

FOOD FOR NOW AND THE FUTURE

A FOOD AND NUTRITION STRATEGY FOR ONTARIO

**A Discussion Paper By The Ontario Public Health Association
Food Security Work Group**

March 1995

This discussion paper is the companion document to "Ontario's Food Story - An Introduction to Food Security Issues". These documents have been produced to stimulate discussion on the complex issues involved in attaining food security. They do not reflect an official position of the Ontario Public Health Association (OPHA).

We would like to thank Remy Budarick from the Peterborough County-City Health Unit for her assistance in the production of this document.

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EXECUTIVE SUMMARY

At the recent International Conference on Nutrition held in Rome under the auspices of the Food and Agriculture Organization and the World Health Organization, all nations were called upon to develop and implement measures to ensure food security for their nations and the world. In response, Canada has made the commitment to develop a National Plan of Action for Nutrition. Provincial governments have been encouraged to be a part of this process. Prior to this international conference Alberta, Quebec and Newfoundland had developed provincial food and nutrition policies.

The government of Ontario recognizes that health is strongly influenced by factors that are beyond the scope of health education and treatment. In the document "Nurturing Health", the Premier's Council describes these factors or "determinants of health" and their impact on the well-being of individuals and groups. Adverse social and physical environments, unemployment, poor housing and inadequate social support limit access to safe, nutritious food in amounts adequate to achieve and maintain health. Disadvantaged residents of Ontario are at particular risk of poor nutrition, which increases the risk of other health and social problems. It impairs quality of life and productivity, making escape from continuing disadvantage more difficult.

It is also evident from the number of existing food and nutrition initiatives in Ontario, that the provincial government recognizes that adequate nutrition is a precondition to a healthy population.

A comprehensive food and nutrition strategy that addresses the determinants of health is needed to ensure food security for all residents of Ontario. This food and nutrition strategy will also give direction to and improve co-ordination of existing government initiatives. Traditionally nutrition policy has focused on disease prevention, while food policy emphasized agricultural and economic concerns.

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What is unique about food security work is that it looks at sustainability and food access issues in addition to the traditional policy issues. Food security has been defined by the Ontario Public Health Association (OPHA) Food Security Work Group in the following way. "People have food security when they can get enough food to eat that is safe, that they like to eat and that helps them to be healthy. They must be able to get this food in ways that make them feel good about themselves and their families."

In 1988, the OPHA made the recommendation that a task force be established to develop a food and nutrition policy that "...ensures healthy food is available to all, that nutrition goals and related strategies to achieve them are adopted and policies are oriented towards sustainable development."

To further this recommendation in 1993, the OPHA Food Security Work Group was established to advocate for the adoption of a provincial Food and Nutrition Strategy for Ontario.

This discussion paper, prepared by this Work Group describes the critical factors that influence food security in Ontario and presents three essential goals for a provincial food and nutrition strategy. The paper closes with recommendations for immediate and longer term actions that can be taken to ensure that these goals are achieved.

GOALS FOR AN ONTARIO FOOD AND NUTRITION STRATEGY

Food security includes, but is much broader than, ensuring access to food. The goals of a comprehensive provincial Food and Nutrition Strategy are:

- To ensure that all Ontarians have the means to access affordable nutritious and personally acceptable foods.
- To ensure a sustainable, safe, high quality food supply in Ontario.
- To promote food consumption patterns that maximize health and minimize disease in Ontario.

CURRENT ISSUES AND CHALLENGES

Although Ontario has an abundant food supply, many people living in Ontario today are not able to achieve food security no matter how hard they try. There are many underlying reasons for this. Different factors combine to create different situations that limit food security for some residents of this province.

Equal Access to Food

Food security includes having sufficient resources to obtain food without having to invest extraordinary energy. Resources refer to economic resources and also to the time, knowledge and skills needed to shop for and prepare nutritious foods. Many Ontarians simply do not have the economic, physical or other means to put healthy food on the table in the amount needed to meet basic needs. The Ontario Association of Food Banks estimates that 250,000 Ontarians use food banks on a monthly basis.

High unemployment, low incomes for the working poor, the relatively high cost of housing, transportation and other basic necessities and inadequate social assistance payments all help to create and maintain poverty. Many other factors, including low literacy levels, a lack of opportunities for skill development and limited access to quality child care make it difficult for people to find ways to break out of the cycle.

A Sustainable, Safe, High Quality Food Supply

Ontario's domestic food production system and the farmers at the local level of it face considerable challenges in ensuring the long-term survival of a "home grown" food supply that meets optimal standards of quality and safety. These challenges include low prices paid to farmers for domestically produced food and agricultural practices that have taken a gradual toll on soil, water and natural habitats.

The traditional, large scale, centralized approach to food production and distribution gives rise to new issues around maintaining the quality and safety of some foods. It also means that the domestic production system is less sensitive and less able to respond to changing food preferences and to the needs of "special interest" population groups.

Along with the previously mentioned factors, there is a lack of information that enables consumers to make informed choices that would benefit domestic food producers and support sustainable food production.

Food for Health

Good nutrition means much more than the absence of illness caused by a lack of vitamins, minerals or other nutritional factors. A lifetime of making healthy food choices helps to enhance the quality and productivity of day-to-day life. In addition, we now know that good nutrition reduces the risk of developing

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lifestyle-related conditions like osteoporosis, heart disease and some types of cancer that are leading causes of death and disability for so many Ontarians today.

Obesity is a cause for concern, as is the widespread and unhealthy preoccupation with weight and body image. The very real risk of eating disorders results from this preoccupation.

Many factors influence the food choices that people make. These include the aggressive marketing and ready availability of foods high in fat, salt and sugar and low in nutrients; declining opportunities to learn about choosing and preparing healthy foods; and changes in society (e.g. family structure and values, employment patterns, leisure activities) that have resulted in different food patterns.

FUNDAMENTAL BELIEFS

- Current inequities must be addressed to ensure that food security is enjoyed by all residents of Ontario, with priority given to those who are the most nutritionally vulnerable. This includes people living in poverty, especially growing children, women of reproductive age, people with disabilities or chronic illnesses and the elderly, Aboriginal people, refugees and the homeless.
- Strategies must be implemented in an environment that addresses the impact of the determinants of health on the well-being of Ontarians.
- We recognize that financial resources are limited at the government level and therefore recommend that reallocation of current resources (financial, technical, material) take place to ensure the realization of both immediate and longer term actions.
- Many changes will be needed to arrive at a system that ensures and maintains food security for all Ontarians. Some of the recommended actions that can be taken are immediate and relatively simple. Others are longer term and will require more effort and more resources to realize. A demonstrated commitment to short and longer term actions is an essential precondition to success.
- The implementation of an effective Food and Nutrition Strategy will require a common vision articulated at the provincial level. It will be co-ordinated by many players from various levels of government, business, health and agriculture with communities across Ontario.

- Policies and strategies can help remove barriers and build on the inherent ability of individuals and communities to care for themselves and to find appropriate ways to enhance their own food security.
- Food and nutrition issues overlap the mandates of many ministries, but policies do not always take complementary approaches toward food security-related issues. It is critical that the policies and actions of various provincial ministries are coordinated and consistent in their approach to the achievement and maintenance of food security.
- In recent years a number of documents produced by provincial and national bodies have addressed issues and recommended strategies compatible with the achievement of food security. For example, Canada's Guidelines for Healthy Eating and the companion Food Guide can be used as a framework for both policy development and for nutrition promotion strategies. Other examples of valuable existing resources include:
 - "Nurturing Health: A Framework on the Determinants of Health", Premier's Council on Health Strategy.
 - "Environmental Responsibility...Conservation and Enhancement of the Environment", Ontario Ministry of Agriculture, Food and Rural Affairs.
 - "Action Towards Healthy Eating...Canada's Guidelines for Healthy Eating and Recommended Strategies for Implementation," Health and Welfare Canada.

ROLES AND RESPONSIBILITIES

Coordinated planning and implementation at the provincial level are essential in finding long term solutions to food security issues.

Food and nutrition programming is an integral component of the Ministries of Health and Agriculture, Food and Rural Affairs. For this reason, it is envisioned that these Ministries will take a lead role in developing the ministry, community and private sector partnerships needed to arrive at the adoption and implementation of a food and nutrition strategy.

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Their role would also include establishing and coordinating an interministerial committee that would plan and implement a food and nutrition strategy. Provincial actions are essential to strengthen the ability of the community to deal with food security issues. Representation should be sought from the Ministries of Education, Community and Social Services, Housing, Environment and Energy, Municipal Affairs, Economic Development and Trade and Finance. This committee would operate in consultation with a provincial advisory group made up of consumers, service providers, farmers and other key stakeholders.

INTRODUCTION

The International Conference on Nutrition has called upon all nations to "formulate, adopt and implement programs and strategies to achieve the recommendations of the World Declaration on Nutrition" (1). Canada has made the commitment to develop a National Plan of Action on Nutrition (2). Provincial governments have been encouraged to be a part of this process.

Although Canada does not have as yet a nutrition plan of the breadth of the World Declaration, many pieces currently exist. Health Canada has set national Nutrition Recommendations to address diet-related health problems and has developed a set of Guidelines To Healthy Eating (3). At both the federal and provincial levels of government, legislation is in place regarding food safety. In addition, three provinces have developed food and nutrition policies - Alberta, Newfoundland and Quebec (4, 5, 6). In the document "Action Towards Healthy Eating", Health Canada recommends that municipalities create food and nutrition policies at the local level (7). A few Canadian municipalities have responded by adopting policies addressing nutrition, hunger and food security (8).

The Ontario Public Health Association (OPHA) has a history of encouraging different levels of government to develop food and nutrition policies. In 1988, the OPHA recommended that a task force be established to develop a food and nutrition policy that "...ensures healthy food is available to all, that nutrition goals and related strategies to achieve them are adopted and policies are oriented towards sustainable development" (9). In 1993, OPHA established this Food Security Work Group to develop an advocacy strategy to ensure food security for all residents of Ontario. The OPHA Food Security Work Group recommends the development of a comprehensive Food and Nutrition Strategy for Ontario that would address food security issues.

The OPHA Food Security Work Group defines food security in the following way. "People have food security when they can get enough food to eat that is safe, that they like to eat and that helps them to be healthy. They must be able to get this food in ways that make them feel good about themselves and their families." Food security forms an important part of an overall food and nutrition strategy. Traditionally, nutrition policy has focused on disease prevention, while food policy emphasized agricultural and economic concerns. What's unique about food security work is that it looks at sustainability and food access questions in addition to the traditional policy issues (11).

Introduction

The provincial government recognizes that health is influenced by factors that are beyond the scope of health education and treatment. In the document "Nurturing Health", the Premier's Council describes these factors or "determinants of health" and their impact on the well-being of individuals and groups (12). Adequate nutrition is a precondition to a healthy population (2).

Social and physical environments, employment, housing and social support all influence access to safe, nutritious food in amounts adequate to achieve and maintain health. Disadvantaged residents of Ontario are at particular risk of undernutrition. Undernutrition increases the risk of other health and social problems. It impairs quality of life and productivity, making escape from continuing disadvantage more difficult.

The Premier's Council has also called for a **Health For All Ontarians Policy** that addresses these determinants of health (13). The issue of food security is critically linked to these determinants of health. A food and nutrition strategy must be developed in an environment addressing both socio-economic and behavioural determinants. We can no longer focus on risk behaviours alone.

We believe that the provincial government has an opportunity to address a number of current and pending food security issues by preparing a strategy. Our purpose in preparing this document is twofold:

- To show in a concrete fashion what an integrated food and nutrition strategy might look like. We believe that a comprehensive and integrated strategy addresses food security issues, as does the World Declaration.
- To indicate our desire to work closely with the Ministries of Health and Agriculture, Food and Rural Affairs in the development of a Food and Nutrition Strategy for Ontario. We believe that these Ministries can play a lead role in developing ministry, community and private sector partnerships that will lead to a successful strategy.

This document will discuss the critical factors that influence the achievement of food security in Ontario and illustrate the complexity of the issue. The document will also outline specific actions needed to ensure residents of the province achieve optimal nourishment now and in the future.

MISSION AND GOALS

Many people living in Ontario do not have the means to ensure food security for themselves. Others choose, for a variety of personal, societal and structural reasons, to eat in a manner that is not optimal for health.

The mission of the OPHA Food Security Work Group is to advocate for a Food and Nutrition Strategy that will result in food security for all Ontarians. Our aim is to ensure healthy food is available to all; nutrition goals and related strategies to achieve this aim are adopted and policies are oriented toward sustainable development. We believe that food security has been achieved when people are able to get enough safe, healthy and enjoyable food. They must be able to get this food in ways that make them feel good about themselves and their families.

Food security includes, but is much broader than, ensuring access to food. The goals of a comprehensive provincial Food and Nutrition Strategy are:

- To ensure that all Ontarians have the means to access affordable, nutritious and personally acceptable foods.
- To ensure a sustainable, safe, high quality food supply in Ontario.
- To promote food consumption patterns that maximize health and minimize disease in Ontario.

FUNDAMENTAL BELIEFS

The OPHA Food Security Work Group recognizes the following principles in the development of a Food and Nutrition Strategy for Ontario.

- Nutrition is a precondition to a healthy population (2).
- People-centred policies and programs that strengthen people's capacities to care for themselves are essential (2).
- Current inequities must be addressed to ensure that food security is enjoyed by all residents of Ontario, with priority given to those who are the most nutritionally vulnerable. This includes people living in poverty, especially growing children, women of reproductive age, people with disabilities or chronic illnesses, the elderly, Aboriginal people, refugees and the homeless (1).
- Strategies must be implemented in an environment that addresses the impact of the determinants of health on the well-being of Ontarians (13).
- Canada's Guidelines For Healthy Eating and the companion Food Guide be used as the framework for policy development and nutrition promotion efforts (7).
- Adequate support to Ontario farmers must be available to help ensure the availability of a high quality and sustainable food supply (8).
- We recognize that financial resources are limited at the government level therefore recommend that the reallocation of current resources (financial, technical, material) must take place to ensure the realization of both immediate and longer term actions.
- Many changes will be needed to arrive at a system that ensures and maintains food security for all Ontarians. Some of the recommended actions that can be taken are immediate and relatively simple. Others are longer term and will require more effort and more resources to realize. A demonstrated commitment to short and longer term actions is an essential precondition to success.

- The implementation of an effective Food and Nutrition Strategy will require a common vision articulated at the provincial level. It will be co-ordinated by many players from various levels of government, business, health and agriculture with communities across Ontario.
- Policies and strategies can help remove barriers and build on the ability of individuals and communities to care for themselves and to find appropriate ways to enhance their own food security.
- Food and nutrition issues overlap the mandates of many ministries, but policies do not always take complementary approaches toward food security-related issues. It is critical that the policies and actions of various provincial ministries are coordinated and consistent in their approach to the achievement and maintenance of food security.
- In recent years a number of documents produced by provincial and national bodies have addressed issues and recommended strategies compatible with the achievement of food security. The recommendations of these reports should be integrated into a Food and Nutrition Strategy For Ontario.
 - "Nurturing Health: A Framework on the Determinants of Health", Premier's Council on Health Strategy (12).
 - "Environmental Responsibility...Conservation and Enhancement of the Environment", Ontario Ministry of Agriculture, Food and Rural Affairs (14).
 - "Action Towards Healthy Eating...Canada's Guidelines for Healthy Eating and Recommended Strategies for Implementation," Health and Welfare Canada (7).

CURRENT ISSUES AND CHALLENGES

The factors affecting the achievement of the goals of a food and nutrition strategy are multifaceted and interrelated. An effective strategy must use a holistic approach that addresses, first and foremost, the many underlying reasons some people in Ontario fail to achieve and maintain food security.

Using Hancock's model for human development as a basis for healthy public policy development, Roberts has adapted the model, to more fully capture the conceptual nuances of food security issues (10, 11).

The diagram below (Figure 1) shows the context of a food and nutrition strategy and the interrelationships between the social, environmental and economic components as it relates to food. It also indicates the influence each exerts upon each other. Secondly, within this framework are the goals of a food and nutrition strategy which are related to an equitable, sustainable and healthy and safe food supply.

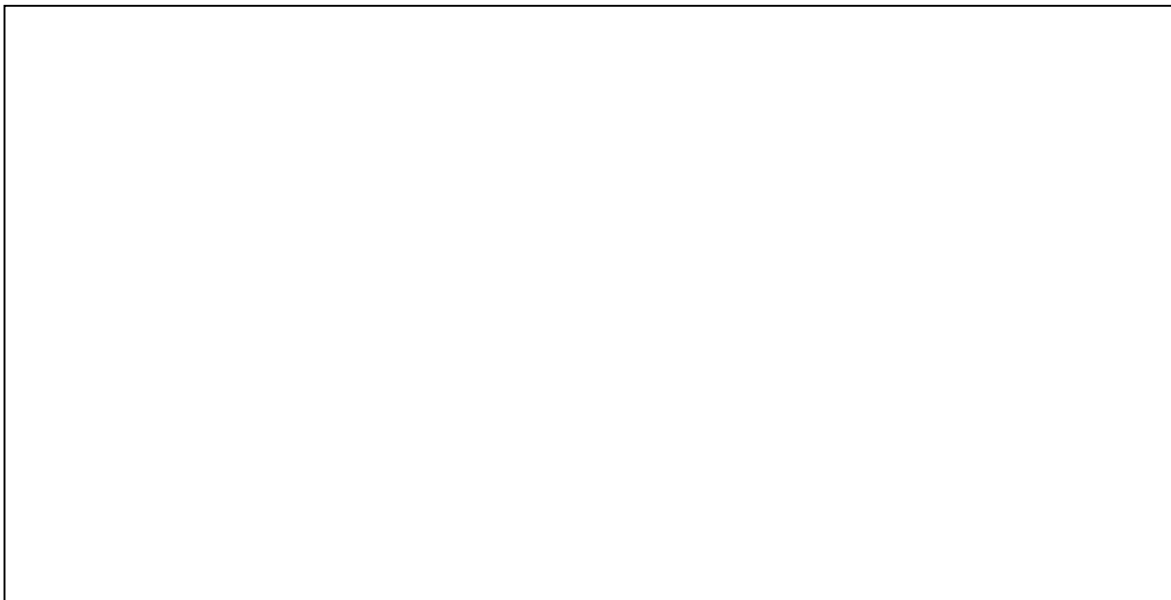


Figure 1. The Context of an Ontario Food Nutrition Strategy (11)

For example, the goal of being equitable, implies notions of fairness and impartiality. In relation to a food and nutrition strategy, it involves the issues of sufficient food access and distribution; that rights to adequate food are guaranteed and that food is procured in a way that respects human dignity.

The goal of being sustainable, implies the capability of being maintained, supported or kept alive. In the context of food strategy it relates to agricultural and ecological sustainability; to the need to conserve natural resources, minimize environmental damage and maintain economic agricultural viability.

Finally, the goal of healthy and safe food, involves concepts of healthfulness, wholesomeness and public safety. As part of a food and nutrition strategy, it relates to issues of food quality, safety and nutrition (11).

This section discusses critical issues and challenges imbedded in each of the proposed goals for ensuring food security in Ontario. Each goal will be discussed to illustrate the complexity of the issue.

GOAL 1: EQUAL ACCESS TO FOOD

"To ensure that all residents have the resources to access affordable, nutritious and personally acceptable foods."

Evidence of Food Insecurity

Food Bank Use - Food insecurity in Ontario arises primarily from unequal access to food by people living in poverty (15). Many must depend on food banks and other charitable food channels for their nourishment yet they are unable to obtain a nutritionally adequate or culturally appropriate diet from these places (16). Recognition of the income-related nature of the "hunger" and food insecurity associated with food bank usage has prompted calls for social policy and program reforms to lessen or eliminate poverty (17).

Data about charitable food distribution or food aid is one method of determining the scope of this aspect of the food security issue. In Canada, food banks have been described as a relatively new phenomenon (18, 19).

Food Bank Facts

- In Ontario, the first food bank began operating in 1984, and in 1989 there were 49 programs province wide (20).
- Today, 250,000 Ontarians in total, use food banks on a monthly basis (11).
- Forty-five per cent of the users are children under the age of 18 (11).

Current Issues and Challenges

In a recent report to the Ontario government, there is growing apprehension that. . .

"the food bank network, failing a major government initiative, would be tempted to pursue long-term consolidation and institutionalization, thereby 'normalizing' poverty and creating two classes of citizens: those with resources and choice in the market and those with neither resources, nor choice, who are dependent on the charity of others" (20).

The Nutritionally Vulnerable - There is no doubt that food insecurity affects both health and the quality of life. One of the physical consequences of this is poor nutrition. These effects are more pronounced among the **nutritionally vulnerable** segments of the population.

The Nutritionally Vulnerable

- People living in poverty especially, growing children, women of reproductive age, people with disabilities or chronic illness and the elderly
- Aboriginal populations
- Refugees
- The Homeless

According to "Nurturing Health", a report by the Premier's Council, income is a powerful determinant of health. The poorer people are, the less healthy they are likely to be (12). The Ontario Health Survey reports that 26% of Ontarians living on **low incomes** reported 3 or more health problems, while only 16% of people in mid to high income brackets reported the same (21).

Low birth weight (LBW) infants are born more frequently to **women living in poverty**. The percentage of LBW births is 1.4 times higher in the lowest income quintile than for highest income quintile. LBW is defined as an infant weighing less than 2500 grams at birth (22). Physical and mental development in these infants are more likely to be delayed. The resulting mental, psychological and educational disabilities are not completely reversible (23)

It is estimated that 15.2% of observed LBW in Ontario would be preventable through adequate maternal weight gain (at least 10kg.). The estimated cost of treating these preventable cases of LBW in Ontario is \$254,200,000 annually (24).

Inadequate nourishment not only affects infants. **Children living in poverty** are also vulnerable to health problems. It is estimated that one in six Canadian children live in poverty (25). Ontario and Quebec with their large populations have the largest number of children living in poverty (26). The effects on children, of living in a family with a low income are vast and may last a lifetime. Not only do they experience material and cultural deprivation, but research indicates that they are more likely than other children:

- to die in infancy
- to experience physical and mental health problems
- to eat less nutritious foods
- to be at higher risk of developing iron deficiency anaemia
- to face discrimination (27, 28, 29, 30)

Children who are poorly nourished are more likely to experience school performance problems. Children are less resistant to fasting than adults due to their small size and high metabolic rate. They suffer from dehydration and ketosis much more readily, and subsequently experience fatigue and a loss of energy. This negatively affects their ability to learn, in part, by decreasing the attention span (31). Furthermore, inadequately nourished children are often apathetic, non-responsive, impulsive, fail to respond normally in social interactions, and cope poorly with stress of frequent daily demands. All of these characteristics interfere with learning and school performance (23).

Aboriginal children have higher morbidity and mortality rates than Canadians in general, and are much more likely to be impoverished. Furthermore, the incidence of infectious diseases such as pneumonia, tuberculosis, and gastroenteritis is high among Aboriginal children (26).

At the other end of the lifecycle, some segments of the **elderly population** also experience low incomes, particularly unattached females. In 1990, 38% of unattached senior women, compared with 26% of senior men had low incomes (32). Low intakes of some nutrients have been reported among the elderly. For instance, studies suggest that between 10-28% of the elderly population in Canada is at risk for deficiencies of calcium, beta-carotene, vitamins A, D and C. Other common nutrient deficiencies of the elderly include vitamin B6, iron, zinc and protein (33).

Current Issues and Challenges

The homeless are another group who are vulnerable to food insecurity. The homeless include those who have no home (street people and victims of crises) and those whose dwellings do not have:

- adequate protection (in relation to weather and personal safety)
- access to safe water and sanitation
- affordability (no more than 30% of income in North America)

The homeless do not have adequate access to employment, education and health care (34).

Estimates of homelessness are both elusive and political.

- In Canada, approximately 25% of homeless people live without shelter, and 75% live without adequate housing.
- Approximately 125,000 to 250,000 Canadians are homeless. Toronto has the highest incidence of homelessness in Canada, with 1 per 1000 people confined to an emergency shelter (35). In 1987 in Metro Toronto, hostel beds were occupied by 25,000 people. By 1990, the number had increased to 32,000 (36).

The homeless who are in hostels depend on charitable sources of food to meet their daily nutritional needs. In a recent study on the homeless in Toronto, 72% of those interviewed relied on hostels and soup kitchens for their meals; over half reported missing one or more meals on the day interviewed (17).

Refugees are another group that are considered nutritionally vulnerable. Due to low incomes it is likely that they suffer the same risks as other members of the low income community. We have little data on the nutritional status of the Canadian refugee population.

Why There Is Limited Food Access for Some Ontarians

The lack of financial resources is a major contributor to food insecurity in Ontario. It must be recognized however, that other resources have a profound impact on an individual's or a community's food security. These include:

- physical resources such as land for gardening, food storage and preparation facilities, transportation to markets, shops and farms and affordable food
- changes in society

There are two other concepts which are important to our understanding of food security. One is that the vulnerability of any given individual to food insecurity is based upon the total amount and mix of resources; and the second is the timing or sequencing of the availability of those resources. In some instances there is a limited amount of most resources chronically, in others there is a cyclical nature to the lack of the resource, and for some there is an acute shortage (15). This paper will now examine some of the underlying influences of why these resources are declining.

FINANCIAL RESOURCES

There are several factors contributing to the lack of financial resources necessary to purchase sufficient nutritious food.

1. **Recession and Economic Restructuring**

Over the past decade, Ontario has endured an unprecedented degree of economic restructuring. Technological innovations, de-industrialization, the decline of full-time employment opportunities and the removal of protective tariffs with the imposition of multinational trade agreements have dramatically altered the economic landscape of the province. Many of these developments are the result of changes in the global economy. While some Ontarians have benefited from these changes, the impact of economic restructuring on the province as a whole has been largely negative. Ontario's manufacturing sector, the mainstay of the province's economy, has been devastated. The Council of Canadians estimates that close to 500,000 manufacturing jobs, most of which were in Ontario, have disappeared since the implementation of the Canada-U.S. Free Trade Agreement (37).

Current Issues and Challenges

The newly released federal government discussion paper, Improving Social Security, states that after this latest recession, as much as 30% of the labour force will be without a job for shorter or longer periods of time in any five year period, even though the unemployment rates will range from 9% to 11% (38). The decline in high-paying employment opportunities and rise in levels of unemployment have resulted in a sharp escalation in poverty, particularly among young families.

2. Inadequate Income

In 1990, 12% of food bank recipients in Canada were employed (19). A major factor which makes families vulnerable to poverty is the erosion of the value of the minimum wage. The Economic Council of Canada stated that 50% of jobs created since 1980 are "bad jobs", in that 2 people working full-time at such jobs cannot support a family. In 1975, a single person in Ontario could live right at the Statistics Canada poverty line if she/he worked full-time at minimum wage; the same would apply to 2 parents with 2 children if both worked full-time. Yet, in 1988 the same individuals with the same full-time, minimum wage jobs, could only earn approximately three quarters of the poverty line income (20, 39).

In 1992, over 4.5 million Canadians, almost 17% of the total population, lived below the poverty line (based on Statistics Canada's low-income cut-offs). This figure includes an estimated 1,265,000 children under the age of 8 (22).

3. Rising Costs of Living

A key determinant of having sufficient money to buy food is the cost of housing and other living expenses. These would include transportation, utilities and sundry items. Only 5% of Canadian households (489,000) reported receiving rental housing subsidies (40). The North American standard for housing costs are 30% of income (35). In 1990, Statistics Canada indicated that 28% of renters paid 30% or more of their income on housing. Moreover, 10% of renters paid 50% or more of their income on housing (40).

Calculations indicate that when welfare is the main source of income, people will spend more than 30% of their income on housing. An individual living in non-subsidized housing, on the maximum welfare rate in the 10 Canadian cities for which total average rents were available will spend between 52.6% to 76.9% of their income on rent, not including utilities. There simply will not be enough money left to buy enough nutritious food (40).

The Social Planning Council of Metropolitan Toronto has estimated that, in 1992, a single parent with one child living on welfare will fall short of actual cost of living expenses by \$266 per month while a single unemployed individual would need an additional \$462 monthly to cover living expenses including food (41). It is not surprising to note that the majority of food bank users are on welfare.

4. Regressive Taxation Policies

A progressive taxation system is one of the most important policy instruments through which governments can ensure that everyone has an adequate level of income to meet their basic needs. Unfortunately, the overall taxation system in Ontario is becoming increasingly regressive, a trend which has resulted in increased income disparities between the rich and poor.

Over the past two decades, a series of tax reforms initiated at the federal and provincial levels have resulted in a significant shift of the total tax burden from corporations and high income earners to middle and low income groups. Since 1982, the share of income that the poorest 20% of the population pay in income tax has risen faster than for any other income level. Between 1984 and 1991, the tax burden of a two-parent, two-child family earning \$20,000 per year increased by 386%; by contrast the total taxes paid by a family of the same size earning over \$100,000 a year underwent a six percent decrease over the same time period. The increased tax burden for low-income earners resulted from several tax policy changes over the past decade, including the partial indexing or de-indexing (to the rate of inflation) of tax brackets, thresholds and credits and the elimination of the federal tax reduction that assisted lower-and middle-income tax payers.

The economic wellbeing of low-income Ontarians has also been jeopardized by the expansion of consumption taxes, including the introduction of a federal goods and services tax (GST) in January, 1991. Consumption taxes are regressive, since poor people pay a higher proportion of their income for housing and other essentials than middle and higher income people. Existing federal and provincial tax credits, which are only partially indexed to the rate of inflation, do not compensate for this inequity; poor people still pay a larger share of their income in property taxes (through rent) and sales taxes after they receive these credits.

Current Issues and Challenges

It is interesting to note that countries with better health status measures than Canada's (such as Sweden and Japan) also have more equitable taxation systems. In Sweden, total tax revenue is almost 60% of the country's gross domestic product, compared with 37% for Canada. Japan's top marginal income tax rate is 65%, compared to just over 50% for Canada. Both countries also impose wealth taxes on high incomes (42).

5. Education

Education levels have a profound effect on earning power and health. "Sixty-six per cent of the very poor and 73% of persons living on social assistance have less than secondary education. Those faced with the double disadvantage of low income and low educational level are most likely to say their health is poor" (21).

The Report of the Senate Committee on Children in Poverty estimates that about 187,000 students will leave school due to poverty over the next 20 years. The dropout rates of 16-17 year olds is twice as high in poor children as in non-poor children (25). Approximately 27% of female school dropouts have dependent children. Thus the cycle of poverty experienced by many continues (43, 44, 45).

Ontario has the highest proportion of people with low level reading skills in Canada (46, 47). Fourteen per cent of residents over age 16 (258,400) do not have the literacy skills they need to deal with everyday reading demands, and 90,600 say they are unable to read (21, 48).

6. Increase in Single Parent Families

There is a growing number of low income, single, female parent households. Single parent families made up 13% of all families in 1991. The number of single parent families doubled between 1971 to 1991 (22, 49).

Female single-parent families had the highest incidence of low income among all families during the decade from 1981-1991. Approximately 62% of female single-parent families had low incomes in 1991 compared with 10.7% of two-parent families, and 9.3% of married couples without children. Furthermore, in 1991, 13.1% of families had incomes below Statistics Canada's low-income cut-offs, up from 11.1% in 1989 (22).

7. Inadequate Access to Quality Child Care

In the fall of 1988 the National Child Care Study revealed that approximately 2.6 million children under 13 years of age were in need of some form of child care in order to accommodate the work or study schedules of their parents (21). However, in 1990 there were only 321,000 licensed spaces (fees subsidized by the government) (50). Consequently, only a fraction of children in need of alternate care were in licensed spaces.

Throughout the 1980's, the majority of subsidized spaces were for young children. However, recently there has been a shift to licensed spaces being allocated for older children. In 1990, 55% of licensed spaces were for 3-5 year olds. Fifteen per cent were for children under 3 years old. However, care for children under 3 represents a high-cost, labour-intensive care which can cost parents as much as one-third more than the cost for an older child (50). This limits accessibility of quality care for parent(s) with low incomes.

PHYSICAL RESOURCES

Any given individual may be affected by the availability of one or more physical resources. Lack of availability to any of these may be chronic, cyclical or short term. Each will have an affect of food security.

1. Limited Transportation to Food Sources

Good access to transportation enables people to take advantages of less expensive markets. Access is often a barrier for low income communities as cars are less common than in higher income communities. Transportation is often also a barrier to women with children, the disabled and older adults, particularly those living in rural communities.

2. Inadequate Cooking and Storage Facilities

Many people, particularly those who subsist in basement apartments, rooming houses and the homeless lack adequate cooking and food storage facilities. The magnitude of this situation has not been fully investigated but it is estimated that approximately 0.5% of the Canadian population is underhoused or homeless. It is difficult, if not impossible to prepare meals or store foods

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without adequate facilities. As a result of experiencing extreme chronic poverty, the homeless are limited in their ability to regularly purchase food and to access food preparation and storage facilities (17). Studies show that most possessed the knowledge and skills to prepare wholesome, well-balanced meals if they had the opportunity to do so. Despite pooling resources to prepare and consume meals together, food intake was still restricted by limited disposable income for food purchases (17).

Another important resource for those who rely on gardening for a source of food is adequate storage facilities for preserved foods. Many people living in rental units do not have access to adequate freezer space.

3. Inadequate Physical Capacity to Prepare Food

Living alone is the single most important indicator of poor nutrition, among the elderly (51). The nutritional health of the aging individual will be a key determinant of his ability to remain at home. Lack of extended family and support from family and friends impacts on the provision of food in the elderly population. In many situations seniors lack the physical capacity to prepare the foods which they need for maintenance of health. Others in society, such as some disabled individuals, also have physical conditions which interfere with the ability to prepare adequate meals for their well-being.

4. Lack of Continuity of Nutritional Care

There is little continuity of care with respect to the nutritional health of the population. Even when people are diagnosed with medical conditions in which diet therapy is one of the treatment choices, they have trouble receiving the type of counselling which is needed. Physicians lack training in nutrition and have little opportunity to develop dietary counselling skills. The services of a registered dietitian are not covered by OHIP unless counselling is obtained within the hospital setting or in a community health centre. The quick discharge of clients from the hospital makes it unlikely that patients are receiving the dietary counselling they need. When they get home there is a lack of community services to help them make necessary dietary changes. In-home dietary counselling through Home Care Programs are not available without the provision of other home medical services. There is also little community support to help individuals follow the instructions of special diets.

5. Inadequate Supply of Nutritious, Affordable Food

There are several caveats to having a supply of nutritious, affordable food. One is having a **supply of food available for purchase**. For most people in Ontario this is not an issue; however, this can be a major source of insecurity for people in the northern areas of Ontario where having a supply of nutritious food is not always certain. While our culture has changed or is changing from one in which individuals and families grew or gathered their own food to one which relies on the food industry to ensure us a supply, not all areas of society have equal access to that supply.

For many people, **land for gardening** is a resource for a partial supply of a family's food needs. For people with low incomes, especially those living in high density housing, land for gardening is simply a resource which does not exist.

Another caveat is having **access to affordable, nutritious food**. In general, food is very reasonably priced for Canadians. Food consumed at home costs the average Canadian about 14% of disposable income. For low-income people, food consumed at home accounts for about 30% of disposable income. However, in assessing affordability of food both income and purchasing power of that income must be considered.

The food industry also influences the amount of money spent on food. In general the food industry makes little profit from raw food products. Food companies often add "value" to agricultural products through processing. Processed foods are packaged and advertised in ways that increase both consumer demand and food industry profit margins. In the end, less than 30% of the average consumer food dollar goes to the farmer. While some expensive, highly processed convenience foods can be a benefit to people with adequate financial resources, they add a cost burden to those with limited financial resources.

There is an ever declining number of major players in the food industry. Canada has the most centralized food economy in the Western world, with four corporations controlling 40% or more of many sectors of the food economy. Five companies control 85% of retail food sales in Canada (52). **Decline in competition** generally increases retail prices (52, 53, 54). In some rural communities in Ontario, one or two companies dominate retail outlets.

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The **location of grocery stores** also influences access to affordable foods. Most consumers buy their food from supermarkets, superstores and convenience outlets. Store locations have largely been determined by market forces, where profitability is likely to be assured. Urban neighbourhoods containing predominantly people with low incomes are often poorly served by retail outlets (55, 56). Research presently underway by the World Food Day Food Security Watch Committee will provide us with specific evidence about this phenomenon in Ontario cities. People living on low incomes often do not have the transportation to take advantage of prices and better quality foods in less expensive markets. Poor service in their neighbourhoods results from either an absence of stores or a monopoly that produces higher prices. This condition is sometimes aggravated in inner city areas where historical development patterns have kept retail store space small. Since retail-level profit margins are small, retailers have relied upon volume to ensure profitability. Companies have been reluctant to operate stores whose size does not accommodate such volumes. It is common to find a disparity in prices in markets located in low income areas compared to high income or suburban areas. It is also common to find poorer quality foods and lack of fresh foods at those markets (56).

A fourth factor is the limited support in Ontario of **alternative strategies for securing food**. These include food buying co-operatives, community gardens, farmers' markets and direct consumer-producer linkages. (See Appendix A) Other parts of Canada have experienced great success with these alternatives, for example the food co-operative movement in the West and the community garden programs in Montreal. In part, this is a product of public policy failure - an inability to recognize that alternatives to traditional food distribution channels are viable and need support.

CHANGES IN SOCIETY

Women have long held the role of primary nurturer for the family. They do most of the food-related household tasks (57). However, the food industry has increasingly taken over the responsibility for food preservation and preparation. Studies show that between 1929 and 1979, the number of food products available in the marketplace increased from 800 to 12,000 (58).

1. Less Time Preparing Food For Family Members

Women in two-earner families with children under age 16 were much more likely to be employed in 1991 (64.4%) than in 1981, (48.9%) (22). The recent report "Yours, Mine and Ours" points out that despite the changeover to two working parents, most systems still operate as if every family still has someone at home to look after children before and after school (59).

This is a problem for parents who cannot afford daycare or for parents whose children are aged 8 to 12 years old in communities that lack alternative supervised programs. Ensuring that children have nourishing breakfasts, lunches and after school snacks is particularly challenging for families in these situations. As a result of these changes in society, children are preparing their own meals (60). Research indicates that in two-earner households, family meals have become less frequent, and schedules of family members may make eating alone or with siblings relatively common (61).

2. Less Time Spent Sharing Food Skills

At one time the extended family was the traditional seat of learning safe food preservation and preparation skills, however, in recent years this has changed. The younger generation have not developed food preservation and preparation skills, leading to a society which is dependent upon the food industry for ready-to-eat products (62). Additionally, the time children spend with mothers in preparing family meals decreases with the mother's employment outside the home (63).

Most people can survive without many food preparation skills as long as they have enough money to buy prepared foods. In fact, there has been an increase in the percentage of income spent on restaurant dining and on ready-to-eat products. However, if a person living on a low income lacks food preparation skills, it limits their ability to adequately prepare nutritious meals from scratch, a less costly and often more nutritious option than ready-to-eat products.

3. New Canadians Face Special Challenges

New Canadians make up a large proportion of the population in many urban areas of Ontario. About 55% of all New Canadians live in Ontario (64, 65). Some of these New Canadians will face barriers to securing a nutritious diet.

Current Issues and Challenges

During initial relocation and settlement periods, many may not find employment, or be forced to take low-paying jobs for which they are overqualified (66). Foods used in their traditional diets may not be available at affordable prices or available at all. The marketing and "status" of convenience, non-nutritious food products lead people to believe these are the best products to buy. Consequently, people may replace nutrient dense inexpensive traditional diets with higher-fat, lower-fibre Western foods.

Some New Canadians also face literacy problems when they come to Canada. The direct impact of limited English language skills on food security is a reduced ability to make healthy food choices. Problems that can arise include:

- an inability to read food preparation and safety information
- an inability to understand nutrition labelling
- an inability to read infant formula preparation directions

4. Food Industry Marketing Strategies

Advertising used by the food industry to sell their products has created a cultural and social norm of what is acceptable and desirable to eat. TV advertising does not promote sufficiently the healthy eating patterns suggested by health professionals (67). Advertising in general is guilty of attracting people to levels of consumption that are not in keeping with economic, emotional and physical health (68). All these problems may be heightened for the nutritionally vulnerable. The price of ready-to-eat food is higher than simply preserved and fresh foods which need to be prepared. Highly processed foods that have high levels of fat, sugar and salt and few nutrients, contribute to a less nutritious diet.

SOCIO-ECONOMIC FACTORS AFFECTING FOOD SECURITY

- 250,000 Ontarians use food banks on a monthly basis (11).
- 45% of food bank users - or 112,500 - are children under the age of 18 (11).
- \$254,200,000 is spent annually in Ontario to treat low birth weight children (24).
- 50% of Aboriginal children live in poverty in Canada (26).
- One in six of all Canadian children live in poverty (25).
- 0.5 to 1.0% - or 125,000 to 250,000 in Canada are homeless, with Toronto having the highest incidence (35).
- In 1988, a family made up of 2 parents, earning minimum wage, with 2 children could only earn about 3/4 of the poverty line income (20).
- A single parent with one child living on welfare in Toronto will **fall short** of actual cost of living expenses, including food by **\$266** per month (41).
- A single unemployed individual would need an additional **\$462** monthly to cover living expenses including food (41).
- Between 1984 and 1991, the tax burden of a two-parent, two-child family earning \$20,000 per year increased by 386% (42).

Current Issues and Challenges

GOAL 2: A SUSTAINABLE, SAFE, HIGH QUALITY FOOD SUPPLY

"To ensure a long-term safe, high quality food supply"

Achieving this goal requires several actions:

- ensuring a stable and financially viable farm population
- creating sustainable food production and distribution systems
- ensuring food safety and quality
- the development of a market place that values, as evidenced in the purchasing patterns of consumers, that the previous three actions are desirable.

Ontario has an abundant food supply. Our trading relations are generally secure, allowing for the import of those products that are not produced domestically in sufficient quantity. Food safety and quality is generally good and food retail prices are low for middle and upper income earners. Farm prices are problematic, and there are on-going efforts to improve this situation. Many Ontario farmers are addressing environmental problems through the development of environmental farm plans. The domestic food system is beginning to adapt to the changing demographic situation and associated changes in food demand. Ontario still faces, however, considerable challenges in each of these areas. Many of these challenges are a result of forces that have been allowed to grow more powerful over the past few decades. The next sections will elaborate on these factors.

Worsening economic position of food producers

Financial viability for farmers is essential to sustaining a long-term secure food supply for the population. Food insecurity is produced when farmers exit agriculture because of financial problems and the production base is concentrated in a few hands or when we must rely on external sources to meet basic food needs. Relying on imported foods (and therefore non-resident farmers) to meet local needs is ultimately a self-defeating strategy. Long supply lines are only viable when cheap sources of non-renewable fuels are available, environmental conditions are favourable and stable (e.g. no disruptions due to weather, natural disaster, or severe pest outbreak or other forms of crop failure), and political relations between trading nations positive. Many believe that the conditions favourable to long supply lines can not be sustained over the long term and that food insecurity will rise as a result.

Unfortunately, the combined effects of agricultural policy, corporate concentration and market conditions have created financial hardships for many farmers (52).

- more than half of Ontario farmers rely on off-farm jobs to survive
- average net farm income in Ontario in 1992 was \$12,563 (69)
- prices farmers receive for their products are, on average, at historic lows
- the number of farmers continues to decline; financial difficulties are the main reason for exiting farming

As a result of these financial problems an increasingly small number of farms is responsible for a rising percentage of Ontario food production. Of the approximately 60,000 census farms in Ontario, about one quarter of these are producing about three quarters of the food. As discussed elsewhere in this report, this consolidation of food resources leads to food security problems.

We are not as self-reliant as we could be. When the grain trade is removed from calculations, Canada is a net importer of agricultural products. Until just after World War II, Canada was self-sufficient in basic fruits (plums, peaches, apricots, strawberries, pears), but by 1980, 28-57% of these five fruits were imported (70). By 1987, Canada has only 71% self-sufficient in fresh vegetables, and 45% in all fruits and berries. These national figures, however, hide regional differences. For example, Saskatchewan is estimated to be supplying only 10 -15% of its vegetable requirements (71, 72). In 1993, Ontario had a \$1.9 billion international deficit in agricultural trade, one third of this in horticultural product (69). Some of the deficit in horticultural products is due to the seasonality of the Canadian growing season, but a significant percentage of the crops that comprise this deficit could be produced and stored here if it were a priority of domestic agricultural policy (70, 73). Economic multipliers are low for regions that rely on a food import/export economy, meaning that money does not circulate as widely in the region and produce secondary and tertiary financial benefits (74). Reliance on external sources may contribute to food supply and price instability.

Loss and degradation of food production resources

The most important biological resources for food production are soil, water, energy, genetic diversity, and wildlife habitat associated with production areas. Measures to correct past problems are being undertaken in all these areas, but more needs to be done.

- All forms of soil degradation are estimated to cost (direct and indirect costs) approximately \$500 million annually (75, 76).

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- Although significant progress has been made, surface waters are still subjected to excessive agricultural (non-point) pollution loads. In many cases, pollution load reductions have not yet translated into significant improvements in water quality (76).
- Groundwater contamination is not as severe as the USA, but recent studies show that nitrate contamination in well water is a problem in some parts of Ontario (77).
- Recent Ontario data is absent, but conventional agricultural practices continue to consume excessive levels of energy relative to sustainable farming practices. Studies from other jurisdictions report up to a 60% reduction in energy use in sustainable systems (78, 79, 80).
- Loss of genetic material is an on-going and inadequately addressed area in agriculture. In both animals and plants, formerly viable varieties and breeds are disappearing due to commercial pressures to narrow the range available. It is only the efforts of non-profit, non-governmental organizations that keeps much of this genetic material from extinction.
- In previous decades, Ontario agriculture has destroyed much important wildlife habitat, some of it very important for water management and pest control in agriculture. For example, we've lost over 60% of pre-settlement wetlands (76). Some programs are now in place to reverse these trends, but they are inadequately financed.

The consequence of these environmental problems are that food production resources are being degraded, and this threatens our production capacity. For example, as soil resources degrade, we become more reliant on fertilizers and pesticides to compensate for the decline in soil quality. These agrochemicals, in turn, further contribute to the deterioration of the soil resource by destroying soil biota, and binding nutrients required for crop production. Excessive fertilization contributes to water pollution and energy inefficiency. Pesticides accumulate in other organisms and humans.

Threats to the quality and diversity of the food supply

A quality food supply has the following characteristics:

- excellent nutritional characteristics
- no significant amounts of microbial, chemical, or physical contamination
- sufficient diversity to satisfy aesthetic and cultural needs.

Our food supply is widely recognized as one of the safest in the world. Recent reports indicate that Ontario farmers are reducing their use of pesticides. Changes to the structure of production and distribution, however, are presenting new challenges. The system is designed to support a centralized, industrial approach to food production and distribution. As we make the transition to a food system rooted in food security principles, we need to reassess many of the principles and practices of the current food safety system and find ways of modifying them to accommodate more appropriate production and distribution scenarios. In particular, we need to examine the relationship between production and distribution practices, agriculturally related diseases (safety and health conditions created by the system itself), and food quality. For example, there is evidence that our chicken rearing systems themselves are significant contributors to the incidence of salmonella poisonings (81, 82).

Similarly, these changes to the food system present new challenges to the nutritional quality of foods. There is increasing evidence that soil quality and food quality are intimately linked (83, 84). Soil degradation, therefore, is likely to reduce the nutritional value of the crops grown on it. For example, much of available nutrients are in the top layer of soil. As this soil erodes the most productive layers of the soil disappear.

There remain persistent questions regarding the effect of crop production chemicals on humans, particularly vulnerable populations such as infants (85). We may be seriously underestimating the immune system and fertility status implications of regular exposure to low levels of pesticides (86).

The distances food travels may also be compromising nutritional value. Practices such as early crop harvest, and genetic manipulation to accommodate long-distance storage and distribution may reduce the quantities of essential nutrients. For example, Vitamin A and C have been reduced in some varieties of tomatoes that have been manipulated for long distance travel (87).

Our increasingly multicultural society poses additional challenges, particularly at the institutional food service level. Our dominant production and distribution system has historically attempted to homogenize food consumption patterns.

Current Issues and Challenges

This is evident from our dietary reliance on a small number of plants and animals for most of our foods, and on the repetitious pattern of food intake common to many individuals and families. Consequently, the domestic food system has, until recently, been slow to recognize niche market opportunities that respect the diversity of the population. Many ethnic communities have relied on imported products, and different distribution systems to supply their needs. This trend will likely continue unless the domestic food system, following on some preliminary work done by OMAFRA, invests in new production, processing and distribution systems to supply locally these emerging markets.

Informed consumers

One of the industry promoted assumptions of the food system is that it is consumer-driven; that the system responds to what consumers demand. It follows, then, that creating a secure food supply requires that people have the knowledge and skill to make purchasing and food preparation choices consistent with their needs and the conditions that create food security. In an ideal system, consumers would be able to express an informed choice for foods of high nutritional quality, produced by environmentally sustainable production systems, and which financially benefits a wide cross-section of Ontario farmers.

Both health and sustainability are stated public policy objectives, but we believe that messages for consumers stand in the way of achieving them. Lacking a stated consensus on the purposes of public information about food, the information that is provided is left largely to the marketers of product. The overarching problem is that no one has responsibility for determining the overall coherence of consumer food messages, except on products labelled with specific nutrition claims (e.g. low in fat).

- Individual firms provide information that shows their products to best advantage. As a result, consumers get information that is incomplete, and which may contradict the information provided by another firm or government agency.
- Individual consumers do not have the resources to determine with any ease the accuracy or completeness of any firm's messages, particularly when faced with the size of food industry advertising budgets.

- Government rules confound this problem because there is also little coherence between the parts and levels of government that have responsibility for advertising rules, labelling and grading systems.
- The healthy eating messages of health departments are often competing with contradictory messages permitted by the regulatory framework of other arms of government.
- Investments in programs that successfully promote environmental stewardship in agriculture are undercut in the market because consumers can not support those efforts with their dollars.

GOAL 3: FOOD FOR HEALTH

"To promote consumption patterns that maximize health and minimize disease."

What we eat has a profound effect on our health. It is one of the factors contributing to low birthweight, ischemic heart disease, stroke, some forms of cancer, adult onset diabetes and osteoporosis.

Some of these chronic diseases are the leading causes of death and potential years of life lost, while others are major contributors to debilitating conditions and escalating health care costs in Ontario.

Evidence of Sub-Optimal Diet

Low Birthweight Babies - The Ontario Ministry of Health has targeted low birthweight as an important health issue, with the aim of reducing the provincial low birthweight rate from 5.5% to 4% by the year 2000 (88). Low birthweight accounts for about 75% of neonatal mortality. Furthermore, estimates of the health care costs to treat a low birth weight baby up to the age of two are approximately \$200,000 per infant (24). Poor nutritional health, maternal smoking, low socio-economic status and very young maternal age are overlapping modifiable risk factors and should be the focus of low birthweight prevention programs (89, 90).

Current Issues and Challenges

Neural Tube Defects Related to Folic Acid - Recent studies have provided strong scientific support for the effectiveness of a higher folate intake, either dietary or through supplementation, in reducing the risk of neural tube defects. (e.g. Spina Bifida) In Ontario the incidence of neural tube defects is approximately 1.6 per 1000 live births (91).

The etiology of poor folate status is multifactorial including poor eating habits, dieting for weight control, oral contraceptive use, low socioeconomic status, drug and alcohol use and cigarette smoking.

The intake of folate among Canadian women is marginal at about 0.18 -0.20 mg (180 - 200 mcg) per day (92). The recommended nutrient intake for adult women is 180 mcg. per day, plus an addition of 200 mcg. per day in pregnancy (3). Major sources of folate are dark green vegetables, legumes and oranges. Only 50 % of Ontario women consume the recommended minimum number of five servings of vegetables and fruit per day (93).

Babies and Mothers Not Receiving the Benefits of Breast Feeding - Despite the growing epidemiological evidence that exclusive breast feeding for the first six months has both short and long term advantages for infants as well as mothers, optimal breastfeeding initiation and duration rates have not been achieved in Ontario. The initiation of breastfeeding in Ontario is high, however, approximately 15-20% discontinue by one month, 30% by two months and 70% by six months. Consequently, this diminishes the immunological, nutritional, hypoallergenic, and psychological benefits of breast feeding. Breastfeeding rates are lower in those with lower levels of education and income (94, 95).

Problems Related to Infant Feeding Practices - Lack of breastfeeding, inability to afford the recommended infant formula, and poor infant feeding practices such as the early introduction of cow's milk are significant nutritional risk factors for iron deficiency in infants (95, 96). No recent national data is available on the prevalence of iron deficiency and iron deficiency anaemia among infants, however, Aboriginal children, low birthweight infants and children of low income families have been identified as high risk groups (29, 95, 97).

The non-haematological consequences of iron deficiency include poor weight gain, anorexia, malabsorption, decreased physical performance, and irreversible, adverse affects on psychomotor development, behaviour and attention span (96, 98).

Obesity: A Growing Concern for All Ages - There is a general recognition of the serious health risks associated with excess body weight. Infants and children who are obese have a somewhat increased risk of becoming obese adults (99). Childhood obesity appears to be increasing in the United States (NHANES III), although exact data for Ontario children are not available. In adults, obesity is a risk factor for ischemic heart disease, stroke, some cancers, hypertension, and adult onset diabetes mellitus (100).

There is an increase in the prevalence of obesity among adults in Canada.

- Significantly more men were obese in 1990 (27%) than in 1985 (19%), based on a BMI (Body Mass Index) over 27.
- Obesity in women has increased from 14% to 17% (101, 102).
- Thirty-one per cent of males and 22% of females have a BMI greater than 27 (21).

Obesity occurs when there is a higher energy intake than expenditure over a period of time. The etiology is complex, but lack of adequate physical activity coupled with the consumption of high calorie foods have the most profound influence. A higher incidence of obesity has been found in those with the lowest education level, suggesting the importance of socioeconomic factors on body weight (21). Those with less education and/or limited incomes may have less access to a variety of healthy foods and opportunities for physical activity which can directly affect body weight.

Underweight, Eating Disorders and Body Image Distortion: An Emerging Issue - In our society, a majority of people are preoccupied with their body image, weight and eating. Most are dissatisfied with their bodies and many will stop at nothing to achieve the ideal body size, using dieting, excessive exercising, bingeing, purging or starving to lose weight. The following statistics speak to the seriousness of this issue.

- The prevalence of anorexia nervosa in Canadian women aged 14 - 24 years is 1-2% and the prevalence of bulimia was 3-4% (103).
- Approximately 10,000 women in Ontario suffer from either anorexia nervosa or bulimia (104).
- Approximately 49% of women compared to 19% of men wanted to lose weight even though they were within the normal weight range (21).

Current Issues and Challenges

- Twenty-one percent of women aged 20 - 34 years are underweight, compared to 6% of males in this age category (21).

For many Canadian girls, dieting begins during elementary school, resulting in a large proportion of women spending a great amount of time, energy and money on unsuccessful attempts to lose weight or change their body shape (100, 105).

Few studies have examined the effects of dieting behaviour on nutrient intake and the resulting biological consequences. There are reports of iron deficiency anaemia, premature osteoporosis, chronic fatigue and hypertension associated with weight loss, inappropriate dieting and the underweight condition (106, 100).

Consumption Patterns Related to Chronic Diseases in Ontario - The influence of diet on the prevalence of major chronic degenerative diseases is now the emphasis of Canada's Guidelines To Healthy Eating which are based on Nutrition Recommendations for Canadians, released in 1990.

Canada's Guidelines For Healthy Eating

- Enjoy a variety of foods.
- Emphasize cereals, breads, other grain products, vegetables and fruit.
- Choose lower fat dairy products, leaner meats and foods prepared with little or no fat.
- Achieve and maintain a healthy body weight by enjoying regular physical activity and healthy eating.
- Limit salt, alcohol and caffeine.

Data on food consumption patterns and physical activity levels from the Ontario Health Survey conducted in 1990 suggest there is a significant deviation from these nutrition recommendations. The following summarizes some of these deviations (3, 21, 107, 108).

- **Fat Intake** - The Ontario Health Survey found the mean percent of energy from fat to be approximately 37% of calories, significantly above the recommended level of 30% (3, 21). Both the amount and type of dietary fat intake is related to blood cholesterol levels with higher intakes of total fat and saturated fat being associated with higher serum cholesterol levels.

- **Carbohydrate and Dietary Fibre Intake** - The mean percent of energy from carbohydrate was 51%, with only 21% of the population meeting the recommended level of 55% of energy from carbohydrates. More male (24%) than females (20%) consume more than 25 grams/day of dietary fibre. In fact young women have the lowest intake of fibre at approximately 15 grams/day (21). Although there is no specific recommended daily intake for dietary fibre adults are encouraged to at least double their intake of dietary fibre from the current estimated intake of 12-19 grams/day (109).
- **Calcium Intake** - Although most people achieved the Recommended Nutrient Intake (RNI) for calcium, as many as 18% had a calcium intake less than 70% of the RNI (21).
- **Iron Intake** - The average intake of iron is above the RNI for men. Approximately two thirds of women under the age of 45 may be at risk of for low iron stores due to an intake which falls below the RNI (21).

Nutrition-related Chronic Diseases in Ontario

- **Ischemic heart disease (IHD)** is the leading cause of death in Ontario, claiming 20,000 lives each year, as well as being a major contributor to morbidity, disability and a reduced quality of life (110). Eating habits have a major influence on three important risk factors for IHD - serum cholesterol levels, obesity and hypertension (111). There is a relationship between low levels of education and income and the prevalence of high serum cholesterol levels, hypertension and obesity (21, 110). This indicates the importance of socioeconomic factors as a determinant of IHD risk, and the considerable potential for the prevention of IHD.
- **Cancer** - One out of three Ontarians will eventually develop some form of cancer (112). It is estimated that 35% of cancer deaths are attributable to diet (108).

Dietary fat may be related to colon, breast and prostate cancer, but other constituents in foods may also contribute to the initiation, promotion or prevention of cancer (107, 113).

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Epidemiological studies have shown that frequent consumption of fruit, vegetables and whole grain products contributes to a lower incidence of various cancers probably related to a decreased fat and increased dietary fibre intake (113). For the person who has had cancer, diet can make a crucial difference in their recovery.

A large proportion of the population is not meeting the recommended number of servings of grain products and vegetables and fruit, the major sources of dietary fibre (21). Therefore, these Ontario residents may not be receiving the potential preventive benefits linked to these healthy food consumption patterns.

- **Osteoporosis** is a growing medical condition especially among older women. Inadequate nutrition and low physical activity levels throughout life are major contributors to this condition (114).

Foodborne Illnesses: A Continuing Challenge - Acute illness from microbiological toxins is the number one hazard from food (115). In the past decade, foodborne illness has increased (116). It is estimated that one in six people suffer from foodborne illness every year, costing the provincial government about a half billion dollars. Although reported cases are often traced to restaurants and institutions, many also occur in the home environment as a result of inadequate food preparation, storage practices and poor sanitation (117).

The safety of Canada's food supply is taken for granted in that we often forget that less than a hundred years ago, molds and rancidity were a serious threat to health - and in many countries still are. Preservatives, modern preserving techniques and food controls are responsible for saving millions of lives. They have eradicated a vast number of diseases caused by food poisoning. The safety of Canada's food supply is the envy of the world for good reason.

However, foodborne illness is obtaining increasing attention in the eyes of the public. There is much publicity concerning poultry contaminated with Salmonella, and foodborne illness caused by E. Coli 0157:H7 ("Hamburger Disease") and Listeriosis.

Foods previously thought to be safe are being discovered to contain pathogens. These include ice cream, soft cheese and shell eggs (118).

There are several food safety inspection programs in place enabling government agencies to secure a safe food supply. Since food poisoning bacteria can be found in the cleanest food premises, special steps are needed to control the growth of bacteria. That is why the Ontario Ministry of Health has introduced a new quality control system through local health units.

This new system is called Hazard Analysis Critical Control Point (HACCP) is now used world wide in food quality control systems.

The risk of foodborne illness increases with the volume of people being served. Risk also increases if the people being served are more vulnerable to illness. These people include the elderly, the very young, pregnant women, the chronically ill and the poor. All kinds of food can become contaminated during any step in preparing food. Some food becomes contaminated because of too much handling or because of complicated preparation. The HACCP system looks at those food handling procedures that might cause foodborne illness.

A very important principle of the HACCP approach is that it promotes self-inspection by operators and staff who have been educated about the causes and preventive measures of foodborne illnesses. Government and the food industry have to create a partnership to ensure a safe food supply. Government inspectors must examine the links in the food chain as opposed only to the finished product.

EVIDENCE OF A SUB-OPTIMAL DIET

- Low birthweight accounts for 75% of neonatal mortality in Ontario (24).
- The incidence of neural tube defects in Ontario is approximately 1.6 per 1000 live births (91).
- Approximately 15 - 20% of mothers discontinue breastfeeding by one month postpartum, 30% by two months and 70% by 6 months (94).
- Aboriginal children, low birthweight infants, women under the age of 45 years and children of low income families are at high risk for iron deficiency and iron deficiency anemias (29, 95, 97).
- Thirty-one percent of males and 22% of females in Ontario have a BMI greater than 27, a level associated with increased risk of developing health problems (21).
- Twenty-one percent of women aged 20 - 34 years of age are underweight (21).
- Fifty-three percent of males in Ontario consume more than 38% of their total energy as fat, compared to the recommended level of 30% energy from fat (21).
- About 35% of all cancer deaths are attributable to diet (108).
- One in six people suffer from foodborne illness every year in Ontario (117).

Contributing Factors To Poor Dietary Habits

There are many factors which are contributing to changes in eating habits which are responsible for poor health. We must try to understand the significance and relative importance of these factors in order to identify those which have the most impact, and act on them to enable all citizens to enjoy food consumption patterns that are consistent with health.

The Effects of Marketing, Advertising and Food Processing Methods on Food and Nutrient Intake

Most Ontarians have physical access to a wide variety of foods for a healthy diet, except those whose circumstances inhibit their ability to access these foods.

We enjoy the convenience of being able to obtain processed foods as well the basic ingredients for food preparation in our homes. However, there is growing concern among health professionals and the general public that some **marketing forces and food processing methods** have a negative impact on the types of foods available, and the nutrient content of our diets. In a recent publication *Australian Nutritionist*, Rosemary Stanton describes the proliferation of these refined processed foods as the "Americanization of the world's food system" (119). Concerns about these market forces include:

- The prominence and easy availability in grocery stores, gas stations, convenience stores, school and worksite vending machines of many refined processed foods which are high in fat and salt and low in fibre.
- The influence of aggressive marketing techniques that promote the consumption of low nutrient-dense foods such as french fries, carbonated beverages and candy (67, 120).

Commercial freezing and canning of foods have increased availability and variety of safe, nutritious foods throughout the year. However, there is also concern that some of the **food processing technologies** currently being used are jeopardizing the nutritional quality of foods. For example, the wide use of partially hydrogenated fat which increases the trans fatty acid content of foods (121).

Labelling of food products with nutrition information is voluntary in Canada. While this provides information to consumers about some products, there is an increasing interest in mandatory nutrition labelling on all products so that consumers can choose foods based upon full information.

We are concerned that inadequacies in consumer food information systems are making it difficult, if not impossible, for consumers to make informed choices. While many people presently report reading nutrition labels, studies show that many consumers are unable to use the information on the label in making healthier food choices (122).

Current Issues and Challenges

Presently, consumers are denied the opportunity to make informed decisions based on criteria such as:

- source, growing and processing methods
- ecological, social and economic factors of production and distribution
- cultural and religious preference

Some examples of consumer confusion produced by these deficiencies include:

- **Following the latest food fads.** Foods are often promoted based on the most recent piece of research evidence reported in the media (e.g., oat bran, no cholesterol products) or the latest popular diet. Policy makers, business people and scientists blame this problem on the media and on each other. Our view is that all the players bear some responsibility and that this phenomenon results from problems outlined above. In the absence of full information, rules and practices, firms use incomplete but favourable claims, in their product promotion.
- **Confusion about places of origin.** For example, consumers often believe they are buying Canadian products and supporting Canadian producers and processors because the label states Canada #1. Of course, this is not necessarily so, and they may not look for, or find, the words that identify the product's country of true origin. (e.g. fruit cocktail containing pineapple labelled "Product of Canada")
- **Bewildering profusion of brand names and claims.** Consumers believe that there are many brands and types of products to choose from, when, in many cases, the products are quite similar, or many of the brands are made by one manufacturer.
- **Misconceptions about product grade.** Labels with Grade A or #1 markings make many believe that it is the top quality choice from a nutritional perspective, whereas grading criteria focus more on cosmetic factors.
- **Contribution to eating disorders.** Claims about products' creating ideal body types are reinforced by advertising playing to anxieties about body image.

- **Food Additives.** Modern technology enables Canadians access to fresh foods and ingredients from all over the world. Modern food processing ensures an abundant food supply throughout the year. The use of food additives has kept pace with technological advances in food processing and improved systems of transportation. But as the use of additives has grown, so has concern about the necessity and safety of adding so many non-food substances.
- **Food Allergies.** Each year, an undetermined number of Canadians experience adverse reactions to foods they have consumed. About 50 Canadians die every year from severe reactions to food (123). Concerns in this area have been brought to the forefront in recent years by incidents involving several ingredients (nuts, fish and sulphites) and by the deaths of several persons as a result of allergic reactions.

The solution to the food allergy problem is constant vigilance by food allergy sufferers; and increasing awareness and understanding of allergies by the food production and service industry; and the disclosure of vital ingredient information in a manner which the consumer can obtain conveniently (124).

There are many questions to consider when addressing mandatory labelling:

- How much and what information should be on the label?
- How can we ensure that some of the most nutritious foods such as fresh produce and simply canned/frozen foods are labelled?
- How can the consumers' knowledge and skills best be developed to enable them to use nutrition information on labels for making healthy food choices?

The "Eating on the Run" Culture

Approximately 31% of the food dollar is spent on **foods purchased in restaurants**. Every adult eats a meal away from home about three times per week (125). The increase in the numbers of muffin and donut establishments allow more people to pick up their morning's supply of energy on their way to work or during coffee break. Few working people return home for lunch. Many who previously brought a packed lunch are now eating at cafeterias or fast food establishments.

Current Issues and Challenges

While it is possible to make healthy choices at most restaurants, the predominant foods offered, especially in fast food outlets, are high in fat and low in whole grains, vegetables and fruits. Recent analysis of meals from Chinese, Mexican and Italian restaurants by the Centre for Science in the Public Interest in the United States indicates that most of the dishes have been adapted from their original healthy form, and are very high in fat (126, 127). While some chefs receive training in designing healthy menus and using lower fat food preparation techniques, few cooks and food service workers have the necessary food and cooking skills to ensure that the public is offered healthy food choices.

Current **food habits** continue to shift away from three evenly spaced family meals towards multiple small meals and snacks eaten throughout the day. Associated with this pattern of eating are the following factors:

- Children are eating fewer meals at home because many are attending day care, before and after school care and remaining at school for lunch.
- Among older children, breakfast skipping is common (128).
- The availability of coffee shops, corner stores and fast food outlets make it easy for children grab a bite to eat.
- Food choices in many of Ontario's municipal parks and recreation facilities are limited to hot dogs, chips, buttered popcorn, pizza, ice-cream novelties and soft drinks.
- Convenience and snack foods of low nutrient density make it possible to alleviate hunger without sitting down to eat.
- There is less opportunity for children to observe and model their eating habits after adults (129).

Community Opportunities For Food Provision

Day care centres are one of the few sites which have legislated standards for nutritious meals and snacks. However, there is a lack of support for the nutrition education of day care staff or for monitoring of the meals and snacks served. Literature reports a lack of variety and sufficient calories being offered (130).

Although the number of individual **school communities** involved with child food programs is increasing, the Ministry of Education has taken little action in ensuring the nutritional health of its students with a few exceptions. The Education Act, 1990, states that children must be supervised over the lunchtime if children cannot go home for lunch and a Board of Education may purchase milk for student consumption (131). Some Boards of Education are abdicating any responsibility for providing a supportive environment for healthy eating in some junior high and high schools, by replacing cafeterias with vending machines or entering into contracts with fast-food franchises and donut shops. This situation must be rectified if children are to establish lifelong healthy eating habits.

Older adults face additional challenges with the provincial directions in long term care that pertain to food and nutrition programming. Eating alone is a risk factor for malnutrition among the elderly. Programs like Meals on Wheels provide affordable nourishment for many, however, research indicates that some seniors try to make the meals stretch over a period of days. With the emphasis on keeping the elderly in their home, strategies will be needed to ensure that the nutritional health of this vulnerable segment of our society is maintained (132).

Declining Opportunities to Learn About Food and Nutrition

We are faced with another challenge when it comes to ensuring that our children have the necessary skills in food selection, preparation and storage to maintain a safe, nutritious food intake. **Personal food skills** have been declining, although little attention has been given to monitoring this trend. In the past women transferred their food knowledge to their children, especially female children. With societal changes, there is an increased use of convenience foods, take-out meals and food eaten outside the home and basic food preparation skills are not being transferred in many families. Yet children are now doing a greater portion of the food shopping. Studies show that teens in the U.S. spent 1-1/2 hours per week doing food shopping for the family and frequently prepare meals using primarily convenience foods (133).

At the same time little attention has been paid to the need to teach food selection and safe food preparation skills within the school or community. While there is a mandate to teach about food and nutrition as part of the **elementary school curriculum**, there is no provincial curriculum to guide teachers in food safety and nutrition issues. This is essential as most teachers do not receive training in food and nutrition as part of their professional preparation.

Current Issues and Challenges

As **family studies programs** are being dropped from some schools, there are declining opportunities for students to learn about food preparation and selection. At the same time, family studies teachers report an increased demand from students for food preparation skill development. In a recent report on youth, young people listed life skills as something that the educational system should be teaching them (59). Knowing how to nourish one's self is certainly an important life skill.

In 1983, the Ministry of Agriculture and Food discontinued the **home economics extension programs** offered through the Agriculture Extension program. There are now few places for consumers to obtain advice about safe, nutritious food preparation skills. Yet, foodborne illness arising from poor food preparation practices in the home remains the largest contributor to food poisoning. A new program, the Community Food Advisor Program, has been introduced to try to address this issue.

The Ministry of Health, Public Health and Community Health Branches have recognized the importance of food and nutrition to health; however, they still allocate a small percentage of the total budget to **nutrition programs**. There is clearly a lack of community opportunities to learn about food and nutrition.

Supplement Use and Research Into Individual Nutrients

The field of food and nutrition has undergone a tremendous information explosion. The media is constantly reporting new studies linking what people eat to health outcome. Often these reports are conflicting, leaving the public confused and unsure about what changes they should make in their eating habits. Much of the research in nutrition investigates the role of individual nutrients in health. When the public hears the preliminary results of these studies, they often interpret the message to mean "take a vitamin or mineral supplement" to ensure they are getting enough of the nutrient. Supplement use contributes to a false sense of security and does little to help the public develop good dietary habits.

The major contributors to poor nutritional health are not single nutrient deficiencies. They are having too much fat and salt and too few vegetables, fruits, legumes and complex carbohydrates in the diet. There is also potential for harm in using supplements, with toxic effects being possible with excessive Vitamin A, D, B6, iron and selenium intakes (3). What is clear is that people are often lacking the knowledge to evaluate the information being given by the media, making it difficult to judge if these new developments will improve their health.

Social and Cultural Norms Regarding Eating Habits

Factors which influence the social and cultural norms around eating are not fully understood. The media and advertising, however, are two very influential forces that shape our attitudes about food habits. For example, the marketing of infant formulas, and the prevailing images and attitudes towards women's bodies in the media have contributed to a culture which is not supportive of the adoption and maintenance of breastfeeding. The acceptance of artificial feeding of infants over breastfeeding as the social norm has been the subject of much analysis.

Advertising has an impact on the creation of cultural norms and on our food choices. Many advertisements portray convenience foods and beverages being consumed by attractive young people during exciting social events. If we want to identify with this image, we buy and consume these items. It is believed, although not well studied, that advertising establishes the societal norm, especially for vulnerable groups such as people living on low incomes, children and adolescents, New Canadians, and those striving toward upward mobility.

Another major impact of media and advertising is the intolerance of society towards a variety of body shapes and the creation of a dieting culture. Societal demand for thinness, especially for women, has led to routine negative attitudes towards overweight people, and unrealistic body image expectations for many. A multimillion dollar diet industry has evolved which gives the false illusion that it is possible to achieve this unrealistic ideal body image (100).

It must be recognized that many other factors influence food intake. Taste is one of the most influential factors in food selection and fat, sugar and salt add flavour to food. Physiological instinct may also be very important but is not well understood.

PLAN OF ACTION

Actions for a Food and Nutrition Strategy for Ontario

The charts that follow summarize the goals, critical issues and action plans for a provincial Food and Nutrition Strategy. It is important to recognize that this chart does not summarize existing initiatives that currently address food security in Ontario. The OPHA Food Security Work Group will be soliciting input from key stakeholders regarding existing initiatives in the coming year, as well as comment on the discussion paper's proposed goals, issues and actions.

Given the changes required to create food security in Ontario, it makes sense to consider transition strategies using a framework that builds on existing successes and proposes progressively more profound initiatives in a food and nutrition strategy.

We propose both a series of immediate actions that build on current successes, and some longer term initiatives that will involve greater use of resources, more multisectorial collaboration and longer time frames. It is important, however, that the actions of the first stage not be seen as end points of transition. Ideally, then, strategies should be selected for their ability to contribute towards a smooth evolution to those longer-term initiatives highlighted here.

GOALS AND ACTIONS FOR AN ONTARIO FOOD AND NUTRITION STRATEGY

A: To ensure all residents of Ontario have the means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
For many, food access can only be assured when societal inequities are addressed.	<ul style="list-style-type: none"> • Adopt a "Health For All Ontarians Policy" that addresses determinants of health and social inequities. 	
We must work towards ensuring access to an affordable, nutritious food supply.	<ul style="list-style-type: none"> • Ensure Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and Municipal Affairs work together on zoning bylaws that encourage: <ul style="list-style-type: none"> - greater food access (eg. farmer's markets, community gardens) - appropriately located retail outlets that reflect neighbourhood cultural and/or economic diversity. • Instate food subsidies in Northern communities. • Fund programs that enhance the affordability of food by providing alternatives to traditional food distribution channels (eg. community shared agriculture, community kitchens, food co-operatives, and the Field to Table initiatives). • Develop a provincial food price and availability monitoring program. 	<ul style="list-style-type: none"> • Develop marketing strategies for cheaper grades of food, emphasizing their nutritional value.

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
<p>Food insecurity is more pronounced in the nutritionally vulnerable.</p> <p>(Nutritionally Vulnerable defined earlier in this Discussion Paper)</p>	<ul style="list-style-type: none"> • Enhance Health Canada funding for pre-natal nutrition programs. • Ensure funding for seniors food initiatives through the Long Term Care Act (meals on wheels, homemakers, shopping programs, congregate dining). • Expand food initiatives for seniors and all persons with disabilities through the Long-Term Care Act. • Act on recommendations from Aboriginal Communities which work towards improved food access. • Increase the number of sites with kitchens and storage facilities by incorporating these into the design protocols for the Ministry of Housing (rooming-house, co-op housing, subsidized government housing). • Increase access to nutrition counselling from Registered Dietitians via: <ul style="list-style-type: none"> - increased dietitians at Community Health Centres - improved access to Home Care dietitians through the Long Term Care Act - diet counselling covered by O.H.I.P. - increase hospital outpatient dietetic services 	

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
<p>Recent changes in our society are affecting our ability to prepare nutritious foods.</p>	<ul style="list-style-type: none"> • Develop a social marketing campaign to illustrate that healthy eating can be part of a busy household's schedule. • Develop orientation programs for New Canadians that introduces them to the Canadian food system, while encouraging the retention of their own nutritious eating habits. 	<ul style="list-style-type: none"> • Create a Community Nutrition Action Research Centre that: <ul style="list-style-type: none"> - reflects a shift from basic nutrition research to applied nutrition research - studies the relationship between diet and disease - investigates the importance of food preparation skills, nutrition knowledge and culture on healthy eating habits - studies the influence of advertising on food consumption patterns especially among nutritionally vulnerable groups.
<p>Support full employment in Ontario, while recognizing the basic economic shifts and structural adjustments occurring in Canada and on a global basis.</p>	<ul style="list-style-type: none"> • Provide incentives that encourage more flexible workplace policies that support a larger workforce (e.g. shorter work weeks; job sharing; measures that discourage working overtime). • Provide incentives for employers to upgrade the skills and education level of staff, e.g. via on-the-job training, allowing educational leave, etc. • Develop and implement a plan to foster broad public understanding and support for such initiatives. 	

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
<p>Support full employment in Ontario, while recognizing the basic economic shifts and structural adjustments occurring in Canada and on a global basis. (cont'd)</p>	<ul style="list-style-type: none"> • Support the development and implementation of worker training and retraining programs that are attuned to the projected needs of the job market. • Ensure that public education curricula provide students with the appropriate qualifications to meet the projected needs of prospective employers. 	
<p>Ensure an adequate income for all households in Ontario.</p>	<ul style="list-style-type: none"> • Raise and maintain the minimum wage to the level adequate to cover basic living costs (food, housing, clothing, transportation) for full-time workers. • Raise and maintain social assistance rates to a level that cover basic living costs. • Ensure that basic living costs for communities across Ontario are monitored on a regular basis and that the resulting information is shared with the appropriate ministries, regional and municipal authorities in a timely way. • Ensure that adequate measures are in place to address unanticipated household emergencies that eat into funds for basic necessities. • Develop and implement a universal day care program. 	

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
<p>Ensure an adequate income for all households in Ontario. (cont'd)</p>	<ul style="list-style-type: none"> • Support the availability of programs that provide parent relief outside working hours. • Increase the accessibility of day care and child care programs by providing adequate subsidies for lower income households. • Increase and maintain income supplements for vulnerable seniors at a level that covers basic needs. • Develop and implement a plan to encourage an increase in mixed income housing developments in communities across Ontario. 	
<p>Ensure affordable, adequate housing for all residents of Ontario.</p>	<ul style="list-style-type: none"> • Support measures to make available both more rental housing subsidies and more subsidized housing units across Ontario so that no household pays more than 30% of total income on rental cost. • Provide incentives and support for the development of alternative home financing arrangements that make housing more affordable for lower income households. • Maintain rent control measures. 	

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
<p>Ensure affordable, adequate housing for all residents of Ontario. (cont'd)</p>	<ul style="list-style-type: none"> • Ensure the establishment and maintenance of community support programs for homeless youth and adults. • Provide for supportive alternative housing for vulnerable youth and adults. • Develop and implement policies that maintain adequate public transportation at a reasonable cost to users. 	
<p>Increase the percentage of Ontario residents who have successfully completed a grade 12 level of education.</p>	<ul style="list-style-type: none"> • Develop and implement plans that would improve school leavers' access to continuing education, e.g. through support for adult education programs. • Support the development and implementation of alternative study programs that can accommodate those who are employed or who have child care responsibilities. • Determine and support changes in the educational curriculum that would increase its relevance to students. • Support the provision of alternative educational programs that meet the needs of vulnerable youth and adults. 	

A: To ensure all residents of Ontario have means to access affordable, nutritious and personally acceptable foods.

Issues	Immediate Actions	Long-Term Actions
EQUAL ACCESS TO FOOD		
Decrease the percentage of the Ontario population that is functionally illiterate.	<ul style="list-style-type: none"> • Provide adequate support for ESL (English as a Second Language) programs for school attendees and for youth and adults outside the school system. • Ensure adequate support for basic literacy and numerical literacy programs across Ontario. 	

B: To ensure a long-term safe, high quality food supply.

Issues	Immediate Actions	Long-Term Actions
A SUSTAINABLE FOOD SUPPLY		All long-term actions cut across issue areas.
The economic situation continues to deteriorates.		<ul style="list-style-type: none"> • Create financial incentives to decrease pesticide use. • Increase finances to farms in transition to sustainable agriculture. • Develop full information system for consumers.
The resources to produce food in a sustainable way are dwindling.	<ul style="list-style-type: none"> • Support community gardens and urban food production. • Implement the Environmental Responsibility Team Report. • Increase Ontario and local food self reliance. • Develop new training programs to assist in transition to sustainable agriculture. • Marketing boards to develop marketing and distribution streams for products of sustainable agriculture. • Transfer research and development money to sustainable agriculture research. • Ensure agricultural land base is preserved. 	
Consumers require full information to make environmentally responsible food choices.	<ul style="list-style-type: none"> • Pass legislation similar to British Columbia's Food Choice and Disclosure Act. 	
Centralized and industrialized food production and distribution threaten the quality and diversity of our food supply.	<ul style="list-style-type: none"> • Research agricologenic diseases and soil-food quality relationships. 	

C: To promote food consumption patters that maximize health and minimize disease in Canada.

Issues	Immediate Action	Long-Term Action
FOOD FOR HEALTH		
<p>Many chronic diseases and debilitating conditions are related to diet.</p>	<ul style="list-style-type: none"> • Develop and implement a nutritional status monitoring system. • Implement the recommendations of the INNOCENTI DECLARATION and the WHO CODE on Breast Milk Substitutes. • Ensure the provision of postpartum support to breast feeding mothers. • Fund programs that promote Health Canada's Vitality programs at the community level. • Encourage all municipalities, work sites and institutional settings to establish policies which support healthy eating and physical activity. • Ensure adequate staffing to provide for Ministry of Health's Mandatory Health Guidelines and Services. 	<ul style="list-style-type: none"> • Establish regulations for the weight loss industry that ensure minimum standards in programming and marketing.

C: To promote food consumption patterns that maximize health and minimize disease in Canada.

Issues	Immediate Actions	Long-Term Actions
FOOD FOR HEALTH		
<p>Marketing practices, food processing techniques and food labelling influence consumer's ability to select nutritious foods in the marketplace and in restaurants.</p>	<ul style="list-style-type: none"> • Require nutrition labelling that enables consumers to choose foods that comply with Canada's Guidelines For Healthy Eating. • Require labelling of foods which are produced or processed using technology that is publicly controversial (eg. food irradiation, genetic engineering). • Enhance funding for marketing campaigns that promote minimally processed foods. • Eliminate advertisements that contribute to the development of unrealistic body image and unhealthy behaviours. • Increase the number of healthy food choices award programs for restaurants and cafeterias. • Require restaurants to disclose their list of food ingredients. • Require mandatory training of food handlers in safe and nutritious food preparation; menu planning to promote healthy eating and proper waste management techniques (eg. recycling). 	<ul style="list-style-type: none"> • Revise present advertising regulations to minimize the advertising of less nutritious snack foods. • Implement total cost accounting in relation to food production, packaging and health consequences, through the addition of taxes (eg. taxes for corporations that choose to use excess packaging).

C: To promote food consumption patterns that maximize health and minimize disease in Canada.

Issues	Immediate Actions	Long-Term Actions
FOOD FOR HEALTH		
<p>People using mass catering programs must have access to nutritious choices.</p>	<ul style="list-style-type: none"> • Increase resources to ensure the enforcement of nutrition standards in mass catering settings (e.g. day cares, schools., residential facilities). • Enhance funding for school nutrition programs as recommended by the Coalition For School Nutrition. 	
<p>There is a need for increased opportunities for food preparation skill development.</p>	<ul style="list-style-type: none"> • Provide community-based food preparation classes. • Expand the Community Food Advisor Program through OMAFRA and the Ministry of Health. • Expand the role of Family Studies teachers in the school system to provide more food skill education at a variety of grade levels. • Develop and implement a Provincial Food and Nutrition curriculum for all grade levels. • Increase the food and nutrition training of teachers, physicians, nurses and epidemiologists by registered dietitians. 	

PLAN OF ACTION - EQUAL ACCESS TO FOOD

IMMEDIATE ACTION

Adopt a "Health For All Ontarians Policy" that addresses determinants of health and social inequities.

Many of the actions necessary to ensure access to food must address societal inequities. The Premiers Council on Health, Well-being and Social Justice have recently released a report calling for a "Health For All Ontarians Policy". A number of other documents have been produced recommending a variety of strategies to deal with issues around income, employment, education, and the provision of daycare, transportation and housing. Some of these specific recommendations are included in Appendix B - Actions That Address Social Inequities.

It is essential that the recommendations put forth in these documents are implemented. Their adoption is critical to ensuring that all Ontarians have access to affordable, nutritious and personally acceptable foods.

Ensure that all residents of Ontario have access to an affordable, nutritious food supply.

- Fund programs that enhance the affordability of food by providing alternatives to traditional food distribution channels. (e.g. community shared agriculture; community kitchens, food co-operative and Field To Table Initiatives - see Appendix A) In addition to providing food, these initiatives require staff support thereby increasing job opportunities.
- The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) and Municipal Affairs must work together on zoning bylaws that encourage:
 - a) greater local food access. (e.g. farmer's markets; household gardens; community gardens)
 - b) appropriately located retail outlets that reflect neighbourhood cultural and/or economic diversity.
- Instate subsidies that ensure reasonably priced nutritious foods in remote northern communities. For example, why is it that beer is sold for the same price all over Ontario, yet nutritious staples are more expensive in northern parts of the province.
- Develop a provincial food price and availability monitoring program.

Ensure that nutritionally vulnerable groups have access to affordable nutritious foods.

- Enhance Health Canada funding for pre-natal nutrition programs.
- Ensure funding for seniors food initiatives through the Long Term Care Act (meals on wheels, homemakers, shopping programs, congregate dining).
- Expand food initiatives for seniors and all persons with disabilities through the Long-Term Care Act.
- Act on recommendations from Aboriginal communities which work towards improved food access.
- Increase the number of sites with kitchens and storage facilities by incorporating these into the design protocols for the Ministry of Housing (rooming houses, co-op housing, subsidized housing)
- Increase access to nutrition counselling from Registered Dietitians via:
 - a) more dietitians at Community Health Centres
 - b) improved access to Home Care dietitians through the Long Term Care Act
 - c) diet counselling covered by O.H.I.P.
 - d) more hospital outpatient dietitians

Address changes in our society that are affecting our ability to prepare nutritious foods.

- Develop a social marketing campaign to illustrate that healthy eating can be part of a busy household's schedule.
- Develop orientation programs for New Canadians that introduces them to the Canadian food system, while encouraging the retention of their own nutritious eating habits.

Plan of Action

LONGER TERM ACTIONS

- Develop marketing strategy for less expensive grades of food that emphasizes the nutritional value of products.
- Create a Community Nutrition Action Research Centre that:
 - reflects a shift from basic nutrition research to applied nutrition research
 - studies the relationship between diet and disease
 - investigates the importance of food preparation skills, nutrition knowledge and culture on healthy eating habits
 - studies the influence of advertising on food consumption patterns especially among nutritionally vulnerable groups.

A SUSTAINABLE, SAFE, HIGH QUALITY FOOD SUPPLY

Although Canadian governments have not framed their actions within a food security framework, some progress on resolving the challenges discussed previously is evident. Parts of the strategic plan of the Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) are consistent with the approach proposed here, and some of the initiatives of the Ministry provide a foundation on which food security can be built in Ontario.

OMAFRA has expressed its commitment to environmental sustainability, and we propose some strategies that would help to make that commitment a reality. Both OMAFRA and the Ministry of Health already have good programs addressing the safety of the food supply, so our proposals here deal primarily with some emerging areas of concern. OMAFRA indicates its commitment to building local self-reliance, but its strategic programming in this area is limited. We devote some attention to this field. Finally, we offer some proposals on how consumer information systems can better support public policy objectives in the area of environmental sustainability. This is an area in which current provincial and federal policy and regulation is deficient, and where significant opportunities lie to support food security.

IMMEDIATE ACTIONS

Modify government programs and regulations so that they support environmental sustainability in agriculture.

- That OMAFRA fully implement the Environmental Responsibility (ER) Team report of April 1991, plus any recommendations from the Ontario Roundtable on Environment and Economy not addressed in the ER Team report.

The policy literature has identified a number of government activities problematic for creating sustainable agriculture, including some aspects of stabilization and insurance programs, sales tax exemptions on agrochemicals, commodity production subsidies, grading standards and agricultural credit systems (134, 135). In recent years, both the federal and provincial governments have been reviewing how existing policies, programs and regulations impede the transition to more sustainable food production systems. Unfortunately, the most significant aspects of the internal reviews performed by both Agriculture Canada and OMAFRA have not been acted upon, nor have the review summaries been publicly released. Both these internal reviews (OMAFRA's Green Team report [1990-1] and Agriculture Canada's review led by the Research Branch [1988-89]) established a detailed agenda to support sustainability and they should be enacted. As well, the Agriculture and Food Sectoral Report (1992) from the Ontario Roundtable on Environment and Economy made additional recommendations that should be implemented.

Encourage Ontario marketing boards to make available and promote the products of sustainable farming systems.

- That all Ontario marketing boards develop marketing and distribution streams for the products of sustainable agriculture systems.
- That legislation similar to British Columbia's "Food Choice and Disclosure Act" be adopted.

Marketing boards have been reluctant to recognize the products of sustainable agriculture systems in the marketplace. Progress has been made in certain quarters. The Ontario Milk Marketing Board has agreed in principle to the development of an organic milk stream. Under certain circumstances, organic egg producers are permitted to sell in the absence of quota because they are seen by the marketing board to be offering a product that doesn't compete with the traditional ones.

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British Columbia recently passed the "Food Choice and Disclosure Act" which permits the development of production standards based on sustainability criteria and the use of labels to identify these products in the market place. We believe that Ontario should pass similar legislation.

Ensure that the agricultural land base in Ontario is preserved.

- Implement fully the recommendations of the (Sewell) Commission on Land Use Planning and Reform regarding and related to agricultural land.
- Expand the conservation easement program to other lands pressured by non-farm land uses and develop appropriate legal frameworks for community land trusts (based on models at work in the USA).

After years of allowing the productive land base of the province to be reduced, the provincial government, by implementing fully the Sewell Commission report, has a wonderful opportunity to ensure that we have sufficient agricultural land for the future.

OMAFRA recently adopted a conservation easement program for the Niagara area. They estimate that this program will save about 2000 acres of the agriculture land in the region at a cost of \$18.75 million over 10 years. Farmers will receive funding for limiting the non-farm uses on their land. The restrictive covenant extends to future owners.

There is also significant interest in community land trusts, but insufficient governmental, legal and taxation supports are in place to make them easy to develop.

Support community gardening and urban food production.

- Set a target of producing 20% of vegetable needs by the year 2010 from urban sources, and develop appropriate institutional supports with municipal planning departments and community organizations to implement it.
- Develop programs to ensure that all municipalities (both urban and rural) identifying a need have community garden programs by the year 2000.

The Ministry of Health has provided grants in the past to community organizations for development of community gardens. The grants program of 1991 was not, however, widely successful because no long-term infrastructure for community garden development was provided. Under better circumstances, the benefits associated with such gardens include community greening, community development and recreation.

In addition to these benefits, urban food production and community gardening can help enhance the province's vegetable production capacity. A recent study by Van Bers concluded that 20% of demand for vegetables could be met from urban production sources (136). Ontario currently imports over \$500 million dollars worth of vegetables annually, most of which can be produced in Ontario. If a coordinated farm - urban production plan is developed, there would be significant and non-competitive opportunities for urban growers (from backyard to commercial operations) to cut our vegetable deficit.

Prevent food safety problems associated with the design of food production and distribution systems.

- Set as a priority research agenda the investigation of agricologenic diseases (those created by the design of food production) and soil-food quality relationships.

As discussed previously, emerging challenges to the food system will require some rethinking of food safety and quality systems. Agricologenic diseases and soil-food quality relations are priority research areas.

Ensure support for a research program supporting the transition to sustainable agriculture.

- That OMAFRA progressively transfer Research and Development expenditures to a sustainable agriculture research agenda.

Although the provincial government spends significant amounts of money on research and development, not enough of it is helpful to creating sustainability and food security.

A more appropriate research agenda includes investigations on:

- indicators of soil excesses and deficiencies to assist development of appropriate crop rotations and crop fertilization programs
- lifecycles of poorly understood insect pests to help identify non-toxic pest management interventions

Plan of Action

- design of animal environments based on ethological principles to reduce animal stress and improve product quality
- implications of widespread conversion to sustainable systems on and use and the agricultural economy so that better planning can take place
- design of transitional rotations for a variety of production systems and economic and ecological conditions
- optimal design of orchard environments, particularly to prevent the development of pest problems and optimize tree nutrition
- design of soil management systems that optimize food quality characteristics
- design of alley cropping systems
- design of optimal Canadian diets and implications for food system
- the city as a source of food production and soil nutrients (137)

Develop new training programs that assist the transition to sustainable agriculture.

- That OMAFRA and the Ministry of Education implement continuing education programs in sustainable agriculture for government staff and farmers, and change existing curricula to respect the new agricultural pedagogies being developed in places such as the University of Western Sydney, Australia.

Training people in sustainable agriculture is a key strategy for its implementation. Educators, disciplinary associations and governments should develop new and continuing education programs. The University of Guelph is experimenting with such new systems, based on the experiences of other agricultural schools like the University of Western Sydney, Australia.

LONGER TERM ACTIONS

Create financial incentives to reduce the use of synthetically-compounded fertilizers and pesticides and to increase financing for farm programs to support the transition to sustainable agriculture.

- The Provincial Sales Tax (PST) should be applied to all synthetically-compounded pesticides and fertilizers sold to farmers and urban dwellers. An exemption could be maintained for biological pesticides and fertilizers, except those that are the product of genetic engineering (biotechnology).

- Revenue from this tax should be used to finance programs that support the transition to sustainable agriculture

In addition to land, the long-term sustainability of other resource use is in question, particularly soil, water and wildlife habitat. Many farmer-led initiatives are currently underway to address these problems, and we suggest a green taxation program that builds upon some of the proposals made by the Ontario Fair Tax Commission. We suggest a program with three principle objectives:

- a) taxing purchasing that is an impediment to sustainability;
- b) ensuring revenue neutrality for the taxed party by shifting those revenues raised directly to programs that promote sustainability within the affected sector;
- c) transferring urban financial resources to rural areas to support the transition to agricultural sustainability.

To ensure that those paying the tax also benefit from the revenues generated (program revenue neutrality), we propose that revenues be earmarked for:

- any costs associated with creating an exemption for biological pesticides and fertilizers (e.g. for lawn and garden products);
- the costs of a retail sales tax exemption on soil and input conservation farm equipment;
- programs to help farmers plan and finance the transition to organic/sustainable practices;
- the costs of government procurement programs to purchase preferentially Ontario and ecologically-produced foods.

The purpose is to provide additional incentives for farmers to make the transition to sustainable practices and to enhance the market for their products. It is consistent with such government programs as Land Stewardship, Food Systems 2002, and support (provincial and federal) for the Environmental Farm Plans. The taxes would raise revenues on a declining rate basis, because synthetic pesticide and fertilizer sales would slowly decrease as farmers made the transition. Financial supports for new programs would also decline over time, but this is consistent with the desired objective of jump-starting market mechanisms that would, once functioning fully, reduce or eliminate the need for such programs. Total revenues from applying the PST and a surcharge would likely raise over \$50 million (138).

Plan of Action

Develop full information systems for consumers.

- That the federal and provincial governments collaborate to create comprehensive product labelling, modelled on existing programs in other jurisdictions, that includes information on environmental and social justice impacts of production, processing and distribution.

We believe that it is important to create a unified scheme of consumer information that helps us achieve public policy objectives in the domains of social justice and environmental sustainability. Simple and user-friendly schemes exist in other jurisdictions and can serve as guides for a Canadian system.

Increase Ontario food self-reliance.

- That OMAFRA build on the work of Innovations Agriculture by investing heavily in the development of food production and distribution systems that meet the dietary choices of Ontario's ethnic communities.
- That food self-reliance become the central thrust of provincial agricultural policy making.
- That OMAFRA and Health establish mechanisms to define optimal nourishment on a population basis (based on nutrition recommendations) and then plan agricultural production based on supplying these nourishment needs.

For the redesign to be successful, the food and agriculture system must become a servant of food and nutrition strategy that emphasizes food security issues. Achieving this requires that the food system be designed to meet domestic food needs, i.e. that it is oriented toward local, regional and national self-reliance. Daly and Cobb have argued that the greater the degree of self-sufficiency of trading units, the greater control each unit has over the terms of trade and the greater the likelihood of benefits accruing to all units (139). This holds provided that there is a degree of confidence and mutual concern among the members of a community or political system that permits some degree of specialization so that a wide range of goods and services can be provided (but not at the cost of community needs and community control as happens under our current system). They argue forcefully that this mutual concern can not realistic exist beyond national borders, and is, in fact, more likely to exist at a regional (or sub-national) level. "Hence, basic self-sufficiency in agricultural

production should normally be a goal of national policy" (139). In turn, this basic self-sufficiency lays the foundation for creating food security. It also creates new employment activity. Given this foundation, what could food self-reliance look like in Canada?

There have been 5 significant studies addressing the potential for self-reliance in Canada (70, 136, 140, 141, 142). All reach similar conclusions, but the most comprehensive Canadian work has been carried out by Van Bers (136). She examined, in a dynamic fashion, changes in Canadian demographics to the year 2031, desirable health promoting changes in the Canadian diet, and sustainable food production systems. Her assessment revealed self-reliance potentials both nationally and regionally. Overall, Canada could be exporting grains, pulses, oilseeds and potatoes. Due to changing dietary patterns, the domestic needs for animal products could be met, but some importation of fodder crops would be required. Deficits would still exist for vegetables, fruits, and apples. Her study also highlights the need to match, on a population basis, optimal nourishment requirements with regional production supply patterns. This concept of demand management, and the matching of demand with appropriate supply, is well established in energy use.

Some European studies are also informative for the Canadian situation. In the 1970s, Norway set out to redesign its food and agriculture system around both self-reliance and the optimal Norwegian diet. They attempted to increase domestic food self-reliance from 39% of total calories to 52% by 1990 (143). They used such policy tools as: production and consumer subsidies; market promotion; consumer education; food labelling; and penalties for unhealthy food (144). By 1988, they had reached 50% self-reliance, whole grain consumption had increased, as had quality of local production of both grains and potatoes. Greater improvements were limited by the absence of new organizational structures to properly implement these goals and by a lack of human and financial resources (146). Finland has been more successful than Norway. The country has been self-sufficient in all basic foodstuffs, except fruits and vegetables, for many years. Current research and policy efforts focus on the horticultural sector, with a particular emphasis on storage, and agricultural inputs (146).

These studies, though limited in number and sometimes in concept, suggest that a similar, if not higher degree of self-reliance is attainable in Canada. The financial opportunities and tradeoffs, however, remain unknown as economists and policy analysts have been reluctant to undertake these kinds of studies.

Plan of Action

Endnotes

1. Note that our supply managed commodities, those that only focus on a domestic market, have traditionally been the most financially secure.
2. This process of homogenization has been made less visible by the processing sector. The food industry is very adept at making modifications to the same foods to make it appear as if variety is constantly being introduced. A further indicator of our reliance on a few plants and animals is evidenced among those with allergies. It is, for example, still very difficult to eat a wheat or corn-free diet, because these plants are used in so many processed foods.
3. Note that many other national jurisdictions have been framing agricultural policy in this light, including the Scandinavian nations, Cuba and Burkina Faso.
4. We also recognize that other supports are necessary to ensure successful transition. In particular, financial institutions must have a fuller understanding of how sustainable farming is practised, and a biologicals input industry must be encouraged.
5. Although such procurement programs are discouraged by current and emerging trade agreements, the Dunkel draft of the Uruguay Round of the GATT includes language that may permit such government action if it is presented in the context of ensuring food security.
6. Note that optimal diet does not mean population average diet. Each individual has unique dietary requirements so the concept of optimal diet implies developing a framework in which the total population is well nourished and individuals dietary needs are also obtainable (147). It also addresses the issue of food quality, an area not fully considered in traditional dietetics and nutrition (148).

FOOD FOR HEALTH

IMMEDIATE ACTIONS

Ensure that the diet related aspects of chronic disease and conditions are addressed.

- Develop and implement an ongoing nutrition assessment/monitoring system for Ontario.
- Implement the recommendations of the INNOCENTI Declaration and the WHO Code on Breast Milk Substitutes.
- Ensure the provision of postpartum support to breast feeding mothers.

Many measures are required to ensure that women receive the support they need to continue breastfeeding. Most working women who want to continue breastfeeding must give up the ideal of optimal breastfeeding and resort to partial, mixed, or token breastfeeding. It is imperative that we create a woman-centred approach to work that values woman's productive and reproductive work, and decreases the double burdens women carry. This approach should acknowledge pregnancy, breastfeeding, and child-care as socially meaningful and productive work, and recognize the social support necessary for optimal breastfeeding. Men share the responsibility for providing this support in the home and the workplace. When provided with maternity leave, affordable child-care, and access to infants during working hours, women can successfully manage productive and reproductive work. "Children, women, families and employers all benefit from this health promoting, inexpensive, nurturing approach to child-care" (94).

- Fund programs that promote Health Canada's Vitality programs at the community level.
- Encourage all municipalities, work sites and institutional settings to establish policies which support healthy eating and physical activity.

Plan of Action

Create an environment for the selection of safe, nutritious food choices in the market place and restaurants.

- Eliminate advertisements that contribute to the development of unrealistic body image and unhealthy behaviours.
- Require nutrition labelling that enables consumers to choose foods that comply with Canada's Guidelines For Healthy Eating. (e.g. "Eating this product several times a week is consistent with Canada's Guidelines for Healthy Eating")
- Require labelling of foods which are produced or processed using technology that is publicly controversial. (e.g. food irradiation, genetic engineering)
- Enhance funding for marketing campaigns that promote minimally processed foods.
- Increase the number of healthy food choices award programs for restaurants and cafeterias.
- Require restaurants to disclose their list of food ingredients if requested to enable those with food allergies and religious restrictions to make healthy food choices.
- Require mandatory training of food handlers in safe and nutritious food preparation; menu planning that promotes healthy eating and proper waste management techniques. (e.g. recycling)

Ensure that people served by mass catering have access to a variety of nutritious, safe and personally acceptable foods.

- Increase resources to ensure the enforcement of nutrition standards in mass catering settings. (e.g. day cares, schools., residential facilities)
- Enhance funding for school nutrition programs as recommended by the Coalition For School Nutrition.

Increase food and nutrition knowledge and skills of the general population.

- Provide community-based food preparation classes.
- Expand the Community Food Advisor Program through OMAFRA and the Ministry of Health.
- Expand the role of Family Studies teachers in the school system to provide more food skill education at a variety of grade levels.
- Develop and implement a Provincial Food and Nutrition curriculum for all grade levels.
- Increase the food and nutrition training of teachers, physicians, nurses and epidemiologists by registered dietitians.

LONGER TERM ACTIONS

- Establish regulations for the weight loss industry that ensure minimum standards in programming and marketing.
- Revise present advertising regulations to minimize the advertising of less nutritious snack foods.
- Implement total cost accounting in relation to food production, packaging and health consequences, through the addition of taxes. (e.g. taxes for corporations that choose to use excess packaging)

ROLES AND RESPONSIBILITIES

We believe that a collaborative effort by the Ontario Ministries of Health and Agriculture, Food And Rural Affairs is essential in developing a comprehensive food and nutrition strategy for Ontario. Food and nutrition programming and policy development are critical components at both these Ministries. The implementation model developed for the Ontario Substance Abuse Strategy could be used to ensure that other essential ministerial, community and private sector partnerships are involved (149).

The implementation model calls for the creation of an interministerial committee. Provincial actions are essential to strengthen the ability of the community to deal with food security issues. Partnership on this interministerial committee should include:

- Ministry of Health
- Ministry of Agriculture, Food and Rural Affairs
- Ministry of Education
- Ministry of Environment and Energy
- Ministry of Community and Social Services
- Ministry of Housing
- Ministry of Economic Development and Trade
- Ministry of Municipal Affairs
- Ministry of Finance

Representatives from these ministries will be responsible for key projects that support the strategy.

The establishment of a provincial advisory group made of community partners will influence the development of the strategy. This OPHA Food Security Work Group is willing to work in this advisory capacity to these Ministries. Membership of the group would have to be expanded to ensure participation of consumers, service providers, farmers, agrifood representatives as well as representatives from key groups such as the Premier's Council. This group will represent the Ontario population in terms of culture, ethnicity, gender and region.

Finally at the local level, coalitions of community partners will establish action plans tailored to the needs of their communities. These coalitions will be supported by provincial funds to ensure the necessary resources to meet their identified needs.

NEXT STEPS

The OPHA Food Security Work Group recognizes that the development of a provincial food and nutrition strategy is a complex process. However, it is also evident from the variety of existing provincial government initiatives, that there exists a recognition of the integral role nutrition and the food system plays in the achievement of health for all Ontarians. It is time to give these initiatives overall direction and coordination through a Food and Nutrition Strategy For Ontario.

In addition to the development of this discussion paper, the OPHA Food Security Work Group has produced a popular education tool on food security issues. The purpose of this discussion paper is to solicit comment from key stakeholders regarding the proposed goals of a food and nutrition strategy for Ontario and the critical issues to be addressed in it's development. Through the distribution of the popular education tool, we hope to mobilize communities to examine local food security issues. Over the next year we will be co-ordinating the distribution of these documents and compiling comments received. Our goal is to bring forward a resolution to the 46th OPHA Conference regarding a Food And Nutrition Strategy for Ontario.

APPENDIX A - Emerging Strategies to Address Household Food Insecurity

Alternative strategies to address household food insecurity are needed. Current initiatives include food buying clubs, Field to table, community gardens, community shared agriculture, collective kitchens, Meals on Wheels and congregate dining.

Food Buying Clubs

Food buying clubs or food co-ops have been operating for some time in Ontario. The overall goal is to have a group of people to purchase in bulk directly from a wholesale distributor or directly from farmers. This decreases the cost and the distance between the consumer and the producer (150). This promotes an environmental approach to food buying because there is less packaging and containers can be reused in the next order. It also promotes the use of organic products, thus contributing to sustainable agricultural practices. Social interaction also occurs because members are required to share the work (150).

Field to Table

This is a recent initiative of Foodshare Toronto. Foodshare in partnership with community groups and Ontario farmers brings affordable, nutritious food to the doorsteps of low income Metro families (151). A special truck is loaded up with vegetables, fruits and other fresh foods and then it delivers to four stops a day in Metro (151). The stops are corners, apartment buildings, and parking lots in low income areas where access to fresh, affordable produce is non-existent. This program promotes nutritious eating, buying Ontario produce, self-sufficiency, community cooperation, and a creative use of limited resources (151).

Community Shared Agriculture

This program encourages consumers to have a direct relationship with a farmer who grows food. As partners with the farmer, consumers share in the rewards and the risks of farming. The consumers gain an understanding of how food is grown, the seasons and the problems encountered in farming (152). Whereas, the farmers gain an understanding of their customers. Thus, the distance between farm and urban centres is shortened (152). Overall, this program aims to work with communities to end hunger and improve access to affordable and nutritious food (152).

Community Gardening

Efforts in community gardening exist throughout Ontario. Coalitions like Grow T.O.Gether in Toronto and the Community Garden Advisory Group in Peterborough have successfully increased the amount of land available in these urban centres for community gardens. These gardens are run collectively by members of a neighbourhood or community. Tasks and food is shared among the members (153).

Collective or Community Kitchens

In these kitchens community members come together to plan and prepare meals in quantities sufficient to feed themselves and/or their families. Prepared meals can be frozen for use during difficult times in the month when financial resources are dwindling. Community kitchens can happen in people's homes, at churches, schools, or community centres.

Community Food Advisor Program

The Ontario Ministry of Agriculture, Food and Rural Affairs has begun a peer education program aimed at improving knowledge and skills in safe food preparation and storage. The program has recently proven successful during its pilot phase and has expanded to include more communities in Ontario.

Meals on Wheels/Congregate Dining

For years, many communities in Ontario have had access to Meals on Wheels programs. This service provides warm, nutritious, and affordable meals to seniors and disabled persons living in their own homes that are not able to prepare full meals for themselves. It enables these people to continue to live in their own homes. This program is coordinated by a non-profit organization and the meals are delivered by volunteers. However, this program is largely funded through private fund-raising efforts. A small proportion of their budget comes from the Ministry of Community and Social Services. This valuable service is filling a gap in the current social system and is directly in-line with the Long Term Care Reform Act. As this Act is facilitated the demand for this type of program will increase.

Congregate Dining programs are designed to meet two needs at once. It provides seniors and other isolated individuals with a warm, nutritious and affordable meal in a social environment where they can interact with their peers. Thus, it simultaneously promotes nutritional well-being as it helps to break down the social isolation that is often experienced in this population.

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