REPORT ON FOOD PROVISION IN ONTARIO HOSPITALS AND LONG-TERM CARE FACILITIES:

The challenges and opportunities of incorporating local foods

Dr. Paulette Padanyi and Dr. Vinay Kanetkar *(University of Guelph)*
Linda Varangu and Brendan Wylie-Toal *(Canadian Coalition for Green Health Care)*
Dr. Alison Blay-Palmer *(Wilfrid Laurier University)*

University of Guelph/Ontario Ministry of Agriculture, Food and Rural Affairs Partnership Fund

The Canadian Coalition for Green Health Care
Coalition canadienne pour un système de santé ecologique

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PROJECT SYNOPSIS

This report is the first deliverable for Food for Health Project 200218 ("Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Health Care System"), a research study being conducted with the support of the University of Guelph/Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Partnership Fund, the Canadian Coalition for Green Health Care, My Sustainable Canada, St. Mary's Hospital (Kitchener), St. Joseph's Health Centre (Guelph), and Aramark.

The five-member research team responsible for this project consists of:

- Dr. Paulette Padanyi (University of Guelph)
- Dr. Vinay Kanetkar (University of Guelph)
- Linda Varangu (Partnership Director, The Canadian Coalition for Green Health Care; Co-Founder and Managing Director, My Sustainable Canada)
- Brendan Wylie-Toal (Sustainable Food Manager, The Canadian Coalition for Green Health Care; Program and Research Manager, My Sustainable Canada)
- Dr. Alison Blay-Palmer (Wilfrid Laurier University).

The project objectives are to:

1. Establish the current state of food provision in Ontario's health care system.
2. Gain an in-depth understanding of the opportunities and constraints impacting food provision decisions in Ontario's health care system.
3. Provide alternative perspectives on health care food provision and the potential for changing these practices.
4. Understand implementation details for making changes at the individual facility level.

Four deliverables are planned. They are charted below along with their relationship to the above objectives.

PROJECT DELIVERABLES	RELATIONSHIP TO PROJECT OBJECTIVES	TARGET COMPLETION
1. Report on Food Provision in Ontario Hospitals and LTC's: the Challenges and Opportunities of Incorporating Local Foods	This report will be written after the first three research objectives noted above have been met. It will integrate the results of three studies in order to provide a macro level overview of the current situation in Ontario.	2012
2. Case Studies of St. Mary's Hospital (Kitchener) and St. Joseph's Health Centre (Guelph)	These case studies will meet research objective 4. They will detail the micro level challenges and opportunities associated with implementing local food procurement policies at two healthcare institutions.	2012
3. Policy Report on the Use of Local Foods in Ontario Hospitals and LTC's	This report will flow from the two documents noted above and will provide specific recommendations for all key stakeholder groups that would be involved in the implementation of local food procurement policies in the Ontario healthcare system.	2012
4. Local Food for Health Care Symposia	Symposia will be held to disseminate the results of this project across Ontario.	2012/13

The desired impact of this project on the health care system in Ontario is:

- A 20% increase in the number of Ontario hospitals and long term care facilities incorporating local foods into their food services by 2015.
- A 20% increase in the number of patient and residential meals served in the Ontario health care system which incorporate local foods by 2015
- A 20% increase in the number of hospital and long term care cafeterias serving local foods by 2015.

It is hoped that achievement of these outcomes will create an institutional market for local foods that will substantially increase both the number of local farmers growing foods for the Ontario health care system, and the amount and types of local foods they sell. As well, the use and endorsement of local foods by health care providers is expected to encourage chain store food retailers and the general public to stock and purchase local food, thereby increasing the current consumer market for local foods. Finally, it is expected that improved knowledge of the costs and processes associated with incorporating local foods into health care will encourage additional research and investigation into the use of local foods in other economic sectors, such as hospitality and tourism (e.g. restaurants, catering firms).

As previously noted, the report that follows is the first deliverable for this project. The research assistants for this report were:

RA #1: Crystal Sarantoulias (MSc candidate, University of Guelph) – development of potential respondents database; literature review.
RA #2: Elin Marley (Canadian Coalition for Green Health Care) – focus group recruitment.
RA #3: Salma Aziz (MSc candidate, University of Guelph) – interview and focus group transcripts.

The field researcher was Mike Nagy (MSc candidate, Wilfrid Laurier University).
He worked on all three studies conducted for this report in order to provide consistency in data gathering.

Contacts for further information on this report:
Dr. Paulette Padanyi (ppadanyi@uoguelph.ca)
Linda Varangu (linda@greenhealthcare.ca).

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EXECUTIVE SUMMARY

Research Topics and Methodologies

This report is the first deliverable for the University of Guelph/OMAFRA-funded project, "Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Health Care System". **The focus of this report is not the feasibility of making gains facility-by-facility. Rather, it is on achieving broad scale gains in the use of local food by Ontario's health care system that can be sustained long term.** Therefore, this report analyzes and draws key conclusions from data gathered in Ontario over a 7-month period (October 2010-April 2011) on seven broad topics:

1. ***The current practices being used to procure and prepare food (in general) in Ontario hospitals and long term care facilities (LTCs).***
2. ***The personnel involved in procuring and preparing food in Ontario hospitals and LTCs and the factors they take into account in their decision-making.***
3. ***Making changes to current procurement, preparation and decision-making practices.***
4. ***The current involvement with local food among Ontario's hospitals and LTCs.***
5. ***The current involvement with local food among the food suppliers contracted by these facilities.***
6. ***Current attitudes/perceptions regarding local food.***
7. ***Attitudes/perceptions toward the future use of local foods.***

Given the large number of topics to be investigated, and the resulting breadth and depth of data needed, multiple sources of information were used. Data was collected from three different types of health care facilities in Ontario: (1) acute care hospitals, (2) long term care facilities, and (3) facilities that provide both acute care and long term care, and from three different respondent groups: (1) food service managers with day-to-day responsibility for meeting the food needs of patients and visitors at Ontario's health care facilities; (2) senior health care administrators with strategic management and fiscal responsibility for food service departments; and (3) local food growers, distributors and processors who are interested in working with the Ontario health care system. Each respondent group was approached separately using a methodology appropriate to the type and amount of information needed from them. The research methods and sample sizes were as follows:

1. **An internet-based survey of food service managers (FSMs)** - the sample of 137 FSMs represents 16.7% of the food service departments in all Hospitals and LTCs in Ontario and all 14 of the province's Local Integrated Health Network (LIHN) regions.
2. **One-on-one, in-depth personal interviews with senior health care administrators** - the respondents were 22 CEOs, VPs, Directors, Executive Directors, and Administrators from 11 of the 14 LIHN regions in Ontario.
3. **In-person focus groups with food growers, distributors and processers** - 6 focus groups were conducted in four cities (Kitchener/Waterloo, Toronto, Barrie and Ottawa) involving a total of 21 participants.

Overview of Ontario Health Care Sector

The basic data collected in the FSM survey reveals that food service departments in Ontario's health care system are potentially a large market for local food sales, but they operate with fairly limited resources. There are usually multiple sources of food within individual health care

facilities, including retail operations such as Tim Horton's and shops run by volunteers. However, the typical food service department only controls the food offered through the major delivery channels: bedside service, dining rooms and cafeterias. The department is generally run by a single food service manager who reports to the senior administrator also responsible for services such as housekeeping and maintenance.

Although the typical department purchases food for and prepares approximately 184,000 patient meals per year, the food service manager is given a budget that is clearly defined, providing $30-35 per patient per day. Most of this budget is spent on the labour needed to prepare and deliver food, allowing the typical food service department to employ 28 full-time and part-time staff. Only $7-8 of the $30-35 is spent on the food needed to meet the guideline set by the Ministry of Health and Long term Care (MOHTLC) of 3 meals and 2 snacks per patient per day. In the case of LTCs, the MOHTLC provides a specific target/subsidy of $7.33 per day for facilities to purchase food[1]. It does not have a similar target/subsidy for hospitals but these facilities nevertheless tend to operate with a similar budget allocation for food.

Key Findings and Discussion

Key findings and discussion points for the seven broad research topics investigated are as follows:

1. ***The current practices being used to procure and prepare food (in general) at Ontario hospitals and LTCs***

   Ontario's hospitals and LTCs purchase the vast majority of their food through contracts or from local grocery stores. The contracted food purchases are handled through group purchasing organizations (GPOs), fresh produce distributors, food suppliers and/or food service suppliers. Using these large professional organizations helps ensure that the food brought into their facilities meets government food safety regulations and is available at a price that is affordable within their tight budgets. Supplementing the contracted purchases with food from local grocery stores serves the same purposes. The portion bought directly from local growers is small and limited primarily to fresh fruit and vegetables. These findings indicate that efforts to achieve significant increases in the use of local food in health care must seek changes in the purchase activity that occurs both inside and outside of food contracts.

   With regard to food preparation, health care facilities in Ontario use a combination of conventional on-site cooking and outsourced, prepared food, but the combination employed varies substantially. The combination used may be a function of the individual facility's circumstances and resources, in which case it is unlikely that a standard approach to food preparation in Ontario health care can be achieved. Overall, a growing number of facilities are moving away from cooking on-site and now use outsourced, prepared food for some or all of the meals they serve to patients. This trend is due to real and/or perceived benefits such as greater food quality, greater food choice, and lower costs. Although extensive infrastructure changes have been made across the health care sector in order to work with outsourced food, it appears likely that most facilities will continue to do some on-site cooking well into the future. Given the mix of food preparation methods used in health care, efforts to

[1] Shortly after this study was conducted, the Ministry's food subsidy to LTCs was increased by approximately 2%, from $7.33 to $7.44 per day.

achieve significant increases in the use of local food must target both facility personnel and the suppliers of outsourced food.

2. ***The personnel involved in procuring and preparing food in Ontario hospitals and LTCs and the factors they take into account in their decision-making***

Four factors dominate food planning and purchasing decisions in the Ontario health care system: food service budgets, patient needs, food costs/prices, and food safety requirements. Their influence on decision-making is evidenced by common practices such as using GPOs to participate in vendor discounting, making extensive use of part-time staff, and purchasing primarily through the large-scale suppliers that can provide food that meets governmental food safety regulations. To be successful, any effort to increase the use of local food in Ontario health care must be compatible with these four factors.

Food service managers (FSMs) are clearly the internal "gatekeepers" of their facility's food planning and purchasing, and are critical to increasing the use of local food in the sector. However, efforts to engage them must take into consideration the numerous constraints they operate under:

- the food service department budget is low and inflexible, and senior administrators insist that their FSMs stay on budget.
- dietitians have considerable say over food planning and purchasing for patients with chronic illnesses or specific conditions.
- they manage several time-consuming and rigorous food safety-related programs that require them to train staff and deal with quarterly visits from external auditors.

3. Making changes to current procurement, preparation, and decision-making practices

Three different types of reviews are conducted in health care facilities. Reviews involving capital investment, such as changes in delivery systems or changes due to new technology, are conducted every 5 years or so. Major decisions about menus, such as the meal and snack options to be offered and how frequently the entire menu will change, are considered every 1-3 years when supplier contracts are changed or renewed. Ongoing monitoring or auditing by the FSM and food service staff is done daily to quarterly and serves several purposes: to improve patient satisfaction, to look for opportunities to streamline processing and preparation, to minimize food waste, and to stay on budget.

Efforts to increase the use of local food should be targeted to the reviews that are done every 1-3 years since type of food to purchase is one of the procurement decisions made during these reviews. Also, this is a decision that would likely have to be made in conjunction with the renewal of food-related supplier contracts and major menu changes.

Currently, the use of local food is a low strategic priority within the Ontario health care system. Therefore, efforts to increase its use should be tied to an objective that has strategic importance to health care. The most important priorities for planning and decision-making purposes are "maintaining or reducing costs" and "increasing in-patient satisfaction". Local food can be tied to reducing costs through its potential to reduce food waste. Local food can be tied to "increasing in-patient satisfaction" through improved nutrition or food appeal (flavor, texture, freshness). However, in both cases, more scientific evidence than currently exists is needed to confirm these relationships.

4. The current involvement with local food among Ontario's hospitals and LTC's

The majority of the FSMs surveyed claim that their facilities use local food in patient meals, cafeteria meals or both, but few could estimate how much. Furthermore, other than purchasing some local food, efforts to promote the use local food by hospitals and LTCs are very limited, and few facilities currently have plans to increase their use of local food. The scanty support for local food in Ontario health care is related to the fact that most facilities do not have a definition for "local food" and most do not track its use. Without a definition and means to track use, the potential for "local food" to become a strategic priority in health care is limited, especially given that the government's new *Excellent Care for All Act* requires extensive use of metrics to measure and benchmark targeted areas of improvement.

5. The current involvement with local food among the food suppliers contracted by health care facilities

The food suppliers contracted by health care facilities appear to undertake only minimal efforts to market local food to their customers in the health care sector. Indeed, most FSMSs do not even know what their food suppliers' local food policies are.

The marketing of locally-grown product by suppliers is hampered by the fact that there is no uniform supply side definition of "local food" in Ontario. However, the focus group participants (local growers, processors and distributors) felt strongly that the marketing practices of the large operations that existed before the surge in interest in local food are also a major hindrance. From their perspective, these long-standing practices limit the ability of these larger suppliers to purchase local food, and they also discourage potential health care customers from purchasing local food directly from local growers and distributors. These practices include:

- a discount structure that involves giving incentives or cost rebates to facilities for purchasing in volume and, in turn, getting large discounts from larger growers.
- Emphasizing the benefits of "one stop" shopping so that health care facilities do not have to deal with getting numerous shipments from different small suppliers and can get lower food prices.
- Emphasizing their ability to provide consistency in quality and supply.

While the focus group participants strongly applauded Foodland Ontario's efforts to brand local food, they felt the recent expansion of the program to include proteins – and to therefore correct the perception that only fruits and vegetables are "local food" -- was overdue.

6. Current attitudes/perceptions regarding local food

Local food is viewed very positively by health care personnel, and is considered to have both economic and health benefits. Notably, however, the economic benefits of local food (supporting local farmers and the local community) are mentioned more often than possible patient benefits. This may be reflective of the current lack of scientific evidence that local food is more nutritious. It also may contribute to the low priority that local food has within Ontario's health care system, since helping parties outside their own mandate is rarely a high priority for organizations, especially those with limited financial and human resources.

Nevertheless, study data clearly reveals that FSMs and senior administrators would like to offer local food if it can be done within their current budget and regulatory constraints, and if their supply concerns can be addressed. According to the focus group participants, many supply concerns can be addressed through technology and additional study of local foods and their benefits to society.

7. Attitudes/perceptions toward the future use of local foods

Despite their positive attitudes toward local food, both the FSMs who were surveyed and the senior administrators who were interviewed have low expectations that the use of local food in Ontario's hospitals and LTCs will increase in either the short term or the longer term. Their low expectations are clearly a function of the three constraints/barriers they all agree that they face: low food budgets, numerous government regulations, and concerns about supply.

Although the focus group participants would like to see the MOHLTC require that 5-10% of health care sector food purchases be local, many senior administrators balked at this idea. They felt that such a requirement might put pressure on their facilities' limited food service human resources and might even require a return to more on-site cooking. The only form of government support that the senior administrators were broadly interested in is an increase in the food target/subsidy of $7.33 per patient per day.

Conclusions

The research conducted for this report suggests that it is possible to take advantage of the market potential for local food in Ontario's health care sector. However, cooperation and coordination among several key stakeholders is essential if broad scale gains that can be sustained long term are to be sought.

Based on this research, the possible plan objectives, key strategies for success, and the government assistance needed to support any plan are as follows:

1. Plan objectives

► **A plan to increase the use of local food across the Ontario health care system cannot currently be based on quantitative growth objectives**. This is because there is no commonly-accepted definition of local food and, as a result, nor are there any agreed metrics or tracking mechanisms to measure its use.

► **Until "local food" is defined and metrics for tracking it are developed for use across the Ontario health care system, attempts to seek growth in the use of local food in this sector must seek to achieve qualitative, subjective goals**. The two basic options for these goals are:

(a) **Seek changes to the guidelines and parameters that hospitals and LTCs are required to adhere to**. This would require a long term plan with objectives such as:

- seeking a significant increase in the MOHLTC food subsidy
- seeking adjustments in Ontario's food safety regulations,
- increasing the percentage of the facility's budget devoted to the food service department.

(b) **Work within the existing constraints**. This could result in more immediate increases and could involve objectives such as:
- getting FSMs to emphasize buying local food when they make purchases outside of their contracts
- building local food requirements into contracts with food suppliers and food service suppliers
- convincing GPOs to focus on suppliers that are more local food-oriented.

2. Key strategies for success

No matter whether the plan seeks long term systemic change or change within the current operating parameters of the health care system, some preliminary groundwork is needed to increase the potential for broad scale success:

► **Using local food must become a high strategic priority in health care**. This is critical to motivating the engagement and support of FSMs and senior administrators in hospitals and LTCs as well as their CEOs and their superiors in the MOHTLC. Achieving this requires developing a more compelling rationale for the use of local food than currently exists. Local food needs more justification than that it will help local farmers and the communities they operate in. Ideally, this justification will relate local food to the facilities' top priorities of "reducing costs" or "increasing patient satisfaction".

► **A strong, collective voice is needed to speak on behalf of Ontario's health care facilities.** Any long- or short-term plan to increase the use of local food in Ontario's health care system needs to be supported by a "united front". One option could be for the Ontario Hospital Association (OHA) and the Ontario Long-Care Association (OLTCA) to undertake a collaborative effort designed to take on the dual roles of educating both their constituents and the general public about local food, while also lobbying key public and private sector stakeholders.

► **The support of large food suppliers and food service suppliers must be sought.** The current system and government policies meet the business needs of these large organizations and give them a clear advantage over small farmers, processors, and distributors. If these organizations do not fully support the goal of making substantial increases in the use of local food, they could decide to undermine efforts to do so by lobbying against them at the facility or Ministry level.

► **It must be determined whether to focus on LTCs or to take a multi-stage approach that starts with long term care and later expands into acute care**. The numerous differences between LTCs and hospitals (e.g. in food procurement and preparation methods, patient populations and needs, the role of food) have resulted in LTCs currently using more local food than hospitals and having a greater potential to increase their use of it in the future.

3. Government assistance

Assistance and support from multiple government agencies is essential to increasing the use of local food in Ontario's health care system:

► **The MOHTLC needs to recognize the importance of food to health care.** Food is not mentioned on the MOHLTC website and does not appear to be recognized by the Ministry as

a tool for preventing illness in the general population or as a treatment tool, except for people afflicted by diseases such as diabetes or conditions requiring careful nutritional intake.

► **The MOHTLC must recognize that some of its current policies deter senior administrators and FSMs from providing top quality patient care.** Although the mission of most food service departments suggests that they focus on doing what is best for patients, the reality is that much of what they offer and do for patients is shaped by tight safety regulations and limited budgets.

► **OMAFRA can take more leadership than it has to date in efforts to increase the use of local food**. Actions that this Ministry should consider, based on this research, are:

(a) Encouraging local growers to band together to present their own "united front" and lobby for the local food cause.

(b) Encouraging local growers, processors and distributors to work with larger food and food service suppliers individually or through the above lobby group in order to build a greater presence for local sources within the existing food supply chain.

(c) Developing or helping to develop a definition of local food for broad scale use within Ontario's health care system. OMAFRA's efforts to date to define local food are admirable (http://www.foodland.gov.on.ca/english/industry/ind-definitions.html), but the results do not allow for easy operationalization across a complex sector like health care.

(d) Through Foodland Ontario:

- publicizing the new definition of local food to the public in order to increase understanding by all Ontarians, including health care personnel, of the breadth of food categories that offer local food options.
- educating consumers about the newer storage and preservation technologies in use by food processors and distributors in Ontario, and the improved production techniques being employed in the province. These changes have positively impacted food availability in Ontario, making it possible to produce not only more volume of products, but more types of products and at all times of the year.

(e) Through the Broader Public Sector Investment Fund:

- Conducting a business analysis/case study similar to the one done to support the Ontario wine industry.
- Conducting a full cost analysis to reveal the full environmental, economic and social benefits of local food.
- Exploring different business models for food distribution in Ontario, e.g. decentralizing the terminal system and creating mid-size distribution hubs.

1.0 BACKGROUND

Although Ontario is home to some of the most productive agricultural lands in Canada, we import $4 billion more food than we export (OMAFRA, 2006). According to a 2005 study for Waterloo Public Health, a significant quantity and variety of food that can be grown in Southwest Ontario is imported and has travelled, on average, about 4,500 kilometres to get to this region (Xuereb, 2005).

The Ontario government has recognized this problem and is investing $24 million over three years to develop the logistics to get more Ontario-grown food into the province's schools, hospitals, food service companies and other institutions (Government of Ontario Newsroom Website, April 2009). A report submitted to OMAFRA in 2009 indicated that having more large scale procurers of local foods will: 1) ensure a stable market for local sustainable products; 2) provide consumers more local food choices; 3) reduce environmental harm from shipping food unnecessary distances; and 4) retain more money in the local economy (Landman et al, 2009).

It is generally accepted that the benefits of purchasing locally-grown food fall into three main categories: economic (increased sales for local farmers), environmental (reduced air emissions and greenhouse gases caused by the fuel used to transport food), and social (improved food safety and security). However, there are also barriers that can offset these benefits, such as concerns about inconsistent supply and pricing of food due to seasonality. The benefits and barriers associated with using local food need to be understood on a sector-by-sector basis within the institutional market due to each sector's unique elements.

The health care sector has the potential to represent a significant portion of Ontario's institutional market for local food. With 30,000 hospital beds at close to 100% occupancy rates (Health Systems Facts Website, February 2010), Ontario health care system serves at least 32,850,000 meals to patients every year. In addition, hospital cafeterias provide numerous meals for employees and visitors. Sourcing hospital food has traditionally not taken into account where the foods are grown but, in the last few years, interest in purchasing local foods for Ontario's health care facilities has increased (Varangu, 2010).

The increased interest in purchasing local foods for Ontario's health care facilities is due, in part, to efforts being undertaken outside Canada. For example, in the mid-2000s, the UK undertook the Hospital Food Project to test the practicality and feasibility of implementing sustainable food procurement policies in their hospitals. The success of the project has been mixed to date, but some hospitals have exceeded their target of 10% local foods (Sustainable Development Commission, 2010). In the US, a "Hospitals for Healthy Food Pledge", which includes support for local sustainable foods, has been signed by over 280 hospitals (Health Care Without Harm website, February 2010).

The increased interest in purchasing local foods for Ontario's health care facilities is also due to greater attention being given to this topic by academic and practitioner researchers. As a first step toward "Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Health Care System", the next section summarizes the available literature on local food in order to clarify existing relevant knowledge from both academic and practitioner sources and the gaps in this knowledge.

2.0 REVIEW OF LITERATURE ON LOCAL FOOD

Local food is a relatively recent, but rapidly growing, field of study. To help with undertaking this project, a review of existing literature was conducted to help the research team confirm the current state of knowledge about local food and determine current research needs.

This review covers a wide range of research topics, from the local food movement, the current definitions of local food, and the benefits of purchasing locally-grown food, to the challenges and opportunities associated with implementing local food procurement policies and practices in institutional settings, and available information on best practices.

2.1 The local food movement

The local food movement is said to have begun in the early 2000's, in tandem with popular media promoting local eating (Nie & Zepeda, 2011). It grew out of earlier food movements, although different perspectives exist on its roots.

According to the US Department of Agriculture's (USDA's) 2010 report entitled "Local Food Systems: Concepts, Impacts, and Issues" (Martinez et al., 2010), the interest in local food in the United States is the result of three movements: (1) the environmental movement, which encourages people to consider the greenhouse gas emissions caused by long-distance transport of food; (2) the community-food security movement, which seeks to enhance access to safe, healthy, and culturally appropriate food for all consumers; and (3) the Slow Food movement originated in Italy, which seeks to encourage traditional ways of growing, producing, and preparing food. In addition, this USDA report states that the local food movement "also reflects an increasing interest by consumers in supporting local farmers, and in better understanding the origin of their food."

More recently, Ikerd (2011) claimed that the local food movement has its roots in the natural food movement of the 1960s. The natural food movement was launched by "hippies" in response to Rachel Carson's book, *Silent Spring*, and its exposure of the environmental risks caused by agricultural pesticides. During the 1970s and 1980s, the natural food movement spread as more people became aware of the food safety and environmental risks associated with industrial agriculture. Growing concern about industrial agriculture generated the organic food movement that began in the 1990s. As this movement developed and successful organic food retailers expanded from independent stores into chain operations (such as Whole Foods), large mainstream supermarkets (such as Kroger, Safeway and Wal-Mart) recognized the sales and profit potential of organics and started competing in this market. By 2007, these large operations accounted for 47% of the organic foods market in the US, surpassing the sales of organic foods in natural food markets (Nie & Zepeda, 2011). The US government solidified the involvement of large organizations in this market when the USDA launched a national program for the certification of organic foods, which helped meet the large operations' need for standardized product. Discriminating natural food consumers who didn't trust the large food producers and retailers or the government to maintain the integrity of any type of food then created the local food movement in their "search for food with integrity" (Ikerd, 2011).

Early local food advocates are starting to express concern that, as the movement matures, it is changing in meaning, values and direction. DeLind (2011) discusses three current emphases within the movement that she argues are shifting it away from its initial, deeper concerns about "equity, citizenship, place-building, and sustainability":

1. The "locavore" emphasis – A "locavore" is a person who prefers to eat or only eats from within his/her own region or foodshed. DeLind feels that this concept focuses too much on the individual. She maintains that claims being made that problems with the global food system can be addressed by changing "one vegetable, one meal, and one family at a time" deflect attention away from the community orientation of the movement. Furthermore, they deflect responsibility for the problems with the global food system away from major organizations and influencers.

2. The Wal-Mart emphasis – As major corporations such as Wal-Mart promote their involvement with local food, she posits that they will increasingly dictate standards, varieties, quantities and growing conditions for the sake of purchase price. Therefore, "commerce and those who control it will increasingly set the popular limits for what is and for what isn't reasonably local… (showing) little respect for local wisdom or competence."

3. The Pollan emphasis - As local food becomes a movement of "experts and popular heroes" (such as Michael Pollan), "the public is being told what it needs to do and how it needs to think" rather than being asked to reconnect "to the soil, to work and labour, to history, or to place."

Offsetting these concerns is evidence that the movement is growing in spite of current economic conditions (Martinez et al., 1980). Furthermore, there is speculation that "local food is moving us ever closer to a food revolution" (Ikerd, 2011), and that, given continued developments and improvements in food security, national food strategies, technology, and commercial choices for food manufacturers and retailers, local foods will become the global norm during the 21st century (Jones, 2010).

2.2 What is "local food"?

The local food movement has been defined as:

> "a collaborative effort to build more locally-based, self-reliant food economies – one in which sustainable food production, processing, distribution, and consumption (are) integrated to enhance the economic, environmental, and local health of a particular place." (Feenstra, 2002, p. 100)

Despite the clarity of the definition for the movement, there is little consensus on the meaning of the term "local food" (Zepeda & Leviten-Reid, 2004; Roininen et al., 2006); DeWeerdt, 2009; Martinez et al., 2010).

Geography, i.e. the distance between food producers and consumers, is often cited as a key characteristic of "local food" (Thompson et. al., 2008), but it is increasingly being recognized that geography cannot be the sole characteristic because there are multiple ways that it can be, and is, applied in defining "local food". For example:

1. A 2008 survey of consumers throughout the United States found that two-thirds considered local food to be food grown within 100 miles (DeWeerdt, 2009). This understanding reflects the high awareness level of the 100-Mile Diet authored by Alisa Smith and J.B. MacKinnon and published in 2007.

2. In the United Kingdom, some respondents in a 2006 Institute of Grocery Distribution (IGD) survey expected local food to be produced within 30 miles of where they live (consistent with the definition used for in the UK for Certified Farmer's Markets). Others spoke in terms of country limits (e.g. England, Scotland) or regions (e.g. the Peak District). However, the majority considered food "local" if it was produced in the same county as it was consumed (Edwards-Jones et al., 2008; Pearson et al., 2011).

3. A recent inspection of top US food retailers' websites uncovered the following range of "local food" definitions (Badore, 2011):

   - Kroger (and subsidiaries): Produce grown in the same state or region.
   - Safeway: Produce that can reach the store in less than an 8-hour drive.
   - Sweetbay Super Market: Within the state (all stores are located in Florida).
   - Publix**:** Produce from the five states in which the stores are located (Florida, Georgia, Tennessee, South Carolina and Alabama).
   - Wal-Mart**:** Produce grown within 450 miles of distribution centers, but only fruits and vegetables will be highlighted as local if they come from the state in which they are sold.
   - Whole Foods: Food that can reach the store within 7 hours by car or truck.
   - Wegmans**:** Food from within the state.

Since the relationship between where a food is produced and where it is consumed can vary between markets, regions, companies and consumers (Martinez et al., 2010), researchers are seeking to identify characteristics other than geography that can contribute to a useful definition of "local food".

One such characteristic is sustainability and its various components, such as sustainable production methods (including organic production) (Thompson et. al., 2008), distribution practices (Martinez et al., 2010), fair farm labour practices, and the personality and ethics of the growers (Thompson et. al., 2008). Local sustainable food has been defined as food that is verified as economically viable, socially equitable and ecologically resilient and is also produced, processed, distributed, prepared and consumed from within the province or within a 200 km radius of the point of purchase (Hamm & Bellows, 2003).

The link between sustainability and local food is also acknowledged in the UK's Public Sector Food Procurement Initiative (PSFPI), which defines sustainable food and farming as systems of production, processing, marketing, distribution, and catering which meet the following five broad aims:

1) Raise production and process standards to meet food quality expectations;
2) Increase tenders from small and local producers by encouraging and facilitating these relationships;
3) Increase consumption of healthy and nutritious food by making it more accessible to consumers;
4) Reduce adverse environmental impacts of production and supply by identifying and enforcing sustainability mandates;
5) Increase capacity of small and local suppliers to meet consumer demand of locally produced food (Michaels, 2006).

Another factor recognized as being important to the definition of "local food" is where and how it is made available for purchase. Martinez et al. (2010) identified two main channels of

distribution: “direct-to-consumer” and “direct-to-retailer”. These channels have different definitions of “local”. “Direct-to-consumer” includes outlets such as farmers markets, community shared agriculture initiatives, pick your own, roadside stands and on-farm stores. They are all physically local to consumers and define “local” accordingly. On the other hand, “direct-to-retailer” involves intermediaries such as grocery stores, institutions (including Farm to School programs), and restaurants. These intermediaries define and use “local” as a marketing tool and therefore define it to suit their purposes.

Two factors have been identified to date that will complicate the achievement of a broadly agreed-to definition of “local food”. The first factor is that, while both policy and cultural change are closely linked to sustainable food consumption, food procurement policies and regulations vary from one jurisdiction to the next. Therefore, to aid in the development of sustainable food systems and/or to encourage the production of significant quantities of locally-grown food products, a definition of “local food” must be acceptable to all stakeholders at the local level (communities, consumers), the institutional level (hospitals, schools), regional level (municipalities, provinces) and the national level (Morgan & Sonnino, 2006). The second factor is that, when food is processed or multi-ingredient, it raises the question of what percentage of all the ingredients and/or processing needs to be deemed “local” for the final product to be considered local food (Pearson et al., 2011; Edwards-Jones, 2010).

2.2 The benefits of local food

Despite the lack of consensus on the definition of local food, studies have shown that consumers are interested in local food more than ever and that local is a key criterion in the perception of the healthiness of a product. Further, consumers consider local to be one of the most important recent health advancements in the context of sustainability (Sustainable Food Procurement and Agriculture Policy, 2009).

Academic and practitioner proponents have identified several significant benefits to a more localized food system. These benefits include revitalization of rural market and agricultural towns, improved income for producers, greater access to safe and healthy food for consumers, and an environment that fosters entrepreneurship (Peckham & Petts, 2003).

Broadly speaking, the evidence suggests that local food procurement and consumption has three major societal benefits: environmental, economic and social (MacLeod & Scott, 2007):

Environmental Benefits: Purchasing local food can reduce the food miles that food travels from farm to fork. This can reduce the resulting air emissions (CO2) and greenhouse gases (GHGs) created due to the volume of fuel used to transport the food to the consumer (MacLeod & Scott, 2007). A study in the Waterloo region of Ontario showed that food items traveled an average of 4497 kilometers and generated over 51,000 tonnes of emissions, which is almost 6% of all emissions generated by the region (Xuereb, 2005). Furthermore, a study conducted by the Leopold Center for Sustainable Agriculture in Iowa on fuel use and CO2 emissions found that procuring only 10% of 28 common food items locally translates into a reduction of 280 to 346 liters of fuel used, and 6.7 to 7.9 million pounds of CO2 (Pirog et al., 2001).

In the UK, DEFRA 2009 found that a household’s food behaviours directly impact GHG emissions at three stages: purchasing, handling and disposal. In this study, the researchers concluded that, since environmental considerations are currently not significant factors in food choices, means to help encourage movement to more sustainable choices must be identified.

The local food movement has been identified as a strategic and logical way to foster such change. Groups such as the American Dietetic Association agree with this strategy and recommend developing responsible practices at the household level to support the ecological sustainability of the food system (American Dietetic Association, 2007).

Another environmental concern that may be alleviated by increased use of local food is food waste. Food waste or food loss is:

> "…food that is discarded or lost uneaten. As of 2011, 1.3 billion tons of food, about one third of the global food production, is lost or wasted annually. Loss and wastage occurs on all steps in the food supply chain. In low-income countries most loss occurs during production, while in developed countries much food – about 100 kilograms (220 lbs.) per person and year – is wasted at the consumption stage." (Gustavson et al., 2011)

The issue of food waste is particularly relevant to the health care sector. Results from 32 studies in hospitals show a median plate waste of 30% by weight, a much higher level than is seen in other food service settings (Williams & Walton, 2011). Reasons for these high levels that were uncovered by these studies include the clinical condition of patients, food and menu issues (such as poor food quality, inappropriate portion sizes, and limited menu choice), service issues (including difficulty accessing food and complex ordering systems), and environmental factors (such as inappropriate meal times, interruptions, and unpleasant ward surroundings). The potential for local food to reduce food waste has primarily been tested to date by practitioner programs. For example, a USDA report entitled "Plate Waste in School Nutrition Programs: Final Report to Congress" noted that case studies of schools that have developed "farm-to-school" programs show that "increasing the use of produce and local foods may increase participation in school meals and consumption of salad and other vegetables, the food categories most likely to be wasted by school children in these programs" (Guthrie & Buzby, 2002).

Economic Benefits: The food industry is increasingly seen as a sector with significant potential for economic development because, if local processors and sellers are better linked to consumers and farmers through the supply chain, the result is likely to be greater economic potential for the local region (Friedmann, 2006). Studies from the UK indicate that the group that will most directly benefit from policies based on using local food is local farmers, who represent a struggling sector in agricultural production (Koc & Dahlberg, 1999). This is typically the case because of the nature of the current food system, i.e. buyers are in control of the prices and, as a result, farmers often find it difficult to make a living (MacLeod & Scott, 2007). Buying locally produced food can, however, result in a significant increase in a farmer's income. A study by The Maine Organic Farmers Gardener's Association indicated that if consumers shifted 1% of their spending to locally grown products, farmers would see an increase in their income of 5% (Gandee, 2002).

There are also several economic benefits of keeping food dollars within local communities. It has been found that farmers re-invest or spent their earnings in the local community in which they live and produce food (MacLeod & Scott, 2007). Furthermore, keeping expenditures within the community can create and maintain employment for its citizens. The challenge with achieving this goal is that local businesses typically source products from elsewhere, therefore money often leaves the local economy. It has been posited that local food systems can help to address this challenge and keep a higher percentage of farming and food dollars in local communities (ATI Consulting, 2002).

The strong secondary impacts of local food purchasing for local communities that have been identified to date include: regeneration of market towns and deprived areas; higher incomes for local producers; greater trust and understanding between stakeholders (Feenstra, 1997); encouraging entrepreneurship; raising profiles of local businesses; greater access to healthy, safe food; supporting small business and enterprise and job creation; reducing external costs to both the purchasing authority and its constituents; and halting the decline in rural services and food and farming infrastructure (DEFRA, 2006).

Social Benefits: Local food systems have the ability to improve food security by raising the status of and access to local food, strengthening local food supply chains, and by improving local level democracy and economic conditions in rural communities (Hamm & Bellows, 2003). Food security has also been found to have a direct link to the availability and access to environmentally sound, nutritious, safe and personally acceptable foods (MacLeod & Scott, 2007).

An attractive potential social benefit of local food is better nutritional quality leading to better health outcomes for consumers. Specifically, it has been speculated that, because local food systems provide fresher, minimally processed food that retains its nutrient composition, the consumption of local food results in improved overall nutrition, obesity prevention, and a decreased risk of chronic diet-related diseases. It has also been postulated that local food systems could make healthy food options more available for consumers and that this improved access to healthier food could result in healthier food choices (Martinez et al., 2010).

Scientific evidence that suggests nutrition is improved by consuming local food includes findings such as:

(a) stored fruits and vegetables lose nutritional value over time (Mulokozi & Svanberg, 2003).
(b) the nutritional value of certain agricultural products such as fruits and vegetables may decline as the amount of time between harvest and consumer consumption increases. This appears to be especially true of vitamins A, C, and E (Jones, 2001).

At this point, many of the environmental, economic and social benefits of local food cited above have not been fully substantiated, but researchers are considering the types of studies needed over the next few years to achieve this goal.

With regard to environmental benefits, several recent life cycle assessments (LCAs) have shown that, although local production can be more energy efficient than non-local production because of transport savings, variations within a country and between seasons can lead to different levels of environmental impact for the same product. This makes it “impossible to state categorically whether or not local food systems emit fewer GHGs than non-local systems” (Edwards-Jones et al., 2008). Given the findings of these LCAs, some researchers believe that the environmental benefits of local food can only be assessed through combining spatially explicit LCAs with the analysis of social issues (Edwards-Jones et al., 2008; DeWeerdt, 2009). They feel that, while LCAs can inform the local food discussion about technical issues (current and emerging), the analysis of social issues, such as risk perception, consumer behaviour, and social attitudes, is needed to help consumers, the media, food chain professionals, and politicians understand and use the technical knowledge to guide their actions (Edwards-Jones et al., 2008)

The potential economic benefits of local food are attractive to many stakeholders but it has been pointed out that, when consumers purchase local food to benefit the local economy, they are also taking away support from farmers, regions and political systems beyond their locality (Edwards-Jones et al., 2008). This form of "import substitution" will result in reduced economic activity in areas where the goods were previously exported from. The magnitude of these broader costs needs to be studied in conjunction with future studies of local economic benefits, as does the potential costs of public investments (i.e. government subsidies) into developing local food markets (Martinez et al., 2010).

With regard to the social benefits of local foods, nutritional quality is difficult to assess because it is based on the product's essential nutrients such as carbohydrates or fatty acids and biologically active compounds such as vitamins or dietary fibre. Transportation, handling and storage can affect the level of both marketing and nutritional quality of produce. Furthermore, preservation methods such as refrigeration and freezing can also have a negative effect on nutrient levels of particular fruits and vegetables (Edwards-Jones et al., 2008). Since the nutritional quality of food depends upon the specific nature of the food supply chain, comparative studies based on data from different food supply chains are needed to accurately assess the nutritional quality of local versus non-local food (Edwards-Jones, 2010). .

2.3 Motivations to purchase local food

Despite the limitations of the existing support for its benefits, the growing popularity of local food has led to many studies being undertaken to understand consumer and institutional purchase motivations.

The afore-mentioned IGD 2006 consumer study in the UK found that 57% of respondents cited freshness as their motivation for purchasing local food. Support for local producers was the next most commonly cited motivation (54%), followed by support for retailers (34%), and good for the environment (30%). The least important reasons for purchasing local food were taste (18%) and quality (9%). A 2009 national consumer survey in the US conducted by the Food Marketing Institute found that the top three reasons that consumers buy local food are freshness (82%), support for the local economy (75%) and knowing the source of the product (58%) (Martinez et al. 2010).

Institutional customers have similar motivations. Five surveys conducted over 2000-2008 with food service directors in public schools, colleges, universities, and hospitals in the US found that that support for local farms, businesses, and community was the top motivation in most of these studies, followed by desire for fresher produce or increased consumption of fresh fruits and vegetables (Martinez et al., 2010). In Canada, 33 Ontario food service directors in hospitals and long term care facilities who were surveyed in Summer 2010 indicated that the top four benefits of purchasing local food are supporting the local economy (69%), providing patients with fresh raw food (63%), strengthening the local food supply chain (56%), and improved meal satisfaction (50%) (Canadian Coalition for Green Health Care, 2010).

These findings and those of studies investigating consumer willingness to pay a premium for local food (e.g. Thilmany et al., 2008) indicate that there is a substantial perceptual/ psychological dimension to local food purchasing among both consumer and institutional buyers that appears to be related to the place, trust, and experience of buying local. This is consistent with Ikerd's assertion (2011) that local food is "far more about a search for fresh and flavourful foods; it's about a search for food with integrity." If this is the case, fresh produce

marketers must emphasize and deliver the characteristics that customers believe that their offerings provide in order to maintain trust and confidence in their products and to grow demand (Thilmany et al, 2008).

The above findings regarding purchase motivation could lead to the conclusion that the nutrient properties of local food are not important to either the consumer or institutional markets. However, two recent consumer studies suggest that it is too soon to make this assessment:

1. A 2011 analysis of data gathered in a nationwide 2003 US food consumer survey (n = 956) used cluster analysis to create food-related lifestyle segments of US shoppers. It found that food shoppers can be grouped into four segments: rational, adventurous, careless, and conservative uninvolved. "Rational" and "adventurous" shoppers, which accounted for 53% of the respondents, were most likely to buy organic and local foods. The two key motives behind their food purchases were to treat illness and to keep fit (Nie & Zepeda, 2011)

2. Using USDA data from 2006-2008, Ferrer et al. (2011) sought to determine local food impacts on health and nutrition. Most of the local food variables included in their model had a statistically significant impact. For example, their results indicated that for every additional farmer's market in a county, obesity and diabetes rates decrease by 0.07% and 0.03% respectively. However, the authors cautioned that the coefficients for these variables were small, providing weak evidence of these impacts.

Neither of these studies is conclusive. However, their findings are sufficiently intriguing to warrant continued investigations into the actual and/or perceived nutritional benefits of local food.

2.4 Barriers and Challenges to Local Food Procurement

Pearson et al. (2011) notes that today's consumers are confronted with several practical barriers if they want to purchase local food:

(1) restricted availability, causing the potential inconvenience of having to get to local food retail outlets;
(2) limited availability of certain products, due to seasonality;
(3) the lack of information on what and where to buy, due to limited promotion;
(4) higher costs, as some local food products may be more expensive than their mass-produced equivalents.

Research has also identified several common challenges that public institutions (including education and health care) and the workplace face when implementing local food procurement programs. These challenges are more wide-ranging than those faced by consumers and include non-discrimination trade regulations, contractual discrimination issues with respect to supplier size, distribution networks for delivery, and supply quantities to the cost of local, sustainable food, and the lack of kitchen facilities, staff training and menu development (MacLeod & Scott, 2007). Notably, these challenges, which fall into three basic categories (policy, logistics, and facilities), differ in their nature, their implementation and from one country to the next.

Policy: Some countries implement food procurement policies by specifying the source of particular types of food. These policies can be all encompassing, such as being mandated to purchase only regionally specific products, or more flexible, such as being required to purchase "organic" occasionally (e.g. once every 2 weeks) (Morgan & Morley, 2002). Other countries incorporate seasonality into public food policy or provide service specifications (freshness, fast delivery, etc.), while others use variants which say that two or more variations of a particular product can be supplied (Morgan & Morley, 2002). A major additional concern is food safety regulations. Local producers have trouble achieving the certification standards that national distributors and institutions require, giving larger scale producers an advantage.

The lack of consistent policies of various sorts is particularly critical for hospitals and health care facilities since they have a major role to play in helping to establish and implement means to reverse the trend of rising health care costs, health care inequalities, and increasing rates of diet related diseases. However, when suppliers are not working together toward a common goal of sustainability, it is difficult for health care facilities to procure local food without supporting legislation (Morgan & Morley, 2002). Furthermore, as pointed out in the Kaiser Permanente Institute for Health Policy (2009), legislation is difficult to write when a single policy will not result in an improved food system. In order to achieve meaningful change, government ministries must work together to create a series of public sector procurement policies that complement one another and affect different aspects of the food system.

Logistics: Institutional local food procurement requires three key partners: institutional buyers, the producers, and go-betweens/distributors (MacLeod & Scott, 2007). Without the cooperation and commitment of these three groups, local food procurement becomes exceptionally difficult. Although advances have been made in specific regions, supply chain difficulties still exist and have a significant influence on the viability of local food procurement. For example, the current purchasing model within the National Health Service in the UK favours large suppliers, creating a major barrier at the institutional level to sustainable food procurement (Morgan & Morley, 2002). In addition, lack of knowledge about local demand and about the procedures for bidding for public contracts has been identified as a perceptual barrier that keeps small and medium-sized businesses from becoming involved in sustainable food procurement at the local level. As a result, hospitals and other institutions have been found to be in a vicious circle where they are waiting on their suppliers to offer more sustainable food options, while the suppliers are waiting for the hospitals and institutions to demand these options (Hockridge & Longfield, 2005).

A UK study concluded that medium-sized suppliers/distributors should be utilized in addition to larger-scale operations. The main advantages of medium-sized suppliers are that:

- unlike small suppliers, most are already audited and accredited, they can provide bulk consignments of local produce and thus offer competitive prices, and they can employ quality control staff
- they are more flexible than large suppliers (Hockridge & Longfield, 2005).

According to The Ecology Action Centre in Nova Scotia based on an examination of notable global local food movements, inconsistent supply and pricing of food due to seasonality is another major issue with local food procurement, as is the fact that local farmers tend to be loosely organized, which creates coordination of supply issues (MacLeod & Scott, 2007).

It has also been found that a voluntary approach is unlikely to achieve local food objectives since not everyone shares the passion and energy needed to create the changes needed with

regard to local food logistics and supply. Government intervention may be required (DEFRA, 2010).

Facilities: There is a clear trend in public institutions (schools, universities, hospitals, etc.) toward the use of food service companies and pre-prepared or processed food. Academic studies have looked at the differences in cost and efficiencies between different types of institutional food service systems and found that "hybrid, cook-chill and external systems contributed to a reduction in total production costs and were also more cost effective than the cook-fresh system" (Nettles, Gregoire & Canterm, 1997; Assaf, Matawie & Blackman, 2008).

However, research has also shown that technologies that give food a longer shelf life (such as cook-chill systems) require more decentralized plating and handling, and increase the number of skilled staff needed (Engelund, Lassen & Mikkelsen, 2007). Furthermore, hospitals with their own kitchens have an easier time incorporating local foods because they have the capacity to receive food directly from farmers (DEFRA, 2010). Notably, the afore-mentioned study of 33 Ontario hospitals and long term care facilities in Summer 2010 concluded that that LTCs may be in a stronger position than hospitals to use local food because they tend to have full-scale kitchens and employ more conventional food preparation methods, whereas many hospitals in Ontario have moved to bulk procurement and preparation (Canadian Coalition for Green Health Care, 2010).

Underlying each of the three major types of barriers (policy, logistics, and facilities) are concerns related to money, time and education. Overcoming these barriers will require cooperation on the part of producers, distributors and customers, and a common goal of linking long term food security and sustainable agriculture to the building and development of local supply chains (Friedmann, 2006).

2.5 Decision Making in Health Care

Decision making in health care is complex because it involves a number of qualitative and quantitative factors (Nettles, Gregoire & Canter, 1997), including:

1. The goal of any food service director should be to provide patients with food that meets their daily nutritional requirements, satisfies and satiates the patient, increases morale and is safe to consume (Hartwell & Edwards, 2001).

2. Food service managers and directors are under increasing pressure to reduce their department's operational costs while maintaining the quality of service and productivity (Hockridge & Longfield, 2005).

3. Several operational and facility-based factors must be taken into consideration when selecting a food service system. In additional to institutional policies and government regulations, these factors include:

(a) flexibility in meal service, employee training and centralization of production
(b) labor, food and utility costs, plus construction variables
(c) financial variables such as payback, return on investment and break-even
(d) level of support from hospital administration and the community (Nettles, Gregoire & Canter, 1997).

Interestingly, a study that looked at the process of determining whether to use a conventional or cook-chill system found that the decisions made by the food service directors who selected a conventional system considered fewer issues than those who selected the cook-chill system. Food service directors who selected the cook-chill system were more likely to consider more issues, visit other operations and place more importance on the projected labor and investment costs (Nettles, Gregoire & Canter, 1997).

2.6 Local Food Efforts around the World

Despite the challenges and barriers noted in previous sections and the complexity of decision-making with regard to the use of local food in health care, many efforts have been made to increase the use of local food in hospitals and long term care facilities.

In the mid 2000's, the UK undertook the Hospital Food Project to test the practicality and feasibility of implementing sustainable food procurement policies in their hospitals. Two lead organizations served as brokers to facilitate the matching of potential food suppliers with individual hospital requirements. The success of the project was mixed, with some hospitals having an easier time implementing local food policies than others due to money and time constraints (Hockridge & Longfield, 2005). Some of the successful hospitals attributed their success to an enthusiastic catering manager. More recently, some hospitals in this project have reported that they have exceeded their target of 10% local foods (Sustainable Development Commission, 2010).

In the US, several universities and government bodies, such as the San Francisco Department of Public Health, have created local food systems as joint efforts between students, professors, and professionals (such as chefs) (MacLeod & Scott, 2007). As well, the USDA has created a program called Farm to School, which seeks to provide local food to schools across the country (Joshi, Kalb & Beery, 2006). A "Hospitals for Healthy Food Pledge" which includes support for local sustainable foods has been signed by over 280 US hospitals (Health Care without Harm website, 2010) and the movement is facilitated by a local food for health care working group.

Another noteworthy example is that Brazil uses local food systems to strengthen food security and improve rural economic conditions. The Brazilian government also works to ensure that local farmers benefit directly from these efforts. Initiatives such as promoting direct milk and crop purchases have provided rural Brazilian communities with more stable food prices, the basis for creating small farmer cooperatives, and increased access to safe food of increased quality for consumers (Rocha, 2009).

2.7 Best Practices in Local Food Procurement in Health Care

Researchers have uncovered four possible best practices to date:

(a) The use of intermediaries

The use of not-for-profit organizations or industry groups to coordinate the buyers and suppliers has been identified as an efficient way to manage otherwise complex supply chains. The use of these groups can assist in local food procurement by carrying out contract negotiations on behalf of the buyers and sellers, clarifying national and regional procurement regulations and assisting in disseminating educational initiatives to support policy around local procurement.

These groups also help farmers and food service suppliers understand each other's challenges, capacities, and priorities (MacLeod & Scott, 2007).

(b) CSAs and local farm co-ops

CSAs (Community Supported Agriculture) allow interested consumers to purchase a share of their output (via a "membership" or a "subscription") and in return receive a box (bag, basket) of seasonal produce each week throughout the farming season. Encouragement and support for CSAs and local farm co-operatives is recommended since they can increase the number of suppliers available to these facilities and therefore they can help to alleviate some of the issues of supply quantities demanded by health care facilities (MacLeod & Scott, 2007).

(c) Facility champions and community builders

At the institutional level, enthusiastic food service managers have been found to be responsible for the success of local food programs in hospitals (MacLeod & Scott, 2007). Getting others involved, such as doctors and nutritionists, in hospital local food procurement has also been found to result in greater organizational autonomy and sense of community (Morgan & Morley, 2002). Getting these individuals involved in supplier visits, promotional event planning and execution, and education initiatives was found to result in a sense of responsibility to their organization.

(d) Menu development

Menu development is a critical component of an effective local food program for health care facilities. Working with dietitians to develop seasonal menus that feature locally available products (Hockridge & Longfield, 2005) has been found to be an effective way to involve the hospital community. This includes the kitchen staff and ensuring that they had both adequate training and kitchen facilities equipped to handle the preparation and serving of locally produced menu items (MacLeod & Scott, 2007).

2.8 State of Local Food Procurement in Ontario

Health care facilities have the potential to represent a large share of the institutional market for local food. With 30,000 hospital beds at close to 100% occupancy rates (Health Systems Fact Sheet, 2010), Ontario hospitals serve 32,850,000 meals to patients every year, and hospital cafeterias provide meals for employees and visitors. Sourcing hospital food has traditionally not taken into account where the foods are grown but, in the last few years, interest in purchasing local foods for health care facilities has increased (Varangu, 2010).

That said, in Canada, the creation of a national action plan is challenging due to the nation's geographic, social and political features (Koc et al., 2008). Thus, most of the momentum around the country in local food systems is due to efforts at a regional level and many of the initiatives are still in their early stages (MacLeod & Scott, 2007).

For example, Local Food Plus (LFP) is an Ontario-based organization. It was the first of its kind in Canada to certify producers as sustainable and to work with public institutions to facilitate the procurement of local food (Local Food Plus, 2011A). To date, LFP has certified over 100 farmers and processors across Ontario (Local Food Plus, 2011B). LFP has been working with the University of Toronto since 2006 toward their target of 10% local food in their cafeterias and

residences. The City of Toronto has also created similar local food procurement policies to take advantage of the vast green belt that surrounds the city (Toronto Public Health, Food Connections, 2010).

The Region of Waterloo Public Health Department has shown leadership in exploring and supporting the issues surrounding local foods (Blay-Palmer & Koc, 2010). Several hospitals in Ontario, including St. Mary's General Hospital in Kitchener, have hosted local food markets to teach and promote health and to show strong environmental leadership (Maan-Miedema, 2008). St. Joseph`s Health Centre in Guelph has also made a commitment to change current food procurement practices and get more Ontario produced food into the hands of their customers (Broader Public Sector Investment Fund website, accessed August 2011).

The food service industry is also making commitments to and investments in local food. Gordon Food Service Ontario has over 500 public sector customers and is committed to developing an internal process to purchase and distribute local food to its customers (Broader Public Sector Investment Fund website, accessed August 2011).

2.9 Gaps in the Literature

The following knowledge gaps were uncovered in this literature review:

1. Although studies have looked at the operational performance of the different health care food service systems and the factors that are taken into account when choosing one system over another, there has been little research into the full variety of procurement and preparation practices used by health care food service managers and directors. This needs to be better understood in order to provide a basis for assessing the potential for incorporating more local food into the Ontario health care system.

2. Although there is existing literature on consumer attitudes and perceptions toward local food and food service directors' motivations to purchase local food, investigation is needed into how food service managers and their superiors actually view local food and its role in health care. These individuals determine what is served in their institutions. Their amenability to change is a key factor in assessing the likelihood of local food becoming a priority, practice or routine for their facilities.

3. Although research elsewhere has demonstrated that there are several obstacles and barriers with using locally grown food, clarity is needed regarding the barriers and opportunities that exist in Ontario to provide a context for any plan to increase the use of local food in this province's health care sector. This is because Ontario's health care system administrators are under a great deal of pressure to help the provincial government achieve its promises regarding health care to taxpayers. Like other public services, they are being mandated by their superiors to minimize department costs due to provincial deficit and debt problems. Furthermore, as a result of the 2011 *Excellent Care for All Act*, they must develop annual quality improvement plans, benchmark their progress regularly to ensure all of their internal practices are in line with other units in the province, and report online against certain indicators.

3.0 RESEARCH OBJECTIVES

Given the current literature available on the use of local food in health care, it is apparent that academic and practitioner knowledge of the challenges and opportunities associated with increasing the use of local food in Ontario is somewhat limited at this point in time. Research is clearly needed to provide a solid foundation for detailed plan development and implementation in this area. To meet this need, the following specific research objectives were set for this portion of this OMAFRA/University of Guelph Partnership project:

1. Establish the current state of food provision in Ontario's health care system.

2. Gain an in-depth understanding of the opportunities and constraints impacting food provision decisions in Ontario's health care system.

3. Provide alternative perspectives on hospital food provision and the potential for changing these practices.

4.0 ONTARIO'S HEALTH CARE SYSTEM

Ontario's health care system is very complex. According to the Ontario Ministry of Health and Long Term Care Master Numbering System document (MOHTLC, 2011), health care in this province involves 2213 facilities, services, and programs, ranging from children's aid to public health laboratories to telehealth. The Ministry assigns them to 37 broad service classifications. This project focuses on facilities and/or programs that provide ongoing food service and fall under one or more of the following 6 Ministry classifications:

Acute Care Treatment Hospitals
Chronic Care Treatment Hospitals (Complex Continuing Care)
Homes for the Aged
Nursing Homes (Long Term Care Beds)
Interim Long Term Care
Temporary Long Term Care

Acute Care and Chronic Care Hospitals are referred to throughout this document as "Hospitals". Homes for the Aged, Nursing Homes, and facilities providing Interim Long Term Care and Temporary Long Term Care are referred to as "Long term Care" or "LTCs". Facilities that have acute/chronic units and also provide some form of long term care are referred to as "Both".

5.0 METHODOLOGY

To achieve the three research objectives stated above, data was gathered on seven broad topics:

1. ***The current practices being used to procure and prepare food (in general) in Ontario hospitals and LTCs.***
2. ***The personnel involved in procuring and preparing food in Ontario hospitals and LTCs and the factors they take into account in their decision-making.***
3. ***Making changes to current procurement, preparation and decision-making practices.***

4. ***The current involvement with local food among Ontario's hospitals and LTCs.***
5. ***The current involvement with local food among the food suppliers contracted by these facilities.***
6. ***Current attitudes/perceptions regarding local food.***
7. ***Attitudes/perceptions toward the future use of local foods.***

Given the number of topics to be investigated, and the resulting breadth and depth of data needed, using a single source to gather all of this information was deemed inadequate. Rather, three key stakeholder groups were used as information sources: (1) food service managers with day-to-day responsibility for meeting the food needs of patients and visitors at Ontario's health care facilities; (2) senior health care administrators with strategic management and fiscal responsibility for Food Service departments; and (3) local food growers, distributors and processors who are interested in working with the Ontario health care system.

Each of the above stakeholder groups was approached separately using a methodology appropriate to the type and amount of information needed from them. The research methods employed were:

1. **An internet-based survey of food service managers across Ontario.** Using the survey technique allowed for recruiting participants from all regions of Ontario and for gathering information across all seven of the above-noted topic areas. Importantly, it provided input on the potential to increase the use of local food in health care from the perspective of the people with day-to-day operational responsibility and authority for food service decisions.

2. **One-on-one, in-depth personal interviews with senior hospital administrators**. In-depth interviews allowed for gathering sensitive strategic and financial information that food service managers may not be privy to, and provided an alternative, higher level administrative perspective on all seven of the above-noted topic areas.

3. **In-person focus groups with food growers, distributors, and processers**. These focus groups provided the supplier perspective on health sector food provision and the potential for changing current practices to incorporate more local food. Given the current limited level of involvement with health care by this stakeholder group, both experienced and inexperienced participants were recruited in order to generate ideas and discuss approaches. For this reason as well, the focus group discussions only dealt with topic areas 5-7.

The specific questions asked in the food service manager survey were generated by the research team. Relevant questions from previous research were used if they were deemed appropriate by the team. The proposed instrument was checked for face validity by food service managers and senior administrators at St. Mary's Hospital (Kitchener) and Aramark, and changes were made accordingly. The proposed methodology, survey instrument, and participant consent form were checked and approved by the University of Guelph's Research Ethics Board (REB Protocol #10AU012). A respondent pool database of 267 food service managers was created by having research assistant #1 contact facilities and ask for their food service manager's name and contact information. The field researcher then contacted each potential respondent by telephone and invited him or her to participate in the study by logging on to Survey Monkey. The survey was fielded during October 2010-March 2011.

The interview guide for the in-depth interviews was generated by the research team. It consisted of some questions asked in the food manager survey and several new questions

needed to draw out senior administrator information, attitudes and concerns. The proposed methodology, interview guide, and participant consent form were checked and approved by the University of Guelph's Research Ethics Board (REB Protocol #10OC031). Research assistant #1 developed the respondent pool for the in-depth interviews at the same time as she developed the pool for the survey. Senior administrators from this pool were recruited and interviewed over the telephone by the field researcher. The interviews were conducted during January-March 2011, and transcribed by research assistant #3.

The focus group guide was developed by the research team. It consisted of a few questions asked in the above two studies plus several new questions needed to draw out supplier information, attitudes and concerns. The proposed methodology, focus group guide, and participant consent form were checked and approved by the University of Guelph's Research Ethics Board (REB Protocol #: 11JA043). The respondent pool for the focus groups was developed by field researcher #3 from the Coalition for Green Health Care. A total of 6 focus groups were held in Kitchener, Barrie, Ottawa, and Toronto. They were conducted in April 2011 by the field researcher, and transcribed by research assistant #3.

6.0 SAMPLE SIZES AND CHARACTERISTICS

6.1 Survey of Food Service Managers

Of the 267 food service managers invited to participate in this survey, 146 (54.7%) completed the online questionnaire. This followed telephone contact from 1-3 times by the field researcher to encourage their participation. However, 9 of these surveys were only partially completed (less than 25% of questions answered) and were deleted from the sample. Therefore, the final sample size was 137 respondents, which represents a response rate of 51.3% of those invited to participate and 16.7% of all of the Hospitals and LTC's in Ontario.

As can be seen in Table 1 on the following page, of the 137 respondents, 55 were employed by Hospitals, 61 by LTCs and 21 by the "Both" facilities. Because the Ontario health care system has 3 times more LTCs than Hospitals, we elected to survey a roughly equal number of each of these types of facilities rather than to allow the LTC findings to dominate the overall results of this study.

As a result of this decision, the Hospital subsample of 55 represents a larger portion of all of the Hospitals in Ontario (31.1%) than the LTC subsample represents of all of the LTCs in Ontario (9.9%). We are nevertheless confident that these subsamples are reflective of their facility type because they were selected to include all sizes of facilities (as measured by number of patient beds – see Table 2 for details). They were also drawn from across all of Ontario's LIHNs (see Table 3 for details).

TABLE 1 – SURVEY SAMPLE RELATIVE TO THE ONTARIO UNIVERSE OF HOSPITALS AND LONG TERM CARE FACILITIES

	Ontario Universe* (# facilities)	Survey Sample (# facilities)	Survey Sample as % Universe
Total Hospitals and LTC's	**817**	**137**	**16.7**
Facilities by Type:			
Hospitals (Acute and Chronic Care)	177	55	31.1
LTC's (Nursing Homes and Homes for the Aged)	619	61	9.9
Both (Hospitals with LTC units)	21	21	100.0
Facilities by LIHN:**			
1 – Erie St. Clair	47	6	12.8
2 – South West	106	14	13.2
3 – Waterloo Wellington	43	10	23.3
4 – Hamilton Niagara Haldimand Brant	105	9	8.6
5 - Central West	27	7	25.9
6 – Mississauga Halton	33	2	6.1
7 – Toronto Central	55	8	14.5
8 - Central	57	7	12.3
9 – Central East	79	13	16.4
10 – South East	50	4	8.0
11 - Champlain	80	10	12.5
12 – North Simcoe Muskoka	34	5	14.7
13 – North East	70	16	22.9
14 – North West	31	10	32.3

* Source: Ontario Ministry of Health and Long term Care, Master Numbering System, April 2011
** This information was not provided by 16 respondents.

TABLE 2 – HOSPITAL, LTC AND "BOTH" SAMPLES BY # PATIENT BEDS (Acute & LTC)

Data shown is number of survey respondents	Hospitals (n=48)	LTC'S (n=59)	Both (n=18)	Total (n=125)*
0-61 beds	13	9	9	31
62-106 beds	6	23	3	32
107-217 beds	7	20	4	31
218-1100 beds	22	7	2	31

* This information was not provided by 12 respondents.

TABLE 3 - HOSPITAL, LTC AND "BOTH" SAMPLES BY LIHN

Data shown is number of survey respondents	Hospitals (n=49)	LTC'S (n=54)	Both (n=18)	Total (n=121)*
1 – Erie St. Clair	4	2	0	6
2 – South West	7	7	0	14
3 – Waterloo Wellington	6	3	1	10
4 – Hamilton Niagara Haldimand Brant	3	5	1	9
5 - Central West	2	5	0	7

6 – Mississauga Halton	1	1	0	2
7 – Toronto Central	3	3	2	8
8 - Central	2	5	0	7
9 – Central East	5	5	3	13
10 – South East	0	4	0	4
11 - Champlain	4	4	2	10
12 – North Simcoe Muskoka	2	2	1	5
13 – North East	6	6	4	16
14 – North West	4	2	4	10

* This information was not provided by 16 respondents.

6.2 Interviews with Senior Administrators

The desired respondents for this portion of the study were senior administrators with responsibility for food service management, i.e. administrators that food service managers report to either directly or indirectly through another layer of administration. A total of 24 interviews were conducted, lasting 30 to 60 minutes each. Two were set aside and used to inform other aspects of this research. One was actually a food service manager, so the information provided in this interview was used to help analyze the survey data collected in the first stage of this research. The other was employed by a food service contractor. This interview was used to supplement the information gathered for the third stage of this study (the focus groups with growers, distributors and processors).

The titles held by the 22 qualified interview respondents included CEO, VP, Director, Executive Director, and Administrator. All had direct or indirect responsibility for food service at their facility. The majority (13) were employed by Hospitals, while 7 worked at LTCs and 2 worked at "Both" facilities. They work across Ontario, representing 11 of the 14 LIHNs.

6.3 Focus Groups with Food Growers, Distributors, and Processors

A total of 6 focus groups were conducted in 4 Ontario cities (Kitchener, Barrie, Ottawa and Toronto). Three of the groups were with farmers/food growers (Kitchener, Ottawa and Barrie) and three were with distributors/processors (Kitchener, Ottawa and Toronto). The total number of respondents was 21, of whom 14 were local farmers/food growers and 7 were local distributors/processors.

The respondents were involved with a wide variety of food (produce, vegetables, and beef). All were employed by small to medium size organizations. No large-scale operations were represented.

None of the respondents had experience selling to the health care or other major public sectors, although some had supplied their products to schools and private daycares in small volume. However, many had experience with approaching the public sector and understood key issues related to supply such as packaging, processing and pricing.

7.0 OVERVIEW OF FOOD SERVICE IN THE ONTARIO HEALTH CARE SYSTEM

7.1. Profile of health care facilities in Ontario

Although food service represents a very small portion of a health care facility's budget[2], it is an important operational consideration in Ontario's hospitals and LTCs. As can be seen in Table 4 below, the survey of food service managers (FSMs) suggests that the average health care facility in Ontario has 168 patient beds and serves slightly over 3500 patient meals per week or almost 184,000 patient meals per year. By type of facility, an average hospital serves more patient meals than an average LTC or "Both" facility, in large part because hospitals have a higher average number of beds. Therefore, hospitals average approximately 250,000 patient meals per year, whereas "Both" facilities average around 150,000 and LTCs average around 136,000 meals per year.

TABLE 4 – AVERAGE NUMBER OF PATIENT MEALS BY TYPE OF FACILITY (Source: Survey of FSMs)

	Hospitals (n=48)	LTCs (n=59)	Both (n=18)	Total (n=125)
Average # Patient beds	232	125	142	168
Average # Patient meals per week*	4864	2618	2982	3533
Average # Patient meals per year**	252,298	136,136	155,064	183,716

* calculated by multiplying average # patient beds by 21
** calculated by multiplying average # patient meals per week by 7

The three types of health care facilities investigated all provide other sources of food for patients, staff and visitors in addition to bedside patient service. As a result, the average number of meals served per year at each type is higher than is indicated above in Table 4. However, it is difficult to estimate how much higher because there is significant variation across Ontario health care facilities in terms of other food sources. What is apparent from both the survey of FSMs and the interviews with senior administrators is that, broadly speaking, hospitals primarily supplement in-patient bed service with cafeterias and vending machines, LTCs rely on dining rooms supplemented by in-patient bed service, and "Both" facilities, as hybrid institutions, tend to be more diverse, offering some combination of in-patient bed service, cafeterias, vending machines, Meals on Wheels, and dining rooms. Details are provided in Table 5 below.

TABLE 5 – MEANS OF DELIVERING FOOD BY TYPE OF FACILITY (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
In-patient bed service	**100.0**	**47.5**	**95.2**	**75.9**
Cafeteria	**94.5**	21.3	**85.7**	**60.6**
Vending machines	**78.2**	14.8	**61.9**	**47.4**
Other (primarily dining rooms)	12.7	**70.5**	33.3	41.6
Meals on Wheels	20.0	21.3	**61.9**	27.0
Fast food/quick service vendors/street vendors inside the facility	29.1	4.9	14.3	16.0

As indicated in Table 5, fast food outlets such as Tim Horton's or coffee shops run by food service contractors or volunteer auxiliaries received relatively few mentions from the FSMs. This may be because they are run by groups external to the facility and thus not of concern to FSMs. However, virtually all of the senior administrators interviewed considered them to be

[2] For example, in its 2011/12 Operating Budget and Business Plan, Alberta Health Services reported that only $75 million (less than 1%) of its $10.477 billion in expenditures in 2009/10 for the entire province was spent on food and dietary supplies. No comparable information was found for Ontario.

important, in large part because the facility often receives a portion of their profit. When asked to discuss their financial expectations for different sources of food (see Table 6), senior administrators agreed that in-patient bed service is solely a cost and that many of their cafeterias run at breakeven despite being given mandates to be revenue generators. Fast food outlets are typically the only consistently profitable aspect of food service in their facilities.

TABLE 6 – COST/PROFIT/BREAKEVEN EXPECTATIONS FOR DIFFERENT FOOD SOURCES
(Source: Senior Administrator Interviews)

Data is number of respondent mentions	Hospitals (n= 13)	LTCs (n = 7)	Both (n=2)
In-patient bed service	Cost – 13	Cost – 7	Cost – 2
Cafeterias	BE* – 4 BE or better - 3 Profit - 6		Profit - 2
Vending machines	Profit - 4	Cost - 1 BE or better - 1 Profit - 3	Profit - 1
Dining Rooms		Cost - 7	BE - 1
Fast food/quick service vendors inside the facility/kiosks	Profit - 11	Profit - 1	BE - 1 Profit -1

* BE = break even

With regard to day-to-day management of the major food outlets controlled by health care facilities, most food service managers at Ontario's Hospitals and "Both" facilities are responsible for both patient meals and cafeteria meals (Table 7). Most food service managers in LTC's are only responsible for patient meals because their facilities generally do not have cafeterias.

TABLE 7 – FOOD SERVICE MANAGER RESPONSIBILITIES (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
Patient meals	27.3	**80.3**	14.3	48.9
Cafeteria meals	-	-	-	-
Both	**70.9**	19.7	**85.7**	50.4

As can be seen below in Table 8, among the facilities that have cafeterias (88 of the facilities surveyed), the majority are still being managed directly by facility personnel, but external contractors have made inroads, particularly into hospital and "Both" cafeterias.

TABLE 8 – WHO MANAGES YOUR FACILITY'S CAFETERIA? (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospitals (n=54)	LTCs (n=16)	Both (n=18)	Total (n=88)
Facility/hospital personnel	**64.8**	**81.3**	**77.8**	70.5
External contractors	29.6	-	16.7	21.6
Combination of above	5.6	6.3	5.6	5.7
Other	-	12.5	-	2.3

According to the survey of FSMs, health care facilities in Ontario employ an average of 28 people in food service (see Table 9 on the following page). This average is heavily influenced by the hospitals in the system, which average 38 food service employees compared to 21 for LTCs and 23 for "Both" facilities.

However, it is important to note that not all food service employees are full-time. Indeed, the norm across all types of facilities appears to be to employ more part-time staff than full-time in

food service. The skew to part-time is greater in LTCs and "Both" facilities which, as previously noted, generally have fewer in-patient beds than hospitals.

TABLE 9 – FOOD SERVICE STAFF BY TYPE OF FACILITY (Source: Survey of FSMs)

Data is in absolute numbers	Hospitals (n=51)	LTCs (n=61)	Both (n=18)	Total (n=130)
Average # people employed in food service	38.0	20.7	22.7	27.8
Average # full-time	18.6	7.7	9.8	12.3
Average # part-time	19.4	13.0	12.9	15.5

If full-time and part-time employees are weighted at 1.0 FTE and 0.5 FTE respectively, the resulting FTEs can be combined with the average # patient meals per year from Table 4 to estimate the number of patient meals served per year and per day by every FTE. These calculations are shown in Table 10 below. They suggest that, in addition to having more food service employees, hospitals are better staffed for food service preparation and delivery than LTCs and "Both" facilities because their FTEs serve fewer meals. However, this staffing difference may be explained by the fact that, as indicated in Table 5, food service in hospitals is primarily offered through individual patient bedside service, while LTCs and "Both" facilities have dining rooms that serve groups of patients at a time.

TABLE 10 – ESTIMATED NUMBER OF MEALS SERVED PER FTE

	Hospitals	LTCs	Both	Total
Average patient meals per year	252,298	136,136	155,064	183,716
Average FTE's employed in food service	28.3	14.2	16.3	20.1
Average # patient meals per year per FTE	8915	9587	9513	9140
Average # patient meals per day per FTE (index is versus total)	24.4 (98)	26.3 (105)	26.1 (104)	25.0 (100)

7.2 Summary of Overview

1. **Food service in Ontario's health care system is quite complex and, due to the multiple sources of food available within individual facilities, not entirely under the control of facility management**.

2. **Fortunately from the standpoint of incorporating more local food into the health care system in Ontario, health care facilities typically control the food offered through the major delivery channels: bedside service, dining rooms and cafeterias.** Unfortunately, all of these tend to be "costs of doing business" rather than sources of revenue. This suggests that a major concern of food service management is operating within a budget, and that efforts to find opportunities for change and improvement may be somewhat narrowly focused on finding efficiencies.

3. **In terms of human resources, staffing for food service typically involves a food service manager and multiple full-time and part-time staff.** The heavy use of part-time staff is consistent with having to operate efficiently within a budget. However, it also suggests flexibility in staffing that might be beneficial from the standpoint of incorporating more local food.

4. **There are some notable differences in food service among Hospitals, LTCs and "Both" facilities that may impact the potential demand for local food by type of facility**. Hospitals typically have more beds than LTCs and "Both" facilities, therefore they typically serve more meals and employ more people in food service. Furthermore, the majority of hospitals and "Both" facilities make food available through bedside service and cafeterias, whereas LTCs primarily deliver food through dining rooms. As a result, the Table 4 estimates of the number of meals served per year are understated more for hospitals and "Both" facilities than for LTCs. When looking at Table 4, it might be concluded that hospitals and "Both" facilities represent greater potential for local food sales. However, there are considerably more LTCs in Ontario (619) than hospitals (177) and "Both" facilities (21), making the LTCs a much larger portion of the health care system than the information shown thus far suggests.

5. **LTCs may have greater potential for using local food than acute care facilities**. Table 11 below estimates the number of patient meals served per year for the three types of facilities by multiplying the actual number of facilities in Ontario by the estimated number of patient meals served per year from Table 4. This does not include cafeteria meals and thus continues to understate hospital and "Both" meals. Nevertheless, it demonstrates the attractiveness of LTCs in terms of local food potential.

TABLE 11– ESTIMATED NUMBER OF TOTAL PATIENT MEALS BY TYPE OF FACILITY

	Hospitals	LTCs	Both	Total
Number of facilities in Ontario	177	619	21	817
Average # Patient meals per year	252,298	136,136	155,064	
Total Estimated # Patient Meals per year	44,656,746	84,268,184	3,256,344	132,181,274
(% of total)	(33.8%)	(63.8%)	(2.4%)	(100.0%)

8.0 FINDINGS AND DISCUSSION BY TOPIC AREA

8. 1 Topic 1: *The current practices being used to procure and prepare food (in general) at Ontario hospitals and LTCs*

8.1.1 Food Procurement

Hospitals, LTCs and "Both" facilities purchase food from several sources. FSMs were asked where they buy specific categories of food – fresh fruit; fresh vegetables; bread, pasta and baked goods; meat and poultry; fish; eggs; dairy; whole grains; juices/ciders; canned fruit; frozen fruit; canned vegetables; frozen vegetables. Their responses (see Table 12 on the following page) indicate that:

(a) In every food category, all three types of facilities buy 50-80% of their food through distributors or service companies, then supplement as needed with purchases from grocery stores or local growers.
(b) Their supplemental purchases are more likely made from a grocery store than a local grower. The data suggests that this may occur because a broader range of food category needs can be met at grocery stores.
(c) The food categories they purchase most from local growers are fresh fruit and fresh vegetables.

TABLE 12 – WHAT PERCENT OF FOOD IS PURCHASED WHERE? - BY TYPE OF FACILITY (Source: Survey of FSMs)

Data is percent of facility sample; rows add to 100%	Hospitals (n=38)				
	Local Growers*	Grocery Store	Food Distributor or Service Company**	Other	Do Not Know
Fresh Fruit	**7.2**	**26.2**	**59.5**	4.8	2.4
Fresh Vegetables	**7.5**	**20.0**	**65.0**	2.5	5.0
Bread, Pasta and Baked Goods	3.1	9.4	**65.7**	18.8	3.1
Meat and Poultry	-	3.8	**76.9**	7.7	11.5
Fish	4.3	-	**78.2**	-	17.4
Eggs	4.2	-	**75.0**	12.5	8.3
Dairy	3.3	10.0	**73.3**	13.3	-
Whole Grains	-	14.8	**59.3**	3.7	22.2
Juices/Ciders	-	12.5	**70.8**	-	16.7
Canned Fruit	-	11.5	**65.4**	-	23.1
Frozen Fruit	-	4.3	**69.6**	-	26.1
Canned Vegetables	-	8.0	**68.0**	-	24.0
Frozen Vegetables	-	4.3	**78.3**	-	17.4

*farmers, farm co-operatives or farmers' markets ** fresh produce distributors, food suppliers, or food service suppliers

Data is percent of facility sample; rows add to 100%	LTCs (n=47)				
	Local Growers*	Grocery Store	Food Distributor or Service Company**	Other	Do Not Know
Fresh Fruit	**30.1**	**19.2**	**50.7**	-	-
Fresh Vegetables	**27.2**	**20.0**	**51.5**	-	1.4
Bread, Pasta and Baked Goods	-	21.3	**61.7**	8.5	8.5
Meat and Poultry	6.5	15.2	**63.0**	6.5	8.7
Fish	2.9	5.7	**74.3**	-	17.1
Eggs	2.7	10.8	**75.7**	2.7	8.1
Dairy	-	14.0	**72.1**	9.3	4.7
Whole Grains	2.7	8.1	**73.0**	-	16.2
Juices/Ciders	-	15.8	**71.1**	5.3	7.9
Canned Fruit	-	11.1	**69.5**	-	19.4
Frozen Fruit	-	8.3	**75.0**	-	16.7
Canned Vegetables	-	8.6	**71.4**	-	20.0
Frozen Vegetables	-	8.3	**75.0**	-	16.7

* farmers, farm co-operatives or farmers' markets ** fresh produce distributors, food suppliers, or food service suppliers

Data is percent of facility sample; rows add to 100%	Both (n=15)				
	Local Growers*	Grocery Store	Food Distributor or Service Company**	Other	Do Not Know
Fresh Fruit	**20.0**	**20.0**	**60.0**	-	-
Fresh Vegetables	**20.0**	**24.0**	**56.0**	-	-
Bread, Pasta and Baked Goods	14.2	14.3	**64.2**	-	7.1
Meat and Poultry	7.1	21.4	**71.4**	-	-
Fish	-	9.1	**81.8**	-	9.1
Eggs	8.3	16.7	**75.0**	-	-
Dairy	-	21.4	**78.5**	-	-
Whole Grains	-	16.7	**75.0**	-	8.3
Juices/Ciders	-	16.6	**75.0**	-	8.3
Canned Fruit	-	9.1	**81.8**	-	9.1
Frozen Fruit	-	16.7	**75.0**	-	8.3
Canned Vegetables	-	-	**75.0**	-	8.3
Frozen Vegetables	-	-	**81.8**	-	9.1

* farmers, farm co-operatives or farmers' markets ** fresh produce distributors, food suppliers, or food service suppliers

Three distinct types of businesses can be categorized as food distributors or service companies – fresh produce distributors, food suppliers, and food service suppliers.

"Fresh produce distributors" tend to be smaller, regional organizations, such as Don's Produce in Southwestern Ontario, that focus exclusively on fresh fruits and vegetables. Hospitals and LTCs often have an ongoing relationship with one fresh produce distributor but, because produce prices and availability vary so widely, they don't set up contracts that commit them and the distributor to certain volumes of annual purchases at a set price.

"Food suppliers" are usually large organizations that are contracted by individual facilities to provide them with raw or minimally processed food to use in preparing meals and snacks from scratch. As can be seen in Table 13 below, Sysco is the dominant food supplier in the Ontario health care system across all types of facilities.

"Food service suppliers" are also large organizations that are contracted by hospitals and LTCs to provide them with a wide variety of processed food and prepared meals. They can also be contracted to manage on-site food outlets such as cafeterias. Although Aramark received the highest number of mentions among our respondents, it does not appear to dominate food service supply in health care in the way that Sysco dominates food supply.

TABLE 13 – USE OF SPECIFIC FOOD & FOOD SERVICE COMPANIES (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent	Hospital (n=55)	LTC (n=61)	Both (n=21)	Total (n=137)
FOOD SUPPLIERS				
Sysco	**81.8**	**85.2**	**71.4**	**81.8**
GFS (Gordon Food Service)	36.4	21.3	19.0	27.0
Summit	14.5	13.1	9.5	13.1
Flanagan	7.3	3.3	9.5	5.8
FOOD SERVICE SUPPLIERS				
Aramark	**20.0**	**14.8**	**9.5**	**16.1**
Compass	10.9	1.6	14.3	7.3
Sodexo	5.5	3.3	-	3.6
Carillion	1.8	-	4.8	1.5
Other	20.0	18.0	14.3	18.2

Facilities often develop and arrange their relationships with different food distributors through GPO membership.

Group Purchasing Organizations (GPOs) are entities that leverage the collective buying power of their GPO members to obtain discounts from vendors. All three types of health care facilities investigated purchase food through GPOs, but to varying extents (see Table 14). Hospitals make heavy use of them for both patient meals (81%) and cafeteria meals (61%). LTCs generally use them for patient meals (72%) but are not as likely to use them for their cafeterias (31%). The "Both" facilities are mixed in their use of GPOs. The GPO most frequently mentioned by the respondent FSMs and senior administrators is HealthPro.

TABLE 14 – USE OF GPOs BY TYPE OF FACILITY AND TYPE OF MEAL (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	For Patient Meals			
	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
Yes, use GPOs	**81.8**	**72.1**	47.6	72.3
No, don't use GPOs	12.7	18.0	28.6	17.5
Don't Know	5.5	9.8	23.8	10.2

Data is percent of column; one answer per respondent	For Cafeteria Meals			
	Hospitals (n=54)	LTCs (n=16)	Both (n=18)	Total (n=88)
Yes, use GPOs	**61.1**	31.3	38.9	51.1
No, don't use GPOs	13.0	**62.5**	38.9	27.3
Don't Know	25.9	6.3	22.2	21.6

8.1.2 Food Preparation

The major food systems used in health care are conventional cooking, cook-chill, assembly-serve/cold plating, and bulk-re-therm. They are explained in Table 15 below.

It is important to note that these systems can be interpreted as being methods of preparation or methods of delivery. Post-survey interviews were conducted with several FSM respondents to determine how they interpreted these terms. These interviews confirmed that, as intended, respondents interpreted conventional cooking and cook-chill as meaning preparation on-site using recipes and fresh food. They interpreted assembly-serve/cold plating/and bulk-retherm as meaning that food is outsourced or pre-made.

TABLE 15 – FOOD SYSTEMS USED IN HEALTH CARE

	Conventional (preparation on-site)	Cook-Chill (preparation on-site)	Assembly-Serve/ Cold Plating/ (outsourced)	Bulk-Retherm (bulk-trolley) (outsourced)
Cooking method?	Yes -Food cooked from scratch on-site.	Yes -Food cooked from scratch, then blast-chilled. -used to create individual quick-frozen servings (IQF).	No – not a cooking method	No – not a cooking method
Food distribution system?	No – not a food distribution system	No – not a food distribution system	Yes -Centralized, belt line plating using IQF foods. Meals then delivered to patients.	Yes -Either buffet style self-serve or bedside plating from trollies.
Other notes	- Could be used to prepare foods that are served using bulk retherm and/or cold plating.	- Rarely used for food safety reasons - Primarily used to prepare foods that are served for cold plating	- Meals often plated up to 24 hours before service. - Patient has very little control over portion size, or entrée selection.	- Allows for patient control over entrée selection and portion sizes.

According to the survey of FSMs, health care facilities in Ontario use a combination of food preparation systems, but the combination varies substantially, both by type of facility and based on whether or not a facility has a cafeteria.

This research indicates that most Ontario hospitals have cafeterias. The hospitals with cafeterias use a wide variety of food preparation systems and there appears to be no norm among them. The most common system in these hospitals is conventional cooking, which is done by 46% of them most of the time or often (see Table 16 on the following page). However, although many hospitals never or rarely use assembly-serve (65%) or bulk retherm (60%), those that do use these systems use them most of the time or often.

As can also be seen in Table 16, hospitals without cafeterias are quite different. The vast majority use assembly serve/cold plating or bulk retherm most of the time or often. In other words, it appears that hospitals with cafeterias have generally retained the capacity to cook from scratch whereas hospitals without cafeterias have moved almost entirely away from scratch cooking and serve food prepared by their food service suppliers.

TABLE 16 – HOSPITALS: FOOD SYSTEMS USED FOR PATIENT MEALS (Source: Survey of FSMs)

Data is percent of row; subsample rows add to 100%	Hospitals with Cafeterias (n=40)				Hospitals w/o Cafeterias (n=15)			
SYSTEM USAGE FREQUENCY*	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**
Conventional	**23**	**23**	23	**31**	7	-	13	80
Cook-Chill	5	3	8	84	-	-	-	100
Assembly-Serve	**20**	**8**	8	**65**	**40**	**27**	-	33
Bulk Retherm	**10**	**18**	12	**60**	**27**		6	67
Other	5	3	5	87	-	-	-	100

* most = 80-100% of the time; often = 50-79%; sometimes = 20-49%; rarely/never = 1-19% of the time

Moving to Table 17 below, it can be seen that most LTC's do not have cafeterias and typically do most of their food service delivery through dining rooms. Unlike hospitals, conventional cooking is the primary food preparation system in LTCs whether or not they have cafeterias (84% of LTCs with cafeterias and 94% of LTCs without cafeterias use conventional cooking most of the time or often).

TABLE 17 – LTCs: FOOD SYSTEMS USED FOR PATIENT MEALS (Source: Survey of FSMs)

Data is percent of row; subsample rows add to 100%	LTCs with Cafeterias (n=12)				LTCs w/o Cafeterias (n=49)			
SYSTEM USAGE FREQUENCY*	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**
Conventional	**59**	**25**	8	8	**74**	**20**	-	6
Cook-Chill	-	-	-	100	4	-	4	92
Assembly-Serve	**-**	-	17	83	4	-	10	86
Bulk Retherm	8	8	33	51	6	-	12	82
Other	-	-	8	92	-	-	8	92

* most = 80-100% of the time; often = 50-79%; sometimes = 20-49%; rarely/never = 1-19% of the time

Like hospitals, the vast majority of the "Both" facilities have cafeterias (Table 18). Also like hospitals, most of the "Both" facilities with cafeterias prepare food using conventional cooking most of the time or often, whereas the "Both" facilities without cafeterias are more likely to have moved to food prepared by food service suppliers.

TABLE 18 – "BOTH" FACILITIES: FOOD SYSTEMS USED FOR PATIENT MEALS
(Source: Survey of FSMs)

Data is percent of row; subsample rows add to 100%	"Both" with Cafeterias (n=18)				"Both" w/o Cafeterias (n=3)			
SYSTEM USAGE FREQUENCY*	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**	**Most of the time**	**Often**	**Sometimes**	**Rarely/ never**
Conventional	**50**	**33**	11	6	**33**	**-**	-	67
Cook-Chill	-	-	6	94	**-**	**-**	-	100
Assembly-Serve	6	11	11	72	**-**	**33**	-	67
Bulk Retherm	-	6	22	72	**33**	**-**	33	33
Other	-	-	11	89	**-**	**33**	-	67

* most = 80-100% of the time; often = 50-79%; sometimes = 20-49%; rarely/never = 1-19% of the time

Overall, conventional cooking appears to be the most commonly used food system among Ontario's hospitals and LTC's. Breaking the data by geographic area (the GTA & Southwestern Ontario versus Northern & Eastern Ontario) and by facility size (99 beds or less versus 100+ beds) confirms this finding from those perspectives (see Table 19 on the following page). However, it also reveals that there is a trend away from conventional cooking for patient meals that is most evident in hospitals, larger facilities, and in the GTA and Southwestern Ontario.

TABLE 19 – FREQUENCY OF USING CONVENTIONAL COOKING FOR PATIENT MEALS
(Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Most of the time*	46	18	70	48	44	47	59	37
Often	21	16	21	28	16	26	22	18
Total of Frequent Use	77	**44**	91	76	**60**	73	81	**55**

* most = 80-100% of the time; often = 50-79%; total of frequent use = 50-100% of the time

"Both" administrator #1 explained his facility's decision to outsource food as follows:

> *"One of the reasons that we actually outsource both our in-patient food service and our outpatient retail space (is because of) staff wanting a better product than what we have when we are running it in-house. They wanted…a greater selection of food; they wanted more premium food as well. That was the big driver for us. The other driver for us…was we were losing money, meaning we were taking money out of our global funding budget to subsidize the food service piece…We went from putting a few hundred thousand in to making a substantial amount. (Our financial situation) turned around within 12 months."*

Hospital administrator #3 said that his facility is moving from scratch cooking to retherm *"because we are way off our peer group (in terms of) effectiveness and utilization of resources."*

However, hospital administrator #5 spoke about current best practices in food service, which call for a combination of outsourcing and on site food preparation rather than outsourcing alone:

> *"In the (old) hospital, we had gone to what they call a belt line sort of arrangement and had gotten out of quick food on site back in the mid 90's. The vast majority of our food was simply outsourced and brought into the facility and rethermed on site. We had a very low proportion of food prepared on site…95% outsourced and 5% on-site…As we were planning for the new hospital, we looked into best practices across the province in order to change our food service delivery model. So now we have a cook in the hospital again and we expect we are going to end up being 75-80% outsourced and 25-30% cooked on-site…We modeled it on some of the hospitals in Hamilton…that have evolved into a food service model (that) improve(s) patient satisfaction and the quality of product they are serving, and reduce(s) waste."*

Given the above comments and rationale, the trend toward outsourced food is likely to continue, although some capacity for on-site cooking will be retained.

8.1.3 Key findings and discussion: *The current practices being used to procure and prepare food (in general) at Ontario hospitals and LTCs*

1. **In both food procurement and food preparation, professional organizations are important partners for health care facilities.** Hospitals and LTCs clearly do not purchase all of their food directly, i.e. they do not operate as individual buyers dealing with numerous small suppliers. They make extensive use of large, professional organizations – GPOs, fresh produce distributors, food suppliers and food service suppliers. Furthermore, in terms of food preparation, there is a trend toward outsourcing prepared food that is occurring for sound reasons, such as improved food quality, increased food selection and financial benefit.

Therefore, the professional organizations that hospitals and LTCs work with must be part of any effort to infuse more local food into hospital and LTC menus.

2. **There are therefore at least four major target audiences for any effort to increase local food in Ontario's health care system:**
   (a) the health care facilities.
   (b) the GPOs they join to gain purchasing efficiency and lower their food costs.
   (c) the food suppliers they purchase ingredients from for the food they prepare using conventional cooking methods. Sysco dominates food supply in Ontario's health care system to such an extent that this organization must be a partner in any serious effort to significantly increase widespread use of local food among Ontario's hospitals and LTCs.
   (d) the food service suppliers that they purchase prepared food from.

   Fresh produce distributors are not on this list because they focus on fresh fruits and vegetables and, presumably, already purchase locally-grown food when it is in season.

3. **Hospitals and LTCs in Ontario vary substantially with regard to their food procurement and preparation methods.** The balance of on-site cooking and outsourcing appears to be dependent upon each individual facility's circumstances and resources. The appropriate balance may therefore always be different for each facility. If this is the case, it may be difficult to institute across-the-province approaches in food procurement that could help guarantee an increase in the use of local food in health care.

4. **Since facilities with cafeterias are more likely than facilities without cafeterias to have retained the capacity to cook on-site, they may be a narrower, but better avenue to initially target any effort to increase the use of local food in health care.**

8.2 Topic 2: *The personnel involved in procuring and preparing food in Ontario hospitals and LTC's and the factors they take into account in their decision-making.*

8.2.1 Key Personnel

As can be seen in Table 20 below, the key personnel in food service in all types of facilities are the same: food service managers, dietitians, other food service staff, and the VP responsible for food service.

TABLE 20 – WHO INFLUENCES YOUR FACILITY'S FOOD SERVICE? (Source: Survey of FSMs)

Data is "TO A GREAT EXTENT" percent (top option within a 5-point extent scale); data is percent of column; multiple answers per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
Food service manager	**92.7**	**98.4**	**100.0**	**96.4**
Dietitians	**49.1**	**39.3**	**33.3**	**42.3**
Other food service staff	**21.8**	**23.0**	**28.6**	**23.4**
VP responsible for food service	**12.7**	**21.3**	**14.3**	**16.8**
Other	3.6	13.1	14.3	9.5
CEO	3.6	8.2	-	5.1
Clinicians	1.8	1.6	4.8	2.2
Doctors	1.8	1.6	4.8	2.2
Nurses	1.8	1.6	-	1.5
Health care facility foundation	-	1.6	-	0.7

Both the FSMs and the senior administrators maintain that the FSM makes most of the day-to-day operational decisions such as menu development and is also the facility's primary contact person for dealing with food/food service suppliers. The next most influential person is the facility's dietitian, who ensures that the food requirements of specific patients are met.

8.2.2 Key Factors

At least 9 factors influence food planning and purchasing "to a great extent" in 50% or more of Ontario's health care facilities. This underscores the complexity of food service in Ontario's health care system.

The two most important influences are the food service budget (82%) and patient health needs (82%). They not only hold the top two positions of influence across all types of facilities, but also by geographic region and by size of hospital. The FSMs also agreed that the next two most important influences are food costs/prices (72%) and food safety regulations (68%). Notably, unlike the top two influences, both of these factors are beyond the control of the facility.

TABLE 21 – WHAT FACTORS INFLUENCE FOOD SERVICE? (Source: Survey of FSMs)

Data is "TO A GREAT EXTENT" percent (top option within a 5-point extent scale); data is percent of column; multiple answers per respondent	Total sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Food service budget	**82**	**82**	**90**	**62**	**86**	**75**	**79**	**86**
Patient health needs	**82**	**84**	**82**	**76**	**83**	**77**	**79**	**83**
Food costs/prices	**72**	**73**	**75**	**60**	**78**	**65**	**68**	**74**
Food safety requirements	**68**	**74**	**65**	**62**	**64**	**71**	**67**	**66**
Ontario legislation	57	48	**66**	55	53	**62**	**57**	**60**
Facility's food policies	56	45	63	**60**	**59**	50	54	55
Size/capabilities of food service staff	51	59	43	52	54	50	52	51
Facility infrastructure/ equipment	51	**61**	45	43	**59**	39	42	58
Patient complaints	50	40	57	52	43	57	48	55
Food suppliers' inventories	42	38	44	48	37	43	37	42
Proximity of food suppliers	20	19	17	33	13	30	21	19
District health requirements/guidelines	20	17	27	10	21	16	26	14
LIHN policies & guidelines	12	6	22	-	13	9	16	9
Medical personnel	3	4	3	-	3	4	5	-

There are ten other possible influences included in the above table. However, unlike the first four, they vary in their extent of influence across the different types of facilities, geographic regions and sizes of facilities. One of these other factors is patient complaints, which most FSMs considered only moderately influential. Hospital administrator #5 provided a possible explanation for this:

> *"A lot of people complain about hospital food. It's bland and it's this, it's that. Well, part of that is related to their normal diet. They are eating stuff that is way too salty and has too many other condiments in it. Healthy food has a different taste and a different look to it."*

Detailed information on two of the top four influences – food service budgets and food safety requirements - was gathered in the FSM surveys and senior administrator interviews. This information is summarized and discussed on the following three pages.

Food Service Budgets

According to the senior administrators, food service budgets in Ontario's health care facilities consist of three components: food, labour to prepare and deliver the food, and fixed costs/overhead allocated to each department by the facility's upper management. FSMs in hospitals are only concerned with food and labour; overhead is the responsibility of senior administrators.

Only 9 FSMs answered a survey question asking for their budgets including labour. Their answers ranged from $15.17-$35.72 per patient per day. The budget information provided in the senior administrator interviews ($28.00 - $35.00 per patient per day) suggests that the norm for hospitals is at the higher end of the FSMs' range. No FSMs or senior administrators for the LTCs or "Both" facilities provided their budgets including labour. However, two senior LTC administrators noted that the MOHTLC requires LTCs to budget .45 hours per resident per day for food delivery.

While few of the FSMs or senior administrators were willing or able to provide budget information including labour, many provided specific information on the food portions of their budget. As can be seen in Table 22 below, only $5.00-$10.50 is spent per patient per day in all three types of facilities investigated. Importantly, this must cover snacks and beverages as well as meals.

The MOHTLC provides a set amount of $7.33 per patient per day for LTCs, but does not allocate a set amount to hospitals. Nevertheless, as can also be seen in Table 22 below, hospitals budget a similar amount for their patients' food per day.

TABLE 22 – FOOD BUDGETS PER PATIENT PER DAY (Source: Survey of FSMs)

Data is dollars per day ex. labour	n	Mean* daily food budget	Median** daily food budget	Minimum	Maximum
Hospitals	19	7.9147	8.0000	6.00	10.00
LTCs	55	7.4653	7.3300	6.90	10.25
"Both"	11	7.7009	7.3300	5.00	10.50
Total Sample	85	7.5962	7.3300	5.00	10.50

* mean is the average of the data collected
** median is the actual midpoint of the data collected

Senior administrators were asked to explain how their total food service budgets are set. For hospitals, the FSMs typically work out the budget in conjunction with financial advisors or an advisory committee. They submit their proposed budget in detail to the senior administrator for approval. It is then submitted for higher level approval and reviewed at the same time as the budgets for all of the facilities' other departments. Hospital administrator #7 suggested that benchmarking versus other hospitals is a standard aspect of the process:

> *"One of the things we (do) when we are looking at budgets is a benchmarking exercise where we compare ourselves to other hospitals and how we are performing in terms of the costs. We often call another hospital to ask 'how did you get so low?' We are the benchmark hospital at this point because our cost is quite low compared to other facilities."*

For LTCs that are part of a chain, the food service budgets for all of the chain's units are determined by headquarters and each unit must operate with what it is given. Independent LTCs build their budgets based on the food and labour costs mandated by the MOHTLC. As LTC administrator #2 said:

> *"It's kind of a no-brainer. It's $7.33 plus (labour). You spend up to the maximum. Anything you don't spend, you have to give back to the government….You (then) determine your approximate menu cost. We really analyze it on a weekly basis, keeping track and ensuring (where we are) from a financial point of view."*

Senior administrators were also asked to comment on the flexibility of food service budgets. Specifically, they were asked if funds could be moved from another budget line within or outside food service to increase the amount spent on food. All of the administrators interviewed insisted that funds or savings from other departments cannot be moved into food service and that, once budgets are set, the FSMs must operate within them. Moving funds around within the food service budget is acceptable, but hospitals appear to have much greater flexibility to do so than LTCs.

> Hospital administrator #9: *"They certainly have the flexibility within their envelope to recommend or suggest changes. If they found cost savings in one area, they could move it to food."*
>
> Hospital administrator #12: *"If somebody can save money in one place and invest it somewhere else, I don't care. I just don't like to be over $31 a day because I set the budget to $31".*

Hospital administrators nevertheless cautioned that food service budgeting is tight for several reasons, and suggested that the poor financial performance of many cafeterias adds to this problem.

> Hospital administrator #5: *"Your ability to move money around within the budget is limited by the fact that you have to find ways to save money…because your budget is getting smaller every year."*
>
> Hospital administrator#8: *"Like any public sector organization right now, our costs are going up faster than our revenues, so we are constantly looking at ways we can tighten the belt."*
>
> Hospital administrator #1: *"With our accountability agreements with our government funding agencies, we are not allowed to run a deficit…But the real challenges we are having now, like everyone else, are around the non-patient food areas. There is not a big enough public use of our cafeteria to make it profitable…There are other options for people to go to."*

As previously noted, LTCs are given a defined amount of money to spend on food per day by the MOHTLC. LTC administrator #2 explained that the Ministry discourages flexibility when it comes to spending any funds they are given *"because everything is funded in an envelope."* He explained the envelope system as follows:

""Okay, so the Ministry provides various envelopes. One is for nursing. It's your primary which probably takes up 80% of your budget. It's a set determined amount per resident per day, usually in the $82-$83 range…You can't even buy paper out of nursing, even though they use it. Then there is a programs budget which is strictly programs. It's in about the $8-$8.50 range for recreation programs. And then you have raw food. Raw food is strictly one envelope and everything in that expenditure has to be raw food. And then you have the other envelope, administration, which covers basically everything else – housekeeping, laundry, dietary (except for food), all your taxes, all your utilities, basically the whole building's upkeep. Anything else is coming from resident co-payment."

"Both" administrator #2 clarified the envelope system by saying:

"The only place you can move money around in long term care is from the administration envelope…Food services could only be supplemented through the administration envelope."

LTC administrator #4 summarized the general situation in LTCs by saying,

"$7.33 a day is not much. Long term care is a business of pennies. Funding is the key problem."

Food Safety Requirements

FSMs were asked to clarify which food-related regulations/guidelines their facilities adhere to. As can be seen in Table 23 below, three programs are common in the Ontario health care system: pest control (88%), HAACP (86%), and cleaning and sanitation (84%).

TABLE 23 – WHAT FOOD-RELATED REGULATIONS/GUIDELINES DOES YOUR FACILITY ADHERE TO? (Source: Survey of FSMs)

Data is percent of column; multiple responses per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
A Pest Control program	**85.5**	**86.9**	**100.0**	**88.3**
HAACP	**80.0**	**90.2**	**90.5**	**86.1**
A Cleaning and Sanitation program	**81.8**	**86.9**	**81.0**	**83.9**
A Product Safety program	49.1	52.5	57.1	51.8
Local city food charter	18.2	27.9	14.3	21.9
A Listeria Environmental program	3.6	8.2	9.5	6.6
An E-coli 0157-H7 program	3.6	4.9	-	3.6
ISO 22000	3.6	-	-	1.5
Other	20.0	26.2	33.3	24.8

HAACP (Hazard Analysis and Critical Control Points) deals specifically with food safety. It is part of the MOHTLC's food safety protocols. It is described as "a universally recognized and accepted method for food safety assurance" that provides a scientific, rational and systematic approach to identification, assessment and control of hazards during production, processing, manufacturing, preparation and delivery of food in order to ensure that food is safe when consumed (HKQAA – HACCP website, accessed January 2012). Implementation of the system is rigorous, involving seven principles/action steps.

The importance of all of these programs and the amount of effort devoted to them was explained by hospital administrator #6:

> *"Protocols we have lots of…We are audited by a 3rd party in terms of the cleanliness of our food service environment. We get Sanitary Inspection Reports done on a quarterly basis. Then there are the protocols that are followed in terms of temperature testing and quality testing and those types of things. Food safety is probably the biggest component...other than patient satisfaction. Food safety is a huge component."*

8.2.3 Summary and discussion: *The personnel involved in procuring and preparing food in Ontario hospitals and LTCs and the factors they take into account in their decision-making.*

1. **Any effort to increase the use of local food in Ontario's health care system must be compatible with the four factors that dominate food planning and purchasing decisions in the Ontario health care system: food service budgets, patient needs, food costs/prices, and food safety requirements.** Given the high level of concern expressed about them by senior administrators, it is unlikely that an effort that doesn't take these factors into consideration will be well-received.

2. **There are two separate and distinct audiences of importance within each facility -- the FSM in charge of planning and purchasing, and the senior administrator responsible for food budgeting**. Therefore, combined with section 8.1, there are five potential target audiences for a local food plan: FSMs, senior administrators in charge of budgeting, GPOs, food suppliers (most notably, Sysco), and food service suppliers.

3. **Although any efforts to increase the use of local food in Ontario's health care system must involve FSMs as the "gatekeepers" of food planning and purchasing, these efforts must not add substantially to their workload or threaten their ability to work within their budgets**. This is because FSMs work with tight budget and time parameters:
   - The food service department budget is relatively low and inflexible, and senior administrators insist that their FSMs stay on budget.
   - Dietitians have considerable say over, and can presumably override the FSMs on, food planning and purchasing for specific patients.
   - Food costs/prices are set externally.
   - FSMs manage several time-consuming and rigorous food safety-related programs that their staff members (presumably both full-time and part-time) must be trained to implement and that involve hosting periodic visits from external auditors.

8.3 Topic 3: *Making changes to current procurement, preparation, and decision-making practices*

8.3.1 The missions of the facility and the food service department

Ideally, the primary motivation for change in any operation is to further the achievement of the mission of the organization or a department within it. All of the hospital administrators interviewed said that their facilities have formal written mission statements, but the statements they quoted were very broad and did not include terminology specifically related to food and food provision (see Table 24 on the following page). A few senior administrators claimed that

food provision is nevertheless important to achieving the facility's mission because food service *"is all part of the patient's experience"* (Hospital administrator #10) and helps the facility *"be the best it can be"* (Hospital administrator #3).

TABLE 24 – FACILITY MISSION STATEMENT TERMINOLOGY (Source: Senior Administrator Interviews)

Hospitals	• "provide excellent patient- and family-centered care" • "provide quality health care programs and services to our community" • "deliver and measure the highest possible standard of health care in a compassionate, integrated and fiscally responsible manner" • "together with the community and guided by our values of compassion, respect, teamwork and accountability, to provide quality, patient-centered health care" • "provide outstanding care with compassion"
LTCs	• "enhance the quality of life of our residents by providing exceptional quality resident-centered care" • "make a positive difference in the lives of those we touch" • "provide premium care to the residents in this, their home" • "continuously search for ways to enhance and improve our care for those entrusted to us"

According to the FSM survey, approximately 60% of the respondent facilities have written mission statements for their departments. The statements they provided indicate the mission of food service at most facilities is to provide "nutritious" meals. LTCs also emphasize "appetizing" food while hospitals are more concerned with food safety and food quality. Reflecting their dual purpose, "Both" facilities combine "nutritious" with both "appetizing" and "safe".

TABLE 25 – FOOD SERVICE MISSION STATEMENT TERMINOLOGY (Source: Survey of FSMs)

Data is number of mentions for words or phrases receiving 5 or more mentions	Hospitals (n=27)	LTCs (n=31)	Both (n=13)	Total (n=71)
Nutritious food; nutritionally-balanced food; nutritionally adequate; optimally nutritious	**14**	**15**	**6**	**35**
Appetizing food; presented in a pleasing and appetizing manner; tasty; flavourful; delicious; colourful	3	**14**	**3**	20
Safe food; safely-prepared food	**8**	6	**2**	16
Quality food; high quality food	**7**	7	-	14
Great service; outstanding service; best possible service; quality food service	6	7	1	14
Individualized care	1	6	1	8
Within a homelike and pleasant setting; conducive to social interaction	1	5	1	7
Within MOHTLC guidelines; consistent with Canada's Food Guide	-	7	-	7
Resident/patient-focused; meet residents'/patients' needs	3	4	-	7
Healthy meal choices	3	3	-	6
Fiscally responsible; cost effective; within the available budget and resources	5	1	-	6
Consistent with the facility's mission/goals/objectives	2	2	1	5

8.3.2 The role and importance of food in health care

Typically, the amount of time and financial investment that an organization is willing to dedicate to making changes to an individual department is reflective of the department's actual or perceived importance within the organization. FSMs were asked how food and food provision is viewed at their facility. The top three responses were basic service (62%), critical to in-patient treatment (60%), and important to mission (58%). Breaking the data by geographic area and by facility size confirms that these views are shared across Ontario. Details are provided in Table 26 on the following page.

TABLE 26 – THE ROLE OF FOOD AND FOOD PROVISION (Source: Survey of FSMs)

Data is "TO A GREAT EXTENT" percent (top option within a 5-point extent scale); data is percent of column; multiple answers per respondent	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Basic service	**62**	**69**	**57**	**57**	**57**	**64**	**46**	**77**
Critical to in-patient treatment	**60**	**76**	**48**	**52**	**56**	**64**	**58**	**61**
Important to mission	**58**	**58**	**64**	**43**	**62**	**53**	**59**	**59**
Preventative medicine	24	18	31	19	22	22	25	24
Educate patients	24	36	16	14	24	26	24	26
Educate visitors/ community	12	20	5	10	13	9	9	14
Revenue generation	11	24	2	5	13	9	7	14
Other	1	2	2	0	2	2	2	2

As can be seen above, there is substantial variation between hospitals and LTCs in terms of how they rank the top three responses. This appears to be a function of the differences in their "customers". Hospitals deal with both short-term and long term patients. Therefore, according to Hospital administrator #12:

> *"(The role of food) depends upon the condition of the patient and what they are in for. If you are a diabetic, it is very, very important that part of your hospital stay is to have education around what you are eating…but for others, say if someone is here for an appendectomy, you give them their food and they're out of here."*

On the other hand, LTCs have a captive population that needs variety and choice over a longer period of time. Food is a major event for residents. LTC administrator #2 noted that:

> *"Food is the pinnacle of a resident's day. This is their socialization for a lot of residents. We have an excellent recreation program, but this is 3 points throughout the day where a resident comes out to the dining room and sees all of their friends."*

"Both" administrator #2 added:

> *"(Food) is the one thing that can be controlled by patients and residents. You are able to have choice – you have choice of what you eat, you have choice of when you eat. Once you become institutionalized, those things are taken away from you. (Also) it's entertainment, it's pleasurable, it's self-sustaining."*

Given that food and food provision serve different purposes in hospitals and LTCs, it is not surprising that the senior administrators in these facilities hold somewhat different views on the importance of food service relative to other departments. Several hospital administrators stated firmly that food service is not a priority, but then tempered their comments by noting that it is more important from a patient perspective than a facility perspective. Hospital administrator #7 said:

> *"(In terms of) overall hospital priorities, it would be lower down the list. Making sure you don't give people infection, and that we treat them the way they are supposed to be treated, and that they are comfortable from a pain perspective --those things are more important than food. From a patient perspective, food is important. It's part of their experience here."*

On the other hand, LTC administrator #1 suggested food was as important as nursing care in LTCs:

> *"In any nursing home, you would look at the nursing department as...providing the service that is most noticeable. Food service is probably right next to that, or sits beside it because, in terms of feedback, the emphasis by families and residents is probably as high on food as it on care."*

8.3.3 How change occurs in food service

Senior administrators were asked how often food preparation and delivery options are reviewed at their facility. Their responses indicated that there are three different types of reviews. Their frequency varies with the level of capital investment and implementation effort they may entail.

Reviews involving capital investment, such as changes in delivery systems or changes due to new technology, are only done every 5 years or so. They involve the CEO and all senior managers at the facility. Hospital administrator #7 explained that:

> *"What happens in health care is that you plan, and it takes you 10 years to finally get the money…It is a whole separate funding procedure that (involves) a whole new Ministry, not the Ministry of Health."*

Major changes to menus are considered at reviews conducted every 1-3 years involving the FSMs, the senior administrators they report to, and their food contractors. "Both" administrator #2 noted that:

> *"Menu change takes a huge amount of work. It's not changing it on a piece of paper; it's the procurement that has to go behind that. Doing that on a regular basis doesn't happen. It's too much work."*

A key decision at this type of review is how many times the menu will be revised during the year. According to the FSMs, practices vary considerably among hospitals (see Table 27 below). Some make major menu changes seasonally (19%) or semi-annually (24%), but almost as many make changes annually (24%) or when food service contracts change (13%).

By contrast, LTCs change their menus more frequently, either seasonally or semi-annually. Their higher frequency of menu change is required by the MOHTLC; it is also consistent with the different role of food and its greater importance in this type of facility. "Both" facilities also change their menus more frequently, presumably because they have LTC components.

TABLE 27 – FREQUENCY OF CHANGING MENUS BY TYPE OF FACILITY (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
Weekly/Bi-weekly/Monthly	5.5	9.8	4.8	7.3
Seasonally – every 3-4 months	**18.2**	**23.0**	**28.6**	21.9
Semi-Annually: twice per year	**23.6**	**65.6**	**47.6**	46.0
Annually	**23.6**	1.6	4.8	10.9
When food service contracts change	**12.7**	-	-	5.2
Never	9.1	-	14.2	5.8
Do not know	7.3	-	-	2.9

The third type of review is ongoing monitoring or auditing (from daily to quarterly) by the FSM and food service staff. This is done for a variety of reasons: to improve patient satisfaction, to look for opportunities to streamline processing and preparation, to minimize food waste, and to stay on budget. Monitoring leads to adjustments as needed to specific food item offerings and staffing plans/assignments.

An aspect of delivery that is regularly monitored is patient selection from among the food options they are given daily. The majority of Ontario's hospitals and LTCs offer options for every meal and snack (Table 28). Doing so allows patients to personalize their food choices.

TABLE 28 – CAN PATIENTS PERSONALIZE FOOD AND SNACK CHOICES? (Source: Survey of FSMs)

Data is percent of responses; one answer (Yes or No) per respondent	Hospitals (n=55)	LTCs (n=61)	Both (n=21)	Total (n=137)
Yes	65.5	78.7	71.4	72.3

The senior administrators also indicated that their facilities regularly ask for and respond to patient feedback on food and food quality. Hospitals conduct annual patient surveys or polls, while LTCs have food committees made up of residents. They meet regularly with the food services supervisor to talk about what they like or don't like on the menu.

According to the FSMs (Table 29), patient requests vary by type of facility, with "smaller portion sizes" being the dominant concern of the older LTC population (75%), versus "more fresh fruit and vegetables" in hospitals (60%). In "Both" facilities, the key concerns reflect their mixed hospital and LTC populations.

TABLE 29 – MOST COMMON PATIENT REQUESTS (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent	Hospitals (n=55)	LTCs (n=60)	Both (n=21)	Total (n=136)
Smaller portion sizes	38.2	**75.0**	**52.4**	56.6
More fresh fruits and vegetables	**60.0**	**58.3**	23.8	53.7
Increased menu selection	**41.8**	**35.0**	**57.1**	41.2
increased variety	**45.5**	28.3	**42.9**	37.5
Specific spices/taste modifications	25.5	21.7	9.5	21.3
More appropriate temperatures for hot and cold food/beverages	14.5	18.3	28.6	18.4
Fresher food	16.4	21.7	-	16.2
Improved meal presentation	10.9	23.3	9.5	16.2
Larger portion sizes	21.8	3.3	23.8	14.0
Friendlier meal services	-	10.0	-	4.4
Food service from same people every day	1.8	5.0	4.8	3.7
Don't know	5.5	1.7	9.5	4.4

Although patient complaints are not an influential factor in food planning and preparation (per Table 21), patient preferences can have a significant impact on food selection. LTC administrator #3 provided this example:

> *"We are a very rural community and some of the items that they (corporate headquarters) put on the menus are very GTA. Perogies, for instance…are very ethnic. My residents don't like them. So we would substitute another starch for that, something they are more familiar with, such as mashed potatoes."*

LTC administrator #7 mentioned similar patient issues and impact:

> *"80% of our population is Chinese…The increase in our Chinese population has happened in the past 10 years…We do provide a full Chinese menu at this time, but…we want to add more Chinese vegetables and provide Chinese soup, maybe on a daily basis. What's difficult for us is that the other 20% represents a multicultural population, so we have to meet everybody's need."*

8.3.4 Changes currently underway/planned

Of the 22 senior administrators interviewed, 15 indicated that their facilities were currently in the process of making major changes, primarily in the areas of:

- **physical redevelopment**: 1 new building, 2 building expansions, 2 new cafeterias, 1 roof replacement, 2 kitchen upgrades
- **management restructuring**: 1 merger with another health care unit, 1 going independent/moving out of a chain, 2 major administrative restructures.

There were few mentions of changes being made to food provision. The changes that were mentioned were being undertaken to improve patient satisfaction:

- **changes to their model of food provision**: 2 moving to retherm, 1 having patients interact with dietary staff daily for menu selection
- **new software**: 1 nutritional program to help develop menus and monitor costs.

Several of these respondents said that changes are currently underway in all hospitals and LTCs in Ontario due to new provincial legislation. This new legislation affects all of the departments in health care facilities. The *Excellent Care for All Act* received royal assent in June 2010 and is considered a landmark piece of legislation by the MOHTLC. Its purpose is to foster a culture of continuous quality improvement in health care, with the needs of patients coming first. The Act requires that, every year, health care organizations develop a Quality Improvement Plan (QIP) for the following fiscal year and make that plan available to the public. The first QIPs were required to be in place, publicly posted, and submitted to the Ontario Health Quality Council for the fiscal year beginning April 1, 2011.

According to the senior administrators interviewed, specific actions being undertaken in response to this Act include benchmarking (ensuring all internal practices are in line with other units in the province) and online reporting of certain indicators. "Both" administrator #2 explained that these indicators are *"very operational"* and that *"there are a number of them".* Hospital administrator #7 clarified the magnitude of effort the Act is causing by saying that his facility is *"looking at making 1000 measurable improvements across the hospital this year."* LTC administrator #2 summarized the Act and its implications as follows:

> *"It is a complete revamp of all of our policies and procedures. It's good. I like where they are going with it. It is very resident-focused and they are going right to the resident. It's certainly going to give a voice to the resident, the opportunities. I'm happy about it but again, with everything, you know you still have to do all of this with the same budget, the same people, and push everyone to the limits to try to get all the compliance."*

All of the senior administrators interviewed indicated that their facilities' overall strategic priorities are not changing in the near term. Most said this was because they are still dealing with major physical or managerial changes or because they are focusing on implementing their QIPs.

FSMs were asked to indicate the top three strategic priorities for their food service units for the current and upcoming fiscal years. Their responses were very similar year to year. Therefore Table 30 below summarizes only their upcoming fiscal year priorities. Not surprisingly, given the major changes underway or planned at the overall facility level, the top two food service priorities for all types of facilities are basic: maintaining/reducing costs (81%) and increasing in-patient satisfaction (66%).

TABLE 30 – STRATEGIC FOOD SERVICE PRIORITIES FOR THE UPCOMING FISCAL YEAR
(Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent	Hospital (n=55)	LTC (n=61)	Both (n=21)	Total (n=137)
Maintaining costs at current levels/ reducing costs	**85.4**	**77.1**	**81.0**	**81.0**
Increasing in-patient satisfaction	**72.7**	**63.9**	**52.4**	**65.7**
Promoting healthy eating behaviour	43.6	49.2	42.9	46.0
Improving food quality	27.3	41.0	23.8	32.8
Reducing food related wastes	23.6	36.1	28.6	29.9
Increasing revenue from cafeteria or other feed retail operations	38.2	6.6	33.3	23.4
Increasing the use of locally-produced food	14.5	21.3	9.5	16.8
Improving patient treatment and/or recovery	9.1	16.4	-	10.9
Reducing in-patient food complaints	-	21.3	4.8	10.2
Other	1.8	3.3	4.8	2.9

Increasing the use of locally-produced food was cited as an upcoming fiscal year strategic priority by 17% of all of the FSM respondents. As can be seen in Table 31 below, this is a modest increase from the 14% level in the current fiscal year data.

Consistent with the greater importance of food in LTCs, local food is a higher strategic priority among LTCs (21%) than other types of facilities and will remain so in the upcoming fiscal year. However, there are shifts occurring in the other types of facilities. The overall growth in strategic priority noted above, from 14% to 17%, traces entirely to hospitals where its current 6% priority level will more than double to 15% in the upcoming fiscal year. Offsetting this somewhat is a decline in priority in the "Both" facilities, from 14% to 10%. The growing importance of local food in hospitals is widespread, as evidenced by viewing the data on geographical and facility size bases.

TABLE 31 – STRATEGIC PRIORITY OF INCREASING THE USE OF LOCALLY-PRODUCED FOOD
(Source: Survey of FSMs)

Data is percent of total answers given to each year's question; multiple answers per respondent	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
current fiscal year	13.9	5.5	21.3	14.3	17.5	10.3	18.6	10.6
upcoming fiscal year	16.8	14.5	21.3	9.5	20.6	12.1	20.3	15.2

A key reason why local food is a relatively low priority in the health care sector in Ontario is that the MOHTLC does not require food dollars to be spent locally, even though this could have a positive spin-off effect on the Ontario GDP.

Although local food per se is a low priority, it is noteworthy that "reducing food related wastes"

was mentioned by 30% of respondents. As indicated in the Literature Review, practitioner-based evidence exists that using local food can help achieve this goal.

8.3.5 Summary and discussion: *Making changes to current procurement, preparation, and decision-making practices*

1. **While the stated mission of most food service departments is to "provide nutritious meals", the data on strategic priorities suggests that this is generally operationalized as to "provide the best quality food available as efficiently as possible within budget constraints."**

2. **Efforts to increase the use of local food should be directed toward the type of reviews that are done every 1-3 years, rather than the more major reviews done every 5 years or the ongoing or quarterly types of reviews.** Type of food to purchase is one of the procurement decisions made during the 1-3 year reviews. This decision would likely have to be made in conjunction with the renewal of food-related contracts and the "frequency of menu change" decision. Since Ontario's fruits and vegetables are generally grown and sold seasonally, the more frequently that food contracts are renewed and/or menus are changed, the greater the potential for increasing the use of local food.

3. **Broadly speaking, arguments for increasing the use of local food should be based on "reducing costs" or "increasing in-patient satisfaction".** Although local food is experiencing a modest growth in priority, it still has too low a strategic ranking in the Ontario health care system to provide rationale or support for increasing purchases on its own. Similarly, although relating the use of local food to food service missions would be ideal, it must be remembered that there is limited evidence at this time that local food is more nutritious (Literature Review).

   The potential for success is much greater if local food can be related to one or both of the two key strategic priorities, "reducing costs" or "increasing in-patient satisfaction". This could possibly be achieved by empirically demonstrating that the use of local food decreases food waste (strategic priority #5), thereby reducing costs (strategic priority #1). Similarly, establishing a link between local food and promoting healthy eating behavior (strategic priority #3) and/or food quality (strategic priority #4) could be used to tie local food to increased in-patient satisfaction" (strategic priority #2).

4. **Given the government's growing emphasis on being able to track and benchmark improvements across the system, any plan to increase the use of local food has to include recommended metrics for measuring change in this area.** Without measurement metrics, goals cannot be set and progress cannot be determined. The government needs this information to be accountable to taxpayers.

5. **The substantial differences between hospitals and LTCs suggest that a multi-stage plan to increase the use of local food may be appropriate, with LTCs targeted first, followed by individual hospitals with the greatest potential for change.** Beyond their populations, other areas of difference uncovered by this research include the mission of the food service department, the role of food, the importance of food service relative to other departments, and the frequency of menu changes.

8.4 Topic 4: *The current involvement with local food among Ontario's hospitals and LTC's.*

8.4.1 Use of local food

"Local food" was defined in the FSM survey as being from the province of Ontario or within 150 km. of the respondent's facility. The majority of the FSMs surveyed (71%) claim that their facilities use local food in patient meals, cafeteria meals or both. As can be seen in Table 32 below, this percentage is driven by the LTCs (77%), but use in hospitals and "Both" facilities is also reported to be quite high (67% and 62% respectively).

TABLE 32 – HOW IS LOCAL FOOD USED IN YOUR FACILITY? (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospital (n=55)	LTC (n=61)	Both (n=21)	Total (n=137)
Used for patient meals	7.3	63.9	14.3	33.6
Used for cafeteria meals	12.7	1.6	-	5.8
Used for both patient and cafeteria meals	47.3	11.5	47.6	31.4
Total Used	**67.3**	**77.0**	**61.9**	**70.8**
Not Used	20.0	16.4	23.8	19.0
Don't know	12.7	6.6	14.3	10.2

When asked how use translates into percentage of total food offered at their facilities (Table 33), only 41 FSMs provided an answer (42% of the 71 respondents whose facilities use local food). Their median responses suggest that, among the Ontario hospitals and LTCs that use local food, 10-20% of the food they offer is local. However, it must be pointed out that their responses varied widely, from 1% to 80%, resulting in aggregated data that must be used with caution.

TABLE 33 – WHAT PERCENTAGE OF FOOD OFFERED IS LOCAL? (Source: Survey of FSMs)

	n	Mean* Local as % total	Median** Local as % total	Minimum %	Maximum %
Hospitals	15	21	10	1	80
LTCs	20	27	20	1	80
"Both" facilities	6	21	11	1	75

* mean is the average of the data collected ** median is the actual midpoint of the data collected

A key reason for the wide variation in responses to the above question is that the vast majority of Ontario's hospitals and LTCs do not formally track their use of local food (Table 34). A check by geographic region and by size of hospital indicates that this is the case from these perspectives as well.

TABLE 34 – DOES YOUR FACILITY TRACK ITS USE OF LOCAL FOOD? (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Total Sample (n=134)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=54)	LTC (n=60)	Both N=20)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Yes	4	7	2	0	5	2	2	5
No	**93**	**87**	**95**	**100**	**89**	**97**	**95**	**92**
Don't know	5	6	3	0	6	1	3	3

Tracking of local food requires a definition of the term. However, most senior administrators (13 out of 22 interviewed) confirmed that their organizations had not yet discussed or decided upon a definition. Among the few that had defined the term, the most common response for hospitals

was that they used their suppliers' definition. The most common response for LTCs was that local does not mean where the food is grown but where suppliers are located.

TABLE 35 – DOES YOUR FACILITY HAVE A LOCAL FOOD DEFINITION?
(Source: Senior Administrator Interviews)

Data is number of respondent mentions	Hospitals (n= 13)		LTCs (n = 7)		Both (n=2)	
	Yes	No	Yes	No	Yes	No
	4	9	3	3	1	1
If yes, what is it?						
Suppliers' definition	2		1			
Ontario	1				1	
Local county	1					
Local means suppliers, not where food is grown			2			

8.4.2 Procurement of local food

The FSMs whose facilities use local food for any purpose (98 of 137 FSMs surveyed) were asked to clarify whether they purchase local food through contracts or outside contracts (Table 36). Most facilities (62%) purchase local food through contracts, even though it is not a required component in most of their contracts.

TABLE 36 – LOCAL FOOD USERS: DO YOU PURCHASE THROUGH CONTRACTS?
(Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospital (n=37)	LTC (n=48)	Both (n=13)	Total (n=98)
Yes, it is required in our contract(s)	2.7	14.6	15.4	10.2
Yes, even though it is not required in our contract(s)	**67.6**	**41.7**	**46.2**	**52.0**
Total Yeses	**70.3**	**56.3**	**61.6**	**62.2**
No	27.0	31.3	38.5	30.6
Do not know	2.7	12.4	-	7.1

However, as can be seen in Table 37, among the facilities that purchase local food within their contracts, it is also common to purchase local food outside their contracts.

TABLE 37 – LOCAL FOOD USERS: DO YOU PURCHASE OUTSIDE CONTRACTS?
(Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Hospital (n=37)	LTC (n=47)	Both (n=13)	Total (n=97)
Yes	**62.2**	**87.2**	**84.6**	**77.3**
No	21.6	12.8	15.4	16.5
Don't know	16.2	-	-	6.2

Together, the above two charts suggest that hospitals are more likely to purchase local food through their contract(s), while LTCs and "Both" facilities are more likely to purchase it outside their contract(s).

It is important to recognize that the percentages in Tables 36 and 37 are based on facilities that use local food, not the total sample. To provide a clearer picture of the involvement with local food in Ontario's health care sector, the above percentages were applied to the total sample. On this basis, 71% of facilities use local food, 44% purchase it through contracts, and 55% purchase it outside of contracts. Details are provided in Table 38 on the following page.

TABLE 38 – TOTAL SAMPLE: PURCHASE THROUGH CONTRACTS OR OUTSIDE CONTRACTS

Data is percent of column	Hospital (n=55)	LTC (n=61)	Both (n=21)	Total (n=137)
Total Yes – use local food	**67.3**	**77.0**	**61.9**	**70.8**
% of Yes - buy within contract	70.3	56.3	61.6	62.2
% of total sample that buys local food within contract(s)*	**47**	**43**	**38**	**44**
% of Yes - buy outside contract	62.2	87.2	84.6	77.3
% of total sample that buys local food outside contract(s)*	**42**	**67**	**52**	**55**

* calculated by multiplying "% of Yes – buy" data times "Total Yes – use local food"

8.4.3 Other support for local food

In addition to using and purchasing local food, institutions can promote it on-site through various activities, such as putting up posters during March Nutrition Month and having demonstration gardens on-site. The survey data suggests that, while support of this nature does occur in Ontario, it is not widespread, nor does it appear to be coordinated with other facilities.

TABLE 39 – PROMOTIONAL SUPPORT FOR LOCAL FOOD – PAST 2 YEARS (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent	Hospital (n=55)	LTC (n=61)	Both (n=21)	Total (n=137)
Promoted local food during March Nutrition Month	**43.6**	26.2	33.3	**34.3**
Promoted local food during other times of the year	25.5	**36.1**	**38.1**	**32.1**
Had a demonstration garden on-site	5.5	24.6	33.3	18.2
Hosted a local food basket drop-off for employees	7.3	14.8	33.3	14.6
Offered local nutritious snacks in vending machines	16.4	3.3	23.8	11.7
Offered an on-site farmers' market	9.1	4.9	-	5.8
Had a larger garden on-site growing food for the facility	-	8.2	9.5	5.1

When asked how successful their activities to support local food were, most FSMs who had promoted local food during Nutrition Month or during other times of the year indicated these efforts were very or somewhat successful. Most of the FSMs who had tried other activities, such as gardens on-site or employee drop-offs, did not know how successful they were.

8.4.4 Plans for local food

The FSMs who participated in the survey and the senior administrators who were interviewed agreed that very few facilities had specific actions currently underway to increase the amount of locally-produced food available for patients and their visitors (Table 40). A check of the FSM survey data by geographic area and size of facility confirmed that this finding holds from these perspectives as well.

TABLE 40 – DOES YOUR FACILITY HAVE ACTIONS UNDERWAY TO INCREASE THE USE OF LOCAL FOOD? (Source: Survey of FSMs)

Data is percent of column; one answer per respondent	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=54)	LTC (n=60)	Both N=20)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Yes	10	17	5	10	13	9	7	15
No	**80**	**78**	**83**	**75**	**78**	**81**	**81**	**77**
Don't Know	10	5	12	15	9	10	12	8

Most senior administrators expressed interest in supporting local food, but only one had actually asked for it for it to be considered. *"I put it on our priority list for our environmental team to start looking at…"* (hospital administrator #7). Another (hospital administrator #8) indicated that *"we have been approached by one of our municipal partners to talk about local food…and how we are supporting it."*

However, most said that their facilities had no plans for local food at this time (that they were aware of) because *"it's not a major strategy for us"* (hospital administrator #8), or "*it's not a concern at my level"* (hospital administrator #2). Local food was felt to be the responsibility of their food service manager and/or their food suppliers, and plans for its use were *"whatever our source…brings in, how much of that would be local"* (hospital administrator #3).

8.4.5 Summary and discussion: *The current involvement with local food among Ontario's hospitals and LTC's.*

1. **<u>For most health care facilities, involvement in local food appears to primarily consist of making periodic local food purchases</u>.** Other forms of support occur (e.g. promoting local food during March Nutrition Month) but are very spotty and are not part of a coordinated province-wide effort.

2. **<u>Most health care facilities do not define local food, nor do they track its use</u>.** The lack of a definition and the lack of a means to track use has two serious implications for any effort designed to increase the use of local food in the Ontario health care system:

   (a) They limit any individual facility's ability to make local food a strategic priority. Strategic plans must have realistic and measurable goals for all key plan components. Each component must have a "pre" measurement to base growth goals on. Plan effectiveness or success is then determined by achievement against these goals.
   (b) There are no metrics in widespread use that can be incorporated into QIPs to meet the government's new legislation on measuring and benchmarking improvements.

3. **<u>Most health care facilities do not currently have plans to increase their use of local food</u>**. This is at least partially a function of not having a definition of local food or the metrics to measure its use.

8.5 Topic 5: *The current involvement with local food among the food suppliers contracted by health care facilities*

8.5.1 Definition of local food

According to the participants in the focus groups conducted for this research project (local farmers and regional food processors or distributors), there is no uniform supply side definition of "local food" in Ontario. They provided several reasons why:

(a) Suppliers feel that the definition of "local" is up to the customer:

"Chain stores would like to have local as Canada because their distribution lines are national. They don't like things that can't cross provincial boundaries. But a public institution like a medical facility or a senior home (would want) to narrow that definition because some residents…have direct connection to agriculture still because they are of

that generation and it might be important to them to have a tighter (definition)." (Kitchener focus group 1)

"Places across the border from Windsor might be more local than somewhere up north, but then you are getting into a different country, different economy. To give you an example, we picked up a customer in British Columbia. He would prefer to buy Canadian over American. Even though he can probably buy some carrots from California, he would prefer to buy it from Toronto." (Barrie focus group)

"We came up with tons of definitions of local (but) which one of those matches what the health care sector is saying? Why are they buying?" (Ottawa focus group 1)

(b) Suppliers feel that the determination of how local a product is can vary by product and by season:

"For grain processing, we are looking at a 3 hour radius to supply all the grain that we need…(However) on certain goods and produce, I narrow that…to my eastern Ontario border, which would be an hour drive." (Ottawa focus group 2)

"If sometimes certain products are not available, seasonally you might be willing to go a little further." (Barrie focus group)

(c) Suppliers feel that the logistics system impacts what is easily accessible:

"With our distribution system, London, Ontario is within reach for the companies in Toronto but they can't go to Peterborough (for product) even though Peterborough is much closer to Toronto than London is. This is the same across North America. All routes go east/west, not north/south, so bringing food from California is twice the distance, but much more convenient (than bringing it) from Florida. If you analyze logistics, it's how the country was settled and how it was built up. We have customers from Peterborough that have trouble getting service from Toronto, so we ship it with air transport and they are extremely happy." (Kitchener focus group 1)

8.5.2 Contractual guidelines and local food policies

As detailed earlier in Table 12, Ontario's health care sector facilities purchase the majority of their food in all food categories from large food distributors. Some of these distributors are contracted for 1-3 years (food suppliers and food service suppliers) while others are ongoing, non-contracted relationships (fresh produce distributors).

Most of the senior administrators who were interviewed indicated that their facilities retain control over their menus as part of their contracts, and that their FSMs meet with these organizations regularly to ensure that the prepared food they supply meets contractual guidelines. Nevertheless, as noted in Table 36, it is not standard practice for facilities to specify within these contracts that local food be used. Only 10% of FSM respondents indicated that their food contracts require local food (3% of hospitals; 15% of LTCs; 15% of "Both" facilities).

Furthermore, when the FSMs were asked whether the suppliers they contract with have local food policies, the majority did not know (see Table 41 on the following page). Similarly, when

the FSMs were also asked if the GPOs they are members of have local food policies, the majority did not know (Yes - 14.5%; No - 13.8% - No; Don't Know - 71.7%).

TABLE 41 – DO YOUR CONTRACTED SUPPLIERS HAVE LOCAL FOOD POLICIES?
(Source: Survey of FSMs)

Data is percent of row; one answer per respondent	n	Yes	No	Don't Know
FOOD SUPPLIERS				
Sysco	**116**	30.2	5.2	**64.7**
GFS (Gordon Food Service)	55	20.0	9.1	**70.9**
Summit	41	2.4	13.3	**82.9**
Flanagan	34	2.9	17.6	**79.4**
FOOD SERVICE SUPPLIERS				
Aramark	**43**	20.9	11.6	**67.4**
Compass	31	16.1	12.9	**71.0**
Sodexo	30	6.7	13.3	**80.0**
Carillion	26	-	15.4	**84.6**

The high percentage of respondents who did not know if their contracted suppliers and GPOs have local food policies suggests that these organizations do not communicate this information well and/or that their customers/members do not understand or care to understand them. This is somewhat surprising because food service suppliers in particular are known to provide posters and flyers about local food for their customers to post or distribute in their facilities. That said, these materials were not mentioned by the FSMs or the senior administrators and it appears they have little impact on facility decision-makers.

8.5.3 Local food marketing to the health care sector

The contracted food suppliers may not have clear local food policies but they are aware of the appeal of local food. Although their overt marketing efforts may be limited (primarily posters and flyers), the focus group participants indicated that there is a great deal of local food–related marketing strategy occurring behind the scenes. Indeed, the focus group participants were very critical of the marketing practices of the large private sector operations involved in food service, suggesting that they limit the larger companies' ability to purchase local food while also discouraging potential health care customers from purchasing local food directly. The participants explained that:

- Large suppliers give "kickbacks" or cost rebates to facilities for purchasing in volume. In turn, they get large discounts from larger growers. This discount structure keeps smaller scale local operations from being competitive and participating in the supply chain.
- Large suppliers emphasize their ability to provide "one stop" shopping. This appeals to health care facilities because they often do not have the capacity to accommodate numerous shipments from different small suppliers due to time and staff issues. It also contributes to lower food prices since distribution costs from local suppliers can be high due to multiple, small volume shipments.
- Large suppliers emphasize their ability to provide consistency in quality and supply. This appeals to health care facilities, which are generally risk adverse and desire uniformity and predictability. Volume and quality from local suppliers can vary.

On the other hand, the focus group participants strongly endorsed the efforts by Foodland Ontario to brand local food, although they felt the program needs to expand from produce into

proteins and its advertising needs to use imagery other than the typical southern Ontario farm.[3] Foodland Ontario is a program initiated by OMAFRA in 1977 to promote Ontario grown products. Foodland Ontario's website states that the program's target market is adults 25-64 who are the food purchasers in their households. It also states that "one of the main objectives of the program is to maintain consumer intent to purchase (Ontario) over 80%, thereby assisting Ontario producers to maximize their market share."

Foodland Ontario is not responsible for promoting Ontario grown food to non-consumer markets, such as public institutions. That is the purpose of the Broader Public Sector Investment Fund, a partnership between the Greenbelt Fund and OMAFRA. According to its website, it has two objectives:

1. "To increase the amount of Ontario food products purchased by Ontario's broader public sector, specifically municipal, university, school and hospital food services."

2. "To enhance the capacity of the agri-food sector (farms, processors, distributors and others) to access broader public sector food services."

To achieve these objectives, the Fund uses financial support provided by the Ontario Government to provide grants to local food industry leaders, producers, distributors, food service providers and public institutions so that they can create systemic change to permanently increase the amount of local food in the province's public institutions.

The focus group participants made no mention of the Broader Public Sector Investment Fund or any specific initiatives undertaken through it to date.[4]

8.5.4 Summary and discussion: *The current involvement with local food among the food suppliers contracted by health care facilities*

1. **For business purposes, supply side definitions of "local food" need to be flexible, making it unlikely that the major food and food service suppliers can or will be the source of a single, uniform definition of local food that can be used across the health care sector**.

2. **Any effort to increase the use of local food in Ontario's health care system that requires the co-operation of the large food and food service suppliers must be compatible with their marketing strategies**. The large suppliers have a well-established discount structure to maintain their cost advantage over small suppliers, and they use claims such as one-stop shopping, consistency in quality, and consistency in supply to differentiate themselves from the smaller suppliers. Undermining any of these factors will threaten their ability to maintain and grow their share of the health care sector market. This will reduce the potential for them to participate in promoting the use of local food.

[3] Foodland Ontario has recently expanded beyond fruits and vegetables to include meat, dairy and eggs (http://www.foodland.gov.on.ca/english/events/news081008.html). This occurred in 2011 after the research for this project was conducted.

[4] Ontario*fresh*.ca, an initiative undertaken with the support of the Broader Public Sector Fund, was launched in Summer 2011 after the research for this project was undertaken. It is a free website and online community designed to expand the market for buyers and sellers of local Ontario food by connecting bulk buyers, chefs, restaurants, caterers, distributors, growers and producers.

3. **Foodland Ontario's efforts to help increase the use of local food have defined local food too narrowly.** As a promotional program that is focused exclusively on consumers, Foodland Ontario relies on public demand to create supplier demand for local food. Its extensive advertising over the years may have had the unintended effect of defining local food quite narrowly, as simply being fruits and vegetables grown by small Ontario farmers.

8.6 Topic 6: *Current attitudes/perceptions regarding local food.*

8.6.1 Overview

Both the senior administrators and the focus group participants were asked to comment on the potential for increasing the use of local food in health care. While few of them were willing to make definitive statements, there was enthusiasm for the prospect overall. Hospital administrator #8 summed up many of his colleagues' comments by saying: *"Would it be nice if we were purchasing more local? Absolutely, I would love to support our local community."*

The focus group respondents pointed out that there is currently a public momentum behind the use of local food and explained why it needs to be incorporated it into the health care system

> *"I feel some momentum out there (and) in articles in the Globe and Mail, in health articles. You know, I think that there is a whole emphasis even in Toronto on the local weekend market…We are starting to realize what we do as Canadians and Ontarians, what we grow and what we do well"* (Toronto focus group)
>
> *"I think there is a movement; there is a perceived desire to get more (local) food into the system…there is perception around that people want that."* (Kitchener focus group 1)
>
> *"They have to appreciate food as a factor of health! I find it fascinating that right now we are talking about food within our health system and we are only talking about food in our hospitals when it is on the treatment side. I think promotion of healthy food in general can bring down health care costs in the whole system enormously. And we can use that savings to start promoting healthy eating."* (Ottawa focus group 1)

8.6.2 Benefits

All of the respondents in the three research studies conducted for this project were asked what the benefits of purchasing local food are for health care facilities. There was remarkable consistency in their responses, with all agreeing that the main benefits to hospitals and LTCs fall into two categories: (a) supporting the local economy and (b) improving food offerings to patients and visitors. Environmental benefits were also cited, but to a much lesser extent.

The FSMs (see Table 42 on the following page) cited economic benefits more frequently than patient benefits. "Increases support of the local economy" and "supports local farmers" were the top two individual benefits they checked (87% and 78% of total sample respectively). These two benefits top all others among the FSMs not only when the data is analyzed by type of facility, but also by geographic region and by size of facility.

The hospital FSMs also indicated that the third economic benefit ("strengthens local food supply chains") was considerably more important (73%) than the top two facility/patient benefits of "more fresh, raw food" and "increased patient satisfaction" (51% and 49% respectively).

However, among LTC and "Both" FSMs, the third economic benefit and these two facility/patient benefits were roughly equal in importance (all within 64% to 67%).

TABLE 42 – FSMs: KEY BENEFITS OF PURCHASING LOCAL FOOD (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent; only benefits cited by more than 50% of the total sample or a subsample are shown	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
ECONOMIC BENEFITS								
Increases support of local economy	**87**	**87**	**85**	**90**	**87**	**95**	**86**	**89**
Supports local farmers	**78**	**80**	**79**	**71**	**81**	**79**	**81**	**79**
Strengthens local food supply chains	**69**	**73**	66	**67**	**71**	**64**	**64**	**77**
FACILITY/PATIENT BENEFITS								
Increases ability to provide fresh, raw foods	62	51	**69**	**67**	62	62	**64**	61
Increased patient satisfaction/ improved food quality	59	49	64	**67**	60	60	59	62
Improves nutrition for patients & patrons	46	31	54	62	43	47	59	38
ENVIRONMENTAL BENEFITS								
Reduces transportation costs	53	64	41	62	46	60	51	56
Reduces carbon footprint	45	60	31	43	46	43	42	48

Overall, as can be seen in Table 43 below, the senior administrators cited the economic benefits of purchasing local food only a few more times than they mentioned benefits to patients (17 and 14 times respectively). However, supporting the local economy was the single most frequently mentioned benefit by these respondents.

TABLE 43 – SENIOR ADMINISTRATORS: KEY BENEFITS OF PURCHASING LOCAL FOOD
(Source: Senior Administrator Interviews)

Data is number of mentions; multiple answers per respondent	Hospitals (n= 13)	LTCs (n = 7)	Both (n=2)
ECONOMIC BENEFITS			
Support local businesses/economy/employ locals	**7**	**3**	**1**
Support local farmers/local heritage	1	1	1
Reduce delivery cost/transport	2	1	
Dollars stay in Ontario	1		
Benefit community	1	1	
TOTAL ECONOMIC MENTIONS	**10**	**5**	**2**
FACILITY/PATIENT BENEFITS			
Fresher food/freshness	5	1	
Quality	2	1	
Taste	1		
Patient satisfaction	1		
Healthier	1		
Nutritional value	1		1
Reduce allergies		1	
TOTAL FACILITY/PATIENT MENTIONS	**11**	**3**	**1**
ENVIRONMENTAL BENEFITS			
Reduce carbon footprint	1		1
Sustain Ontario farmland			1
TOTAL ENVIRONMENTAL MENTIONS	**1**	**-**	**2**
OTHER			
Engage with community	1		
Get help with our events	1		
Good PR/community relations		1	

The focus group respondents clearly emphasized economic benefits over facility benefits, but had interesting observations in both areas. They generally felt that:

- Supporting local economies connects people to their local land; they are eating food that they know comes from their area.
- Farmers are the "new superheroes"; therefore, they need to be promoted in Ontario's public institutions.
- Freshness and sensory satisfaction are tied to enjoyment of food; it is impossible to have "vine ripe" product that is from far away and produced on a large scale basis. Only local growers can provide true "vine ripe" product.
- Since the time from field to plate should be lower with local food, the nutritional value of the food has less time to break down.
- People are in the health care system for their bodies "to repair". How can this happen if they don't have good food?
- Less processing is better for patients and local food can assist this.
- Buyers can actually come and see the farm when it is local and view the operation for themselves. This can't be done with imported food.

The focus group respondents also emphasized that full cost accounting would expose many benefits of local food. Full cost accounting (FCA) generally refers to the process of collecting and presenting information about environmental, social, and economic costs and benefits/advantages (collectively known as the "triple bottom line") for each proposed alternative.

8.6.1 Barriers

All of the respondents in the three research studies conducted for this project were asked what the barriers to purchasing local food are for health care facilities.

According to the FSMs, the single most important barrier (69% of total sample) is a supply issue: the seasonal availability of local food (Table 44). This was the key barrier not only for all types of facilities, but by geographic region and by size of facility. The FSMs agreed that there are many secondary barriers: lack of availability through their GPOs and suppliers, the price of local food, added labour for food preparation, and food safety risks. However, there was no clear agreement on their order of importance, suggesting that barriers vary substantially according to the individual facility's circumstances.

TABLE 44 – FSMs: KEY BARRIERS TO PURCHASING LOCAL FOOD (Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent: only benefits cited by more than 50% of the total sample or a subsample are shown	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both (n=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Seasonal availability of local food	**69**	**76**	**64**	**62**	**75**	**69**	**58**	**79**
Too expensive to purchase	54	60	51	48	57	55	46	62
Lack of availability of local food in some food groups	53	62	43	62	46	69	59	50
Lack of availability through current suppliers	47	47	43	62	46	53	46	52
Added labour for food prep	46	51	44	38	56	36	44	52
Concerns about handling/food safety risks	42	56	31	33	41	47	41	39

The senior administrators also considered availability and supply issues to be the primary barrier to purchasing local food (16 mentions, with seasonal availability receiving the most – 5). However, consistent with their budgetary responsibilities, financial concerns were clearly the second most important barrier (11 mentions) from their standpoint. Details are provided below in Table 45.

TABLE 45 – SENIOR ADMINISTRATORS: KEY BARRIERS TO PURCHASING LOCAL FOOD
(Source: Senior Administrator Interviews)

Data is number of mentions; multiple answers per respondent	Hospitals (n= 13)	LTCs (n = 7)	Both (n=2)
AVAILABILITY/SUPPLY BARRIERS			
Availability of what is needed/seasonality concerns	3		2
Local vendors wouldn't have same standards/quality as national distributors	2	1	
The more trucks that deliver to the back door, the more time the staff Is taken away from cooking		2	
Convenience/prefer one stop shop		2	
Reduced range of products	1		
Supply must be consistent	1		
Ability of supplier to meet volumes needed	1		
Not enough suppliers in local area	1		
TOTAL AVAILABILITY/SUPPLY MENTIONS	**9**	**5**	**2**
FINANCIAL BARRIERS			
Increases costs/can't stay within $7.33	3	1	1
Need more staff/higher labour costs; product needs to be pre-cut to reduce labour costs and wastage	2		
Ability of supplier to offer a competitive price	1	2	
Pricing must be consistent/can't fluctuate	1		
TOTAL FINANCIAL MENTIONS	**7**	**3**	**1**
OTHER			
Geography is not a Government of Ontario procurement criteria	1	-	-
Need definition of local	-	-	1
Product needs to be pre-prepared since we don't cook	1		
Need to ensure product is safe	1		

Table 45 above summarizes the senior administrators' answers to a direct question about the barriers to using local food. However, earlier in their interviews, when they were commenting on the benefits of local food, the senior administrators expressed greater concerns about food safety and government regulations than is reflected above.

> *"From a personal perspective, all of us support local. From the health perspective, that's where the problem comes in...the issue is that these are ill patients, and we have to have food that we know is safe."* (Hospital administrator #3)

> *"…when we have the opportunity, we will consider it. But as you're probably aware, we have lots of rules that we have to follow with respect to procurement and with respect to food safety. Those are the things we have to make sure we are in compliance with."* (Hospital administrator #10)

These comments suggest that senior administrators consider the supply barrier to be a problem that can be solved by looking at optional solutions, while government rules and regulations are ongoing "facts of life" that they must accept and adhere to. One administrator also commented that, despite the attractiveness of local food, the limited resources they get from the government for food and labour force health care facilities to use the larger, more convenient, lower-priced distributors:

> *"It's just unfortunate that when you're dealing with food with the limited resources that we have, it just doesn't make sense to go with anyone other than the large distributors*." (LTC administrator #2)

As was mentioned previously, the local growers and processors/distributors who participated in the focus groups were highly critical of the marketing practices of the large food distributors. When asked about local food barriers, they clearly considered the contracts held by these organizations to be major obstacles to increasing the use of local food in health care facilities. However, they pointed out that government policies impede the development of local food as well. They highlighted the following effects of government policies:

- The budgets of health care facilities are so lean due to small government subsidies (i.e. $7.33 per patient per day) that they can only look at price, not overall costs to society and the environment.
- Public sector facilities are price driven and are very specific about their orders, including form and fit. Processing requirements such as pre-cut carrots and peeled potatoes advantage large volume suppliers.
- Lack of cold packing plants in Ontario hampers local processing.
- Lack of local abattoirs in Ontario adds to distribution costs and logistic issues.
- The government lacks the priority/will to support local food because it is skewed to promoting large-scale production geared to export.

When asked to discuss seasonality and whether or not it is a barrier, the participants indicated that seasonality is both positive and negative. Meeting year-round demand is easy for products that are good for cold storage (carrots, apples), but not possible for other foods. The abundance and high quality of Ontario grown products at harvest time can be taken advantage of through flash freezing techniques, although more capacity is needed for this locally. Notably, none of those who commented on seasonality and health care needs saw scaling up to meet increased demand as an issue. They said that they would only need 1-2 years to adjust, not 5-10 years as is often assumed.

When asked to comment on the current supply chain for food in Ontario, the participants felt that the food supply chain in general is effective but geared more to larger scale operations, not smaller scale local businesses. They agreed that having one massive food terminal in Toronto is limiting, and that a decentralized system with regional terminals would be more conducive to promoting and selling local food.

8.6.2 Summary and discussion: *Current attitudes/perceptions regarding local food.*

1. **Local food is viewed positively in the health care sector, and facilities are willing to offer local food if it can be done within their current cost and regulatory constraints**. The current public "momentum" behind the movement and the positive attitude on the part of senior health care administrators suggests that efforts to help hospitals and LTCs increase their use of local food could be well-received.

2. **Consistent with previous studies on the motivations to purchase local food, health care personnel in Ontario mention the economic benefits of local food more often than they mention its potential benefits to their patients.** This may be reflective of the current uncertainty about whether or not local food is more nutritious and therefore capable of contributing to the achievement of the mission of most food service departments to "provide nutritious meals". No matter what its basis, this view could mean that health care personnel

think that buying local food will benefit farmers and businesspeople outside their facility more than it will benefit patients and others inside their facility. Helping external people is not typically a concern of most organizations, especially those with limited financial and human resources. Therefore, this view may be contributing to local food's current low strategic priority (Table 30), and could work against efforts to raise its priority status.

3. **Current provincial government policies are considered a barrier to increasing the use of local food in Ontario's health care system.** Numerous government policies have been put in place to protect Ontario residents (e.g. food safety regulations) or to save taxpayer funds (e.g. low food subsidies for LTCs), but may have had the unintended effect of advantaging large suppliers over local growers, processors and distributors. From the supply side perspective, some aspects of government policy need to be re-considered to ensure that they support, not hinder, the development and supply of local food within the province.

4. **The other two major barriers cited by health care personnel, high costs of local food and supply issues, can be overcome with education and further research.** The focus group participants felt that cost and supply issues, particularly those related to seasonal availability, can be overcome in part by making better use of technology and decentralizing the food distribution system in Ontario. They also suggested that a full-cost accounting analysis of local food could help overcome barriers by revealing the full extent of its benefits to society.

8.7 Topic 7: *Attitudes/perceptions toward the future use of local foods.*

8.7.1 Long term Expectations

Despite the enthusiasm noted in the previous section for increasing the use of local food in the health care sector and the relative consistency in responses regarding benefits and barriers, questions regarding the future of local food in health care in Ontario received very mixed responses. Specifically, when the senior administrators were asked, "Looking a few years into the future, what do you foresee regarding the use of local food in health care in general in Ontario?", approximately one-third saw it increasing, one-third saw it remaining the same, and one-third saw it declining.

Reasons cited for the use of local food in health care to increase were:

1. **Lower transportation costs - *"…****the cost of transportation. Gas prices are high. At some point, local food should be able to compete."* (Hospital administrator #1)

2. **Greater visibility - *"****I think that every year that passes by, it will be more and more of a focus. You know there was a time that it wasn't even discussed…But over the past 5 years, it started showing up on the radar…it has been written into the contractual language."* (Both administrator #1)

3. **More public education/demand** - *"The opportunity is from the education perspective and the economic opportunities. If we can get it organized, deal with the safety issues, and manage it well, I think we have a great opportunity to educate people that are coming into health care around the opportunities growing right in their backyard."* (Hospital administrator #5)

Reasons given for it to remain the same were:

1. **Tight budgets/the need to buy at a low price** – *"For locals to be competitive on price will be challenging. If you're producing a lower volume and if there isn't a quality difference, then it's a challenge. Health budgets are squeezed every year and you can't afford to increase your food costs just to buy local."* (Hospital administrator #10)

2. **Health care's current focus on patient safety** - *"When I look at what health care is focusing on now, patient safety is number one. I think resources will go to those types of things, not necessarily to better food."* (Hospital administrator #7)

3. **Ontario's climate/seasonality** – *"There are times in the year when we have lots of local produce that's fresh. Local produce can be frozen, but it is the fresh local produce we want to put in front of people and use."* (Hospital administrator #12)

4. **Access problems** – *"I believe it will be a real challenge to improve the access to local food for those communities like ourselves who have no real local commercial food production that would meet the (required) quality and standards."* (Hospital administrator #9)

Reasons given for the use of local food in health care to decline were:

1. **Greater standardization – "***We are probably going to be looking at even more standardization and less ability to change with the fluctuating market. I think the tendency will be toward more predictability. Consistency is very important."* (Hospital administrator #11)

2. **More cutbacks – "…***cutbacks are going to be coming…And if we continue to get cutbacks, we won't have the ability to continue to do that. There will be more pressure on us."* (Both administrator #2)

8.7.2 Short-term Expectations

To gain another perspective on the potential for increasing the use of local food in the Ontario health care system, the senior administrators and the FSMs were asked about the likelihood that their specific facility would purchase more locally-produced food in the next five years. Most did not foresee much change during this time period.

Only 34% of FSMs felt there was a high likelihood that the use of local food would increase in their in-bed patient service, and only 28% claimed a high likelihood in their cafeterias.

TABLE 46 – HIGH LIKELIHOOD OF AN INCREASE IN LOCAL FOOD IN NEXT 5 YEARS
(Source: Survey of FSMs)

Data is "HIGH LIKELIHOOD" percent (top option within a 3-point likelihood scale); data is percent of column; one answer per respondent	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both N=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
In-bed patient service	34	33	32	45	30	40	35	36
Cafeteria	28	41	9	39	23	35	26	33

The FSM who was interviewed as part of the senior administrator study provided a possible explanation for the FSMs' forecasts. She indicated that the GPO that her facility works with will have a strong impact on any efforts to increase the use of local food. *"I can only use my discretion basically when it isn't under contract with Health Pro. It comes down to what Health Pro contracts. I have to obey what Health Pro says."*

Like the FSMs, many senior administrators were cautious when talking about the short-term prospects for increasing the use of local food in their own facilities. Hospital administrator #8's response reflected an inability or unwillingness to forecast short-term expectations that was shared by many of the senior administrators who were interviewed:

> *"I would say unknown. We live in a rural community and I am fully aware of the importance of supporting our local producers. As much as we can, we will. But I can't predict the future and say that we are going to see a shift of x percentage given what we do now with local produce. So unknown is probably fair."*

The reluctance of some senior administrators to forecast what will happen at their facilities may reflect the previously-revealed fact that Ontario's hospitals and LTCs make extensive use of large, professional organizations in making their food purchases – GPOs, fresh produce distributors, food suppliers and food service suppliers. Therefore, consistent with the above FSM's comment concerning her GPO, some senior administrators indicated that changing the amount of local food their facilities purchase would require having the local food producers work with GPOs and large food/food service suppliers:

> *"Right now, because we're using a national food service company to manage and we're purchasing through their group, our local suppliers would need to get registered under their banner to be eligible to really supply products. For the things that aren't purchased through the national group, they really need to identify to our food service group what products they have available and get into the purchasing chain…"* (Hospital administrator #10)

Hospital administrator #12 suggested another possible reason that our senior administrator respondents were cautious in their forecasts about the use of local food at their facilities:

> *"We have to have a compelling business reason to do it."*

Responses to a question about the implications of increasing the use of local food in their facilities help explain the above comment. The implications several senior administrators focused on were based on the assumption that increasing their use of local foods would require a return to more in-house cooking and would therefore result in higher food service costs:

> ***"****From a staffing perspective, if we were to look at cooking, our labour is certainly going to need to increase compared to what we have today. Their skill sets would have to be different. Infrastructure is obviously huge because right now we don't have a pot, we don't have a stove, we don't have a mixer, and we don't have any of that equipment. You are talking multimillion dollar change to the department to allow for cooking to happen."* (Hospital administrator #7)
>
> *"Right now because of our system of retherm, we don't have a staff to do local. The minute we chose to go that way, it changed everything. That's our commitment. We*

have to look at costs, and that was our only option in looking at a system like that... (To incorporate more local food), we would have to restructure our whole thing. Right now we have minimum staff, and they could not possibly do scratch cooking without increasing quite a few FTEs again." (Hospital administrator #3)

8.7.3 Major Changes Needed and the Role of Government

The respondents in all three studies were asked to discuss the major changes needed to increase the use of local food in Ontario's health care system.

The question was framed to the FSMs in terms of their own facility – "What major changes are needed for your facility to purchase and serve more local food than it currently does?" As can be seen in Table 47 below, the FSM's focused on two major areas: availability/supply and government regulations. Their focus on needing changes in supply is consistent with their recognition in section 8.6.3 that supply issues are the key barriers to the use of local food. However, the need for changes in government regulations is not something the FSMs signaled in their answers to other questions. Nevertheless, 48% of the total sample felt that governments must require local food certification and 45% felt that governments must modify their food safety regulations. These possible changes received comparable support from FSMs in all types of facilities, all regions and all sizes of facilities.

TABLE 47 – MAJOR CHANGES NEEDED TO INCREASE THE USE OF LOCAL FOOD
(Source: Survey of FSMs)

Data is percent of column; multiple answers per respondent: only top 4 responses shown	Total Sample (n=137)	By type of facility (n=137)			By geographic region (n=121)		By # beds (n=125)	
		Hosp (n=55)	LTC (n=61)	Both N=21)	GTA & South (n=63)	North & East (n=58)	<100 (n=59)	100+ (n=66)
Procuring local food must be easier	60	67	52	62	67	53	58	62
Local food must be supplied on a 12-month basis	58	60	51	71	60	52	54	64
Govts must require local food certification	48	51	46	48	51	45	46	50
Govts must modify food regulations to include local food	45	42	46	52	49	41	53	42

Questions to the senior administrators and focus groups about changes needed to increase the use of local food in the Ontario health care system were framed in terms of the role of government. The focus group participants (growers, processors, distributors) were quite certain that government should take the lead, while the senior administrators' responses were more mixed and considerably less positive about government involvement.

Overall, the focus groups clearly felt that it is a governmental responsibility to finance and promote the increased use of local food in the health care system and to create an environment that encourages industry. However, they also felt that industry has a strong role to play by following through on the efforts made by government.

"There has to be one leader that promotes it, but they can't do it alone. So to ask the government to do everything for you, I don't think that's the right solution. You are playing victim… It's a mix between government and industry... Government does manage and create certain needs to develop certain industries. That's what they are

doing with the fit program with the solar panels. They (need to) create an environment that will promote this." (Ottawa focus group 2)

"I would like to see government support us a little bit and help us crack open the door, and I will do the rest. I will work my way through pricing and getting the institution the product they need. Just crack the door for me and I'll do the rest…why they don't even start with 5-10%?" (Kitchener focus group 2)

"We are the government. I think we need to do it collectively. I think you start modestly...so the food service contracts (could say) to go up to 10%... I think it's the government's responsibility…It is really easy to do pilots." (Kitchener focus group 1)

"The responsibility should fall on Health Canada from the federal level to educate the facilities… I think the leadership maybe has to come from the federal level, but the execution or strategy may be provincial." (Toronto focus group)

"Do the same study they did with wines, do it on food - the payback of local food…Something like that would be fairly inexpensive to do and very valuable." (Barrie focus group)

The senior administrators were less enthusiastic about governmental involvement. Consistent with their emphasis on finances, many senior administrators favoured government action in the form of an increase in the raw food subsidy.

"We would need some sort of funding from the Ministry to propose such a change. You know, what we could do 10-12 years ago with Ministry funding, we can't do now." (Hospital administrator #3)

However, there was little agreement among them otherwise regarding what government should do - or whether it should even get involved in any effort to increase the use of local food in health care. Table 48 summarizes their thoughts/comments.

TABLE 48 – Possible Government/MOHTLC role in increasing the use of local food in healthcare
(source: Senior Administrator Interviews)

Data is number of mentions; multiple answers per respondent	Hospitals (n= 13)	LTCs (n = 7)	Both (n=2)
More funding/incentives/subsidy/increase food budget	**5**	**5**	
Build awareness of choices available locally to org purchasers so they can pressure their distributors	1		1
Change purchase criteria	1		
Change purchase criteria but provide extra funds to cover increased costs	1		
Streamline regulations to provide safety provisions without burying local producers so that they can't compete or provide competitive prices	1		
Provide funding to support processors to formulate healthcare products using local food	1		
Yes, there is a role for government		1	
Reduce regulations			1
Ensure that there is a consistent approach among the healthcare facilities			1
No, there is no role for government	2		
Government has to weigh providing a food subsidy against one for reducing cancer surgery rates	1		
No, it should be the Ministry of Economic Development to assist with food production	1		
The Ministry will not get involved with directing people where to buy – it's all about supply availability		1	

The focus group participants' suggestion that government should require that a specific percentage of hospital and LTC food purchases be local was discussed by the senior administrators. Many questioned the viability of doing this, even at the 5% level, because they did not believe that the government would provide the financial support needed to implement it:

> *"They could mandate that we have a percentage of food that comes from various local sources, but they need to be prepared for the backlash from everyone saying "How do we afford it?"… They can certain assist with the cost which they are not always forthcoming to do…They always do that...they make you do things and then they don't give you the money to do it."* (LTC administrator #2)

> *"If the Ministry was keen on supporting local produce and was prepared to pay a premium to hospitals for it, they could look at (requiring local) if that's the direction they wish to go. What we are seeing these days is the exact opposite. The expectation is that we are going to do more for less."* (Hospital administrator #4)

> *"If they want to make a policy mandate, that's fine, but at what cost? If there is no funding that comes with it and the increased cost is then borne by the hospital, that's never going to happen. We have to manage within a shrinking envelope of funding."* (Hospital administrator #5)

> *"The government can't force us to buy local produce. We are forced legally to balance our budget. So when somebody says you will pay more for local, hospitals will just go back and say 'Look, you tell us to buy local, then give us the money to buy local.' We have to buy the lowest price products to keep our costs as low as possible. The Ministry is forcing us to do that."* (Hospital administrator #12)

In addition, some senior administrators involved in long term care questioned having any extra government requirements for food given the current regulatory environment they must operate within.

> *"I certainly don't want to say they can mandate it. They mandated enough things."* (LTC administrator #5)

> *"One of the things that I think I need to say about the Ministry is that they need to stop regulating, especially in the long term care. Not in the hospitals, but in the long term care. How we provide food...is so regulated, it's unbelievable. Their regulations make it very difficult to achieve what we need to achieve as far as food services goes."* (Both administrator #2)

8.7.4 The Priority of Increasing Local Food in Ontario Health Care

In their final comments, several senior administrators emphasized that, while increasing the use of local food may be desirable, it is a low relatively priority.

With regard to the MOHLTC, some senior administrators questioned whether this Ministry would ever implement a local food purchase guideline:

> *"I doubt very much that the Ministry of Health and Long Term Care will ever get involved in directing where people can buy their foods… I know that the only things that (will)*

affect where we will purchase is availability, having it on site when it is needed on site, and the cost factor." (LTC administrator #1)

"If it was viewed as a priority perhaps by the Ministry of Health and Long Term Care, perhaps we can focus a little bit more on it. But I don't see it being a priority to them right now. I think that they have some other issues they are looking at. I don't think they are focused at all on community support." (LTC administrator #6)

Many of the interview respondents pointed out that increasing local food is a very small consideration within the larger context of administration at their facility.

"Would it be nice if we were purchasing more local? Absolutely, I would love to support our local community. It has to be balanced against what we are here for, to provide as much health care as we can, active health care…so it's always a trade-off… My role, when you come in for a day surgery, is to provide you the highest quality care that I can. If I'm able to provide you with a locally grown meal, that's great, but it's not my priority……if I am the government of Ontario, and I have ways to reduce cancer surgery, I'm probably not going to throw in a subsidy for food before throwing in a subsidy for reducing cancer surgery rates…We have a set budget. We provide food as economically as we can and as nutritiously as we can, but it competes with the other aspects of the operation." (Hospital administrator #8)

"With long term care, (we are under constant) pressure from the Ministry of Health in regards to our budgets and our time. Those pressures don't lend sometimes to being able to focus on some of the other things that might be considered important, such as locally grown items, local vendors, or those types of things. We are trying to keep our budget under control and we are spending a tremendous amount of time ensuring (that) we are following every regulation that they have stipulated for us…and some of those other things unfortunately on the priority list are pretty low." (LTC administrator #5)

"How do you make it relevant? Why would you even think about it? Why would I want to spend any time on that? I'm not being critical. With all the other things that we got, why is that something I would want to spend any time on? We are dealing with the urgent priorities and incorporating local foods would be less urgent." (Hospital administrator #13)

8.7.5 Summary and discussion: *Attitudes/perceptions toward the future use of local foods.*

1. **Expectations are low that the use of local food in Ontario's hospitals and LTCs will increase in either the short term or the longer term.** These expectations are a function of the three issues of costs, supply, and government regulations that were identified as key barriers to increasing the use of local food in the previous section, 8.6.

2. **Although the focus group participants strongly endorsed government involvement to increase the use of local food in health care, most senior administrators would be wary of anything other than an increase in the MOHTLC food subsidies.** Senior administrators seem to assume that other actions – for example, mandating that a percentage of their food purchases be local – would require a return to more in-house cooking. They are also concerned that government involvement will simply increase the pressures they currently face.

3. **Given the low priority that increasing the use of local food has relative to other health care concerns, achieving this goal may be best achieved by increasing the amount contracted and delivered through GPOs, food suppliers and food service suppliers.** This could be achieved by two mechanisms: (a) having local producers approach these "customers" and become part of their supply chain, and/or (b) having FSMs demand that their GPOs, food suppliers and food service suppliers increase the amount of local food that they supply.

9.0 KEY CONCLUSIONS: INCREASING THE USE OF LOCAL FOOD ACROSS THE ONTARIO HEALTH CARE SYSTEM

9.1 Introduction

There is a fair amount of anecdotal evidence available on individual health care facilities in Ontario that have purposely increased the use of local food in their offerings to patients, visitors and staff in recent years. For example, St. Joseph's Health Care Centre in Guelph was featured in an October 2011 article in *Food Service and Hospitality* claiming that "Canadian hospitals are beefing up their meal programs, offering greater choice, personalized service and more local food options" (Neshevich, 2011). Individual facility efforts, such as those at St. Joseph's in Guelph, are highly commendable and generally recognized as being due to the existence of an internal administrator or food service manager who has successfully "championed" the use of local food. However**, it is important to emphasize that the focus of this report has not been the feasibility of making gains facility-by-facility. Rather, it has been on achieving broad scale gains in the use of local food by Ontario's health care system that can be sustained long term despite periodic turnover in facility management and personnel.**

Therefore, this section discusses conclusions that can be drawn from this report that can contribute to the development of a strategic plan to increase the use of local food across the Ontario health care system. Developing a strategic plan with this objective is a worthwhile exercise because the research conducted for this report has clearly demonstrated that the health care personnel responsible for food service are interested in using more local food at their facilities. However, this research has also highlighted many challenges, and some opportunities, that must be taken into account during plan development.

Strategic plans typically include setting well-defined objectives and identifying key strategic decisions or actions needed to achieve these objectives. The possible strategic plan objectives, the key strategies needed to make any plan successful, and the assistance that can be provided by the MOHTLC and OMAFRA are discussed below.

9.2 Plan objectives

► **Any plan developed to increase the use of local food across the Ontario health care system local food cannot currently be based on quantitative growth objectives, This is because there is no commonly-accepted definition of local food. As a result, there are no agreed metrics or tracking mechanisms to measure its use.** As stated in the Synopsis at the beginning of this document, the desired impact of Food for Health Project 200218 ("Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Health Care System") is:

- A 20% increase in the number of Ontario hospitals and long term care facilities incorporating local foods into their food services by 2015.
- A 20% increase in the number of patient and residential meals served in the Ontario health care system which incorporate local foods by 2015
- A 20% increase in the number of hospital and LTC cafeterias serving local foods by 2015.

Specific, objective gains of this nature are only feasible if credible base or "pre" data is available or can be estimated with a high degree of confidence. A key finding of this study is that this data is not available. Furthermore, the information that health care facilities can supply is so spotty and limited that it cannot be used to develop reliable estimates.

► **Until "local food" is defined and metrics for tracking it are developed for use across the Ontario health care system, attempts to seek growth in the use of local food must seek to achieve qualitative, subjective goals**. There are two basic approaches possible at this point in time for pursuing these types of goals:

(a) Seeking changes to the guidelines and parameters that hospitals and LTCs are required to adhere to – example objectives would be:

- seeking a significant increase in the MOHLTC food subsidy
- seeking adjustments in Ontario's food safety regulations
- increasing the percentage of the facility's budget devoted to the food service department.

Plans to seek changes of this nature will take time to be approved and implemented; they will also require the involvement of senior level personnel. For example, increasing the food subsidy or making Ontario's food safety regulations less restrictive would have to involve having very senior health care administrators (CEOs, Board Directors) make strong and repeated appeals to the MOHLTC. A change such as increasing the percentage of the facility's budget devoted to the food service department could entail having the senior administrators responsible for food service argue for this change with their CEOs, or having FSMs to argue with their senior administrators for more funds out of their budgets.

A plan to seek major systemic changes is worth considering because it could lead to significant, across-the-province shifts in the use of local food within the health care sector. Realistically, though, it would have to assume a longer term, 3-10 year time frame.

(b) Working within the existing constraints – example objectives would be:

- getting FSMs to emphasize buying local food when they make purchases outside of their contracts
- building local food requirements into contracts with food suppliers and food service suppliers
- convincing GPOs to focus on suppliers that are more local food-oriented.

This type of plan does not require extensive involvement by higher-level managers, and could result in notable increases in the use of local food by Ontario's hospitals and LTCs in a shorter amount of time, i.e. 1-3 years.

9.3 Key strategies for success

No matter whether the plan seeks long term systemic change or change within the current operating parameters of the health care system, some preliminary groundwork is needed to increase the potential for broad scale success:

► **The use of local food must become a high strategic priority for health care**. Senior administration and FSMs must view local food as essential to achieving their facility's mission or annual goals. This attitude is critical to motivating their engagement and support.

To achieve agreement that local food is a high strategic priority, FSMs and senior administrators must be given reasons why using local food is important to heath care. It is beyond the scope of this project to determine what these reasons are. However, the research conducted for this project indicates that they must be capable of convincing hospital and LTC personnel that the patient benefits of local food are just as important as or even more important than the economic benefits most of them readily acknowledge. In other words, local food needs more justification than that it will help local farmers and the communities they operate in. Ideally, these reasons will tie local food to their two most important priorities, reducing costs and increasing patient satisfaction. To be actionable, they must also be backed by scientific evidence and be compatible with governmental standards of efficiency and effectiveness.

► **A collective voice must be developed to speak on behalf of the Ontario health care sector.** The spotty, facility-by-facility nature of current efforts to increase the use of local food in Ontario health care is partially a function of the lack of a collective voice to promote the value of local food to the government and other stakeholders. Any long- or short-term plan to increase the use of local food in Ontario's health care system needs to be supported by a "united front". One way to meet this need would be for the Ontario Hospital Association (OHA) and the Ontario Long-Care Association (OLTCA) to collaborate on educating and lobbying key personnel in the government and at GPOs, food suppliers, and food service suppliers. This collaborative effort could also seek to educate the members of these associations and encourage them to promote local food within their facilities.

► **The help and support of large food suppliers and food service suppliers must be recruited.** Given how much food in hospitals and LTCs is purchased from professional organizations and will continue to be in the future, it is apparent that they must be willing partners in any long- or short-term efforts to increase the use of local food in health care. The current centralized food distribution system and many food-related government policies meet the business needs of these large organizations and give them a clear advantage over small farmers, processors, and distributors. If these large professional organizations do not fully support the goal of making substantial increases in the use of local food, they could decide to undermine efforts to do so by lobbying against them at the facility or Ministry level.

► **It must be determined whether to focus on LTCs or take a multi-stage approach that starts with long term care and later expands into acute care**. For health care food service, the most substantial differences that exist in Ontario are by "type of facility" rather than by "geographic region" or by "size of facility". Periodic data comparisons made throughout this report have consistently shown that there are more differences between hospitals, LTCs and "Both" facilities than between facilities located in the "GTA & South" LIHNs and the "North & East" LIHNs or between facilities with "<100 beds" and those with

"100+ beds". As a result of differences in areas such as food procurement and preparation methods, patient populations and needs, the mission of the food service department, the role of food, the importance of food service relative to other departments, and the frequency of menu changes, LTCs currently use more local food than hospitals and have greater potential to increase their use of it in the future. Therefore, any long- or short-term plan to increase the use of local food in the Ontario health care system might simply focus on LTCs. Alternatively, it could be multi-stage, with all LTCs as the initial target. Hospitals could be targeted later, although a facility-by-facility approach might be needed to reflect their level of resources and capacities for change.

9.4 Government assistance

According to this research, governmental policies may have hindered the local food movement in Ontario to date. The MOHLTC's need to ensure that the Ontario health care system does not make patients vulnerable to more illness has led to restrictive safety regulations for the food that is brought into these facilities for patient meals and snacks. Similarly, the need for the MOHLTC to control its spending of taxpayer-based revenues has resulted in limited food subsidies and limited budget flexibility. Collectively, these policies have advantaged larger food suppliers and were the catalyst for the trend toward outsourced, prepared food.

Similarly, while OMAFRA has sought to increase the market for local food through Foodland Ontario, its promotional focus on fruits and vegetables may have led to a narrow understanding among health care professionals of what constitutes local food and the perception that local food is of limited appeal due to seasonal availability and higher costs. The recent move by Foodland Ontario to include proteins is an important step toward correcting these misperceptions. The launch of *OntarioFresh.ca* is also welcome as it will help institutional purchasers connect with nearby local food suppliers.

Despite the potential for long term and short term strategic plans to be developed, as suggested in sections 9.2 and 9.3, assistance and support from government is needed to achieve the goal of substantially increasing the use of local food in Ontario's health care system. Specific needs and opportunities for government involvement include the following:

- **The MOHTLC must recognize the importance of food to health care.** Food is not mentioned on the MOHLTC website and does not appear to be recognized by the Ministry as a tool for preventing illness in the general population or as a treatment tool, except for people afflicted by diseases such as diabetes or conditions requiring careful nutritional intake. Therefore, the MOHLTC's role in any plan to increase the broad scale use of local food in Ontario's health care system is dependent upon Ministry officials first officially recognizing the importance of food in general to the health of patients and visitors to Ontario's health care facilities.

- **The MOHTLC must recognize that some of its current policies deter senior administrators and FSMs from providing top quality patient care.** Although the mission of most food service departments suggests that they focus on doing what is best for patients, the reality is that they are limited in their ability to do so by tight regulations and limited budgets. As a result, the mission to "provide nutritious meals" appears to be operationalized as to "provide the best quality food available as efficiently as possible within budget constraints". This has contributed to food service decision-making exhibiting a managerial orientation rather than a patient care orientation.

► **OMAFRA can take more leadership than it has to date in efforts to increase the use of local food**. Actions that this Ministry should consider, based on this research, are:

(f) Encouraging local growers to band together to present a "united front" and lobby for the local food cause.

(g) Encouraging local growers, processors and distributors to work with larger food and food service suppliers individually or through the above lobby group in order to build a greater presence for local sources within the food supply chain.

(h) Developing or helping to develop a definition of local food for broad scale use within Ontario's health care system. OMAFRA's efforts to date to define local food are admirable (http://www.foodland.gov.on.ca/english/industry/ind-definitions.html), but the results do not allow for easy operationalization across a complex sector like health care.

(i) Through Foodland Ontario:

- publicizing the above new definition of local food to the public in order to increase understanding by all Ontarians, including health care personnel, of the breadth of food categories that offer local food options.
- educating consumers about the newer storage and preservation technologies in use by food processors and distributors in Ontario, and the improved production techniques being employed in the province. These changes have positively impacted food availability in Ontario, making it possible to produce not only more volume of products, but more types of products and at all times of the year.

(j) Through the Broader Public Sector Investment Fund:

- Conducting a business analysis/case study similar to the one done to support the Ontario wine industry.
- Conducting a full cost analysis to reveal the full environmental, economic and social benefits of local food.
- Exploring different business models for food distribution in Ontario, e.g. decentralizing the terminal system and creating mid-size distribution hubs.

9.5 Final comments

The research conducted for this report suggests that it is possible to take advantage of the market potential for local food in Ontario's health care sector. However, cooperation and coordination among the key stakeholders is essential to achieving broad scale gains that can be sustained long term despite periodic turnover in facility management and personnel.

The alternative approach is to continue on the current path, with gains occurring periodically on a facility-by-facility basis. This approach seems to require the existence of at least one local food champion in every organization. The key question with this approach is whether any changes made to accommodate local food can be retained once the champion is no longer involved in his or her facility's food procurement and preparation.

10.0 NEXT STEPS

This report has provided the foundation for the remainder of Food for Health Project 200218 ("Exploring the Feasibility and Benefits of Incorporating Local Foods into Ontario's Health Care System"). The next two steps are to:

1. **Detail the micro level challenges and opportunities associated with implementing local food procurement policies at individual healthcare institutions.** This research will be used to develop the second deliverable of this project, Case Studies of St. Mary's Hospital (Kitchener) and St. Joseph's Health Centre (Guelph). These case studies will help address the question of whether changes made to accommodate local food are likely to be retained long term.

2. **Provide specific recommendations for all key stakeholder groups that would be involved in the implementation of local food procurement policies in the Ontario healthcare system.** These recommendations will be based on both this report and the two case studies. They will be the basis for the third deliverable of this project, a Policy Report on the Use of Local Foods in Ontario Hospitals and LTC's.

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