON: Canadian Institute of Health Research, 2005.
- Katzmarzyk, P. "The Canadian Obesity Epidemic: An Historical Perspective." Obesity Research 10.7 (2002): 666.
- Koc, Mustafa, and Kenneth A. Dahlberg. "The Restructuring of Food Systems: Trends, Research and Policy Issues." <u>Agriculture and Human Values</u> 16 (1999): 109-16.
- Laidlaw, Stuart. "Saving Agriculture from itself." Feeding the Future: From Fat to Famine, how to Solve the World's Food Crises. Ed. Andrew Henitzman and Evan Solomon. 1st ed. Toronto: House of Anasi Press, 2006. 12-35.
- Laird Birmingham, C., et al. "The Cost of Obesity in Canada." CMAJ 160 (1999): 483.
- Lang, T. " Diet, Health and Globalization: Five Key Questions." <u>Proceedings of the Nutrition Society</u> 58 (1999): 335-43.
- Lang, Tim, and Michael Heasman. <u>Food Wars: The Global Battle for Mouths, Minds and Markets</u>. London: Earthscan, 2004.
- Lang, Tim. "The Complexities of Globalization: The UK as a Case Study of Tensions within the Food System and the Challenges of Food Policy." Agriculture and Human Values 16 (1999): 169-85.

Ş

- ---. "Food Control Or Food Democracy? Re-Engaging Nutrition with Society and the Environment." <u>Public Health Nutrition</u> 8.6A (2005): 730-7.
- Lau, D. C. W. "Call for Action: Preventing and Managing the Expansive and Expensive Obesity Epidemic." <u>Canadian Medical Association Journal</u> 160 (1999): 503-5.
- Library and Archives Canada. "Canadian Confederation" Library and Archives Canada. May 2, 2005 2005. <a href="http://www.collectionscanada.ca/confederation/023001-2000-e.html">http://www.collectionscanada.ca/confederation/023001-2000-e.html</a>.
- Liu, Shiliang, et al. <u>Evaluation of Food Fortification with Folic Acid for the Primary Prevention of Neural Tube Defects</u>, 1997-2003. Vol. Executive Summary. Public Health Agency of Canada, 2003.
- Loyns, Richard. National Food Policy: Proceedings of the Agricultural and Food Marketing Forum., 1979.
- Macdonald, Douglas. "Coerciveness and the Selection of Environmental Policy Instruments." <u>Canadian Journal of Public Administration</u>. 44 (2001): 1161-87.
- MacLachan, Ian. "Betting the Farm: Food Safety and the Beef Commodity Chain." Feeding the Future, from Fat to Famine, how to Solve the World's Food Crises. Ed. Andrew Henitzman and Evan Solomon. Toronto: House of Anasi Press Inc., 2006. 40-69.
- MacRae, Rod. "Policy Failure in the Canadian Food System." For Hunger-Proof <u>Cities</u>
  <u>Sustainable Urban Food Systems.</u> Ed. Mustafa Koc, et al., 1999.
- Manzer, R. <u>Public Policies and Political Development in Canada</u>. Toronto, ON: University of Toronto Press, 1985.
- Martin, P. "Bill C-473 An Act to amend the Food and Drugs Act (trans fatty acids)." <a href="https://www.patmartin.ca/ndp.php/SEC3fd9eaa3ec178/276">www.patmartin.ca/ndp.php/SEC3fd9eaa3ec178/276</a>>.
- Maxwell, Simon, and Rachel Slater. "Food Policy Old and New." <u>Development Policy Review</u> 21.5-6 (2002): 531-53.
- McLaren, Lindsay, et al. Are Integrated Approaches Working to Promote Healthy Weights and Prevent Obesity and Chronic Disease? Calgary: Centre for Health & Policy Studies, Dept Community Health Sciences, University of Calgary, 2004.
- Mechanic, David. "Who Shall Lead: Is there a Future for Population Health?" Journal of Health Politicals, Policy and Law 28.2-3 (2003): 421-42.

- Milio, N. "Nutrition and Health: Patterns and Policy Perspectives in Food-Rich Countries." <u>Soc. Sci. Med.</u> 29 (1989): 413-23.
- Morrell, C. A. "Looking Back Over Twenty-Five Years at the Canadian Council on Nutrition." <u>Canadian Nutrition Notes</u> 19.5 (1963): 49-55.
- Morrison, A. B. "The Integration of Nutrition into Food Strategy." <u>Journal of the Canadian Dietetic Association</u> 41.1 (1980): 26-30.
- Morton, Desmond. "World War I." 2005. <a href="http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0008716">http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0008716</a>.
- Murray, T. K. "Diet and Health: The Canadian Experience." <u>Am J Clin Nutr</u> 45 (1987): 1390-3.
- Murray, T. K., and J. L. Beare-Rogers. "Nutrition Recommendations." <u>Journal of the Canadian Dietetic Association</u> 51.3 (1990): 391-3.
- Nathoo, Rasnim, Christina Holmes, and Aleck Ostry. "An Analysis of the Development of Canadian Food Fortification Policies: The Case of Vitamin B." <u>Health Promotion International 20.4 (2005)</u>: 375-82.
- National Institute of Nutrition. "Changing Face of Food Labelling in Canada." Rapport 15 (2000): 1-5.
- National Research Council (USA), Committee on Diet and Health. <u>Diet and Health: Implications for Reducing Chronic Disease Risk</u>. Washington, DC: National Academy Press, 1989.
- Nestle, Marion. <u>Food Politics: How the Food Industry Influences Health and Nutrition</u>. UNIVERSITY PRESSES, 2002.
- Nolte, Rochelle, et al. "U.S. Military Weight Standards: What Percentage of U.S. Young Adults Meet the Current Standards?" <u>The American Journal of Medicine</u> 113 (2002): 486-90.
- Nutrition Canada. <u>Nutrition: A National Priority</u>. Ottawa: Information Canada, 1973.
- Nutrition Division, Department of National Health and Welfare. <u>Family Allowances</u> <u>Boost Nutrition</u>. Vol. III. Ottawa: Department of National Health and Welfare, 1947.
- Office of Nutrition Policy and Promotion, Health Canada. "2003 Review of Canada's Food Guide to Healthy Eating Stakeholder Consultation."

  <u>Government of Canada.</u> 2004-01-06 2004. <a href="http://www.hc-sc.gc.ca/fn-sc.gc.gc.ca/fn-sc.gc.ca/fn-sc

- an/food-guide-aliment/review-examen/review\_stakeholder\_consult-examen\_consult\_parties\_interessees\_e.html>.
- Office of Nutrition Policy and Promotion. "Canada's Food Guides From 1942 to 1992." Government of Canada. 2007/01/27 2007. <a href="http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/context/hist/fg\_history-histoire\_ga\_e.html">http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/context/hist/fg\_history-histoire\_ga\_e.html</a>.
- ---. "Nutrition Policies and Dietary Guidance in Canada." <u>Government of Canada.</u> 2007/01/27 2007. <a href="http://www.hc-sc.gc.ca.proxy1.lib.umanitoba.ca/fn-an/nutrition/diet-guide-nutri/nut\_pol\_diet\_guid-pol\_nut\_lig\_direc\_e.html">http://www.hc-sc.gc.ca.proxy1.lib.umanitoba.ca/fn-an/nutrition/diet-guide-nutri/nut\_pol\_diet\_guid-pol\_nut\_lig\_direc\_e.html</a>.
- Organisation for Economic Co-Operation and Development. "Canada's Food Systems." Compendium of National Food Safety Systems and Activites. Organisation for Economic Co-Operation and Development, 2000. 17-25.
- ---. "Health at a Glance." <u>Organisation for Economic Co-Operation and Development.</u> 08/11/2005 2005. <a href="http://www.oecd.org/document/0/0,2340,en\_2649\_201185\_35625856\_1\_1\_1\_1,00.html">http://www.oecd.org/document/0/0,2340,en\_2649\_201185\_35625856\_1\_1\_1\_1,00.html</a>>.
- Orr, J. B. <u>Food, Health and Income: Report on A Survey of Adequacy of Diet in Relation to Income</u>. London,: MacMillan and Co. Limited, 1936.
- Ostry, Aleck Samuel. <u>Nutrition Policy in Canada, 1870-1939</u>. 1st ed. Vancouver BC: UBC Press, 2006.
- Ostry, Aleck, et al. "The Interplay of Public Health and Economics in the Early Development of Nutrition Policy in Canada." <u>Critical Public Health</u> 13.2 (2003): 171-85.
- Ostry, Aleck. "Public Health and the Canadian State: The Formative Years, 1880 to 1920." <u>Canadian Journal of Public Health</u> (1994): 293-4.
- Pepper, Laura C. "A Link between Producer and Consumer." <u>Canadian Nutrition</u> Notes 10.1 (1954): 1-3.
- Pett, L. B. "Applied Nutrition." Canadian Journal of Public Health 34.1 (1943): 1-5.
- ---. "Food Makes a Difference." <u>Canadian Journal of Public Health</u> 33.12 (1942): 565-70.
- Position of Dietitians of Canada. "Individual and Household Food Security in Canada." Canadian Journal of Dietetic Practice and Research 66. Spring (2005): 43-6.

- Public Health Agency of Canada. "Who we are. "<u>Government of Canada.</u> 2006-04-11 2006. <a href="http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/phac-aspc/index\_e.html">http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/phac-aspc/index\_e.html</a>.
- Raine, K. D. "Determinants of Healthy Eating in Canada an Overview and Synthesis." <u>Canadian Journal of Public Health</u> 96. Supplement 3 (2005): S8-S13.
- Raphael, Dennis, ed. <u>Social Determinants of Health</u>. Toronto, ON: University of Toronto Press, 2004.
- Rice, James J., and Michael J. Prince. <u>Changing Politics of Canadian Social Policy</u>. Toronto, ON: University of Toronto Press Incorporated, 2000.
- Roberts, Alasdair. "A Fragile State: Federal Public Administration in the Twentieth Century." . 18-36.
- Robertson, A., et al. "Food and Health in Europe: A New Basis for Action." <u>WHO Regional Publications. European series</u> 96 (2004): 1-385.
- Romanow, Roy J. <u>Building on Values: The Future of Health Care in Canada</u>. Vol. Final. Ottawa, ON: Commission on the Future of Health Care in Canada, 2002.
- Safe Canada.ca. "Government's Role in Public Safety." <u>Government of Canada.</u> 06/03/2007 2007. <a href="http://www.publicsafety.gc.ca/abt/index-en.asp">http://www.publicsafety.gc.ca/abt/index-en.asp</a>.
- Schneeman, B. O. "Evolution of Dietary Guidelines." <u>Journal of the American Dietetic Association</u> 103.12 Suppl 2 (2003): S5-9.
- Sen, Amartya. "Introduction: Rationality and Freedom." <u>Rationality and Freedom.</u> Cambridge, Massacusetts: The Belknap Press of Harvard University Press, 2002. 3-64.
- Sherrington, Andrew. <u>Nutrition: Issues and Priorities</u>. Vol. 1. Ottawa: Canadian Public Health Association, 1975.
- Skogstad, Grace. "Agriculture and Food Policy." <u>The Canadian Encyclopedia.</u> Historica Foundation of Canada, 2005. 1-8.
- Standing Senate Committee on Social Affairs, Science and Technology. <u>The Health of Canadians –The Federal Role</u>. Vol. Final., 2002.
- Statistics Canada. "Canadian Community Health Survey." June 30, 2005 a. <a href="http://www.statcan.ca/Daily/English/040615/d040615.pdf">http://www.statcan.ca/Daily/English/040615/d040615.pdf</a>.
- ---. "Statistics Canada." 2004/01/19 b. <a href="http://statcan.ca/english/about/overview.htm">http://statcan.ca/english/about/overview.htm</a>.

- Strategic Inter-Governmental Nutrition Alliance of the National Public Health Partnership. <u>Eat Well Australia an Agenda for Action for Public Health Nutrition</u>. National Public Health Partnership, 2001.
- Struthers, James. "The Great Depression." <u>The Canadian Encyclopedia.</u> 2006. <a href="http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0003425>.">http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0003425>.</a>
- Swinburn, B. A., et al. "Diet, Nutrition and the Prevention of Excess Weight Gain and Obesity." <u>Public Health Nutrition</u> 7.1A (2004): 123-46.
- Tansey, Geoff. "Food Policy in a Changing Food System." <u>British Food Journal</u> 96.8 (1994): 4-12.
- Tarasuk, V. S., and N. T. Vozoris. "Household Food Insufficiency is Associated with Poorer Health." <u>Journal of Nutrition</u> 133 (2003): 120-6.
- Teisman, G. R. "Models for Research into Decision-Making Processes: On Phases, Streams and Decision-Making Rounds." <u>Public Administration</u> 78 (2000): 937-56.
- Tillotson, James E. "America's Obesity: Conflicting Public Policies, Industrial Economic Development, and Unintended Human Consequences." <u>Ann. Rev. Nutr.</u> 24 (2004): 617-43.
- Tjepkema, M., and M. Shields. <u>Measured Obesity: Overweight Canadian Children and Adolescents</u>. 1st ed. Vol. 1. Ottawa ON: Statistics Canada, 2005.
- Trans Fat Task Force. <u>Interim Report of the Trans Fat Task Force</u>. Vol. 1. Ottawa ON: Health Canada, 2005.
- ---. TRANSforming the Food Supply. Final ed. Ottawa: Health Canada, 2006.
- Tulchinsky, Theodore H., and Elena A. Varavikova. "A History of Public Health." <u>The New Public Health: An Introduction for the 21st Centruy.</u> 1st ed. San Diego, CA: Academic Press, 2000. 5-54.
- Turner, Joanne. "The Historical Base." <u>Canadian Social Welfare.</u> Ed. Joanne Turner and Francis Turner. 4th ed. Toronto: , 2001. 80-95.
- Vogel, Ellen, and Sandra Burt. <u>Stakeholder Convergence on Nutrition Policy: A Cross-Case Comparison of Case Studies in Costa Rica, Brazil and Canada</u>. Draft prepared for presentation and discussion at the Annual Meeting of the Canadian Politiccal Science Association in Saskatoon, Saskatchewan, June 1, 2007 ed. Vol. 1., 2007.
- Welsh, Jennifer. "The Food Strategy A Springboard for Questions." <u>Journal of the Canadian Dietetic Association</u> 41.1 (1980): 16-9.

- Whelan, Eugene. <u>Strategy for the Agri-Food Sector</u>. Vol. Discussion Paper. Ottawa: Agriculture Canada, 1981.
- Wirick, R. G. <u>A Preliminary Paper on some Food Policy Aspects of Nutrition and Health</u>. Vol. 8. Ottawa: Food Prices Review Board, 1975.
- Working Group on the Prevention and Control of Cardiovascular Disease.

  <u>Promoting Heart Health in Canada: A Focus on Cholesterol</u>. Ottawa: Minister of Supply and Services Canada, 1992.
- World Health Organization / Food & Agriculture Organization. "World Declaration and Plan of Action for Nutrition." Rome, December 1992.
- World Health Organization and Food and Agriculture Organization. <u>Diet, Nutrition, and the Prevention of Chronic Diseases.</u> Report of a Joint WHO/FAO Expert Consultation. Vol. WHO Technical Report Series 916. Geneva: WHO, 2003.
- World Health Organization. *Global Strategy on Diet, Physical Activity and Health* ., 2004.
- ---. <u>Terrorist Threats to Food: Guidance for Establishing and Strengthening Prevention and Response Systems</u>. Geneva, Switzerland: World Health Organization, 2002.
- Young, T. K. <u>Population Health: Concepts and Methods</u>. 2nd ed. NY, NY: Oxford University Press, 2005.