

Examining Campus Food Sustainability at York University

June 2009

& IRIS

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Institute for Research and Innovation in Sustainability (IRIS), York University
349 York Lanes – 416.736.5784 – www.iris.yorku.ca

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**Written by: Tony Morris, Meagan Heath, Annette Dubreuil, Caitlin Gascon,
Lori Dagenais, Holly Ouellette, and Isabella Jaramillo**
Editors: Dawn Bazely, Cecilia Tagliavia, and Anthony Barbisan

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EXECUTIVE SUMMARY

The Institute for Research and Innovation in Sustainability (IRIS) began looking at the range and types of food service operations at York University in the summer of 2008. A significant early finding was that food service operations on the Keele Campus are enormously decentralized, and that the Glendon Campus provides very few options for students.

The mandate of IRIS is to engage in sustainability research, including that into campus-based sustainability issues. This past year, we examined the structure and practices of food services at York. In the spring of 2009, IRIS staff and volunteers surveyed 1,239 members of the York community, and also interviewed key members of the university staff responsible for regulating campus food services. We also explored the range of available options that could improve the sustainability of these operations. This report describes the complexity of York's current food services, and relates the York situation to the broader context of food and the environment. It also describes the survey results and provides specific recommendations for moving forward. Prior to being carried out, the survey was submitted for review and approval by York University's Office of Research Ethics.

Many of the York community members surveyed, expressed their dissatisfaction with campus food options as well as with campus waste management arising from the garbage produced by food services. An overwhelming number of survey participants expressed a strong desire for more healthy food, vegetarian and alternative dietary options, as well as a very low interest in having access to major restaurant and fast food chains. Community members exhibited a high degree of willingness to participate in and to support more sustainable food practices, such as composting, bringing their own mugs to campus, or buying local and organic food options. Through additional research accompanying the survey, we learned that in their present state, the campus food service operations overseen directly by York face economic challenges with respect to their long-term sustainability. This is primarily due to the significant asymmetry that exists with respect to the relative distributions of customers and locations among the four primary food management bodies (York University Food Services, York University Development Corporation, which manages York Lanes, the Student Centre, and Schulich School of Business). For example, many of the food service operations directly controlled by York University are in relatively quiet locations, compared with those in the Student Centre and York Lanes. The outcome of this decentralized management structure is that the university is not benefiting from its food service operations as greatly as might be assumed.

As a result of these findings, we recommend that York University make food service operations a much higher priority on its sustainability agenda. A major step in this direction would be the formation of a policy aimed at governing campus food service operations in a more coordinated fashion that enables and supports the implementation of sustainable practices to a much greater degree than is presently possible.

INTRODUCTION

In the summer of 2008, the Institute for Research and Innovation in Sustainability (IRIS) identified campus food service operations as an area that presented many opportunities for increasing sustainability at York University. The members of IRIS met with the Director of YU- card and Food Services to gain an understanding of the complex system of food provision at York University. IRIS agreed to assist Food Services by carrying out research into the range of existing sustainable food initiatives at other universities and elsewhere, and to survey the York community about their views, concerns and desires related to eating on campus.

The range of food services at York University is overseen by four separate bodies. (1) The York University Development Corporation (YUDC) owns and leases space to vendors in York Lanes. (2) The Student Centre is managed by a Board of Directors, which includes representatives from the York Federation of Students. (3) The three food vendor locations in the Schulich School of Business are managed by Aramark Hospitality. (4) York's Food Services, which is a unit of Campus Services and Business Operation (CSBO), manages and controls all other food service locations, including the leases at the Glendon Campus. Aramark is now the main food provider on both the Keele and Glendon campuses at the locations managed by Food Services. Food Services also oversees independent operators including the Orange Snail, Michelangelo's, the Absinthe Pub, Country Style Kosher Deli, and the Graduate Student Lounge.

It soon became obvious that the issue of campus food sustainability could not be studied without some consideration of waste management, which is managed by CSBO across all University facilities. Waste has proven to be a similarly complex topic, especially when investigating and assessing the types of packaging and disposal methods that provide the most environmentally-friendly options for food.

This report summarizes the survey findings, and also gives an overview of research that was conducted into issues such as problems and opportunities relating to waste, local and organic foods, fair trade, vegetarianism, as well as research results from similar projects.

CAVEATS, ACKNOWLEDGED BIASES AND SURVEY LIMITATIONS

All surveys have various limitations and biases embedded within the questions that influence the results, and these are briefly discussed in this section.

The survey that we developed was influenced by the use of an online survey format. Aside from the inevitable technical glitches, the research was further limited by the structure of questions available through Survey Monkey. For example, the format of the ranking questions proved to be confusing, yet Survey Monkey did not provide any alternative. Despite aiming to design the survey in a manner that we hoped would increase the likelihood that people would answer all questions, some respondents did not complete the survey. We only analyzed completed surveys.

As with any survey using closed questions, respondents were forced to select one of the answers provided, which we knew would not always perfectly match his or her opinion. Many questions

provided the option to select “other” or to add a comment. We have included many of these comments in this report.

The survey was made available to members of the York University community via several means: (1) over four days (Monday, March 30 to Thursday, April 2, 2009) laptops were set up to table the survey in the high-traffic, centralized locations of Vari Hall on Keele campus and in front of the Glendon cafeteria; (2) the survey link was sent to the York University Staff Association, as well as several faculty and department listserv’s (via Research Accounting); (3) the survey was distributed to the Y-File e-newsletter; (4) and the survey was posted to the IRIS website and the IRIS Facebook group. Due to the choice of sampling locations, most survey respondents were likely to have been individuals who: were present for the tabling of the survey in Vari Hall or the Glendon cafeteria; had free time; and were interested in the topic of food and/or waste. Additionally, by making the survey available online, other people could participate without needing to be present at a specific time and place. While prizes were used to entice otherwise uninterested individuals to visit the survey tables, there was no similar incentive for online respondents. We do, however, believe that food is a universal issue for everyone. This broad interest was reflected in the fact that respondents represented a significant cross section of the York population.

IRIS has a mandate to carry out sustainability-related research, and thus the survey includes an admitted environmental bias. However, our survey results clearly show that the average member of the York community is aware of and concerned about environmental issues associated with food production and consumption. The survey revealed a broad interest in sustainability that goes beyond those members of the York community who are directly engaged in environmental programmes. An additional motivation for engaging in this project was the opportunity that it presented for public education. Consequently, this report is as much about education as it is presenting the survey results and examining the food service landscape at York University.

DEFINITIONS

WASTE

We consider waste to be the aggregate of all objects discarded, whether into a garbage can, recycling bin, composter, or as litter. Food waste is thus, all waste derived from food, including food scraps, packaging, napkins, utensils, etc.

COMPOSTING

The Composting Council of Canada, which represents the Canadian composting industry, defines composting as “a natural biological process, carried out under controlled conditions, which converts organic material into a stable humus-like product called compost” (2009a). Compost, as defined by the Canadian Council of Ministers of the Environment (CCME), is a “solid mature product” (2005, p.3), which is categorized for unrestricted or restricted use based its level of contamination. The CCME developed

national guidelines for compost quality, though compost and composting regulations still vary between provinces, as some – such as Ontario – have not yet adopted the national standard (2009b).

At York University, food vendors are required to collect kitchen scraps, which are then moved to a centralized off-site composting facility. Consumers have the option of depositing their food scraps into a growing number of on-campus outdoor organic waste digesters. There are currently approximately forty digesters located across campus, which accept fruits, vegetables, paper napkins, tea bags, coffee grinds and all other food scraps except meat and bones (*See Appendix III for map of locations*). These bottomless composters are only emptied once per year. As such, they are not suitable for paper or biodegradable packaging which requires greater capacity and longer digestion periods than the system allows (Haagsma, 2009).

BIODEGRADABLE PACKAGING

The Canadian Council of Ministers of the Environment (CCME) has set out the requirement that “biodegradable packaging waste shall be of such a nature that it is capable of undergoing physical, chemical, thermal or biological decomposition such that most of the finished compost ultimately decomposes into carbon dioxide, biomass and water” (Five Winds International, 2008, p.52).

Biodegradable packaging must meet two objectives:

1. Be comprised of renewable resources (crops) rather than non-renewable resources (fossil fuels).
2. Be biodegradable rather than existing perpetually (Davis and Song, 2006). However, we found no Canadian legal definition for “biodegradable”. In the United States, the Biodegradable Products Institute applies standards developed by the American Society for Testing and Materials Specifications to certify the biodegradability of eligible products, indicated by their “Compostable Logo” (Biodegradable Products Institute, 2009). Clearly, since all materials do eventually degrade, a robust definition should, ideally, refer to a timeline when defining what constitutes an acceptable biodegradable material.

Currently, at York University, biodegradable packaging goes into the garbage stream, because it cannot be accepted in the available composters, nor is it recyclable (York University, 2009).

RECYCLABLE CONTAINERS

This scan was specifically concerned with recyclable food waste, such as pre- and post-consumer packaging. The extent to which different kinds of packaging are recycled varies among and within institutions and municipalities, and is dependent largely on economic factors. York University requires recyclables to be separated between two bins: the bottles and cans bin (containing glass and plastic bottles, metal cans, aluminum trays and foil, plastic tubs and lids, and HDPE and PET plastics with the recycling number 1 or 2, amongst others), and the paper bin (containing office paper, newspapers, magazines and inserts, boxboard and egg cartons, amongst others) (York University, 2009).

LOCAL, SEASONAL FOODS

Currently, Canada lacks a federal standard or certification for local foods. The non-profit organization Local Food Plus (LFP), has, however, established its own standard in Ontario: “local foods” must be cultivated with more diverse, sustainable methods than those commonly used in conventional agriculture, and must be grown, processed, distributed, and purchased within the province of Ontario (2009). Local farms tend to have more biodiversity in their crops, so their need for pesticides and artificial fertilizers is much lower than that of monocultures (Harper and Le Beau, 2003). The utility of genetically modified seeds is also limited in local farming because crops do not need to grow in any condition or season, nor do they need to stay fresh through long-distance transportation. So while many local farms cannot afford organic certification, they often do meet or exceed current organic standards (Pollan, 2008). Also, local produce typically spends less time between harvest and consumption than long-distance foods, allowing these seasonal varieties to retain more nutrients and flavour (Pollan, 2008). They are often less expensive than long-distance foods as well, despite federal subsidies that encourage the mechanization and globalization of agriculture [e.g. GST exemption on pesticide use and the Canadian Exploration Expense for oil, coal, and gas companies (Boyd, 2003)]. Additionally, more of the profits go directly to the farmers rather than the “middlemen” (i.e. agribusiness firms, food processors, shippers, retailers, marketers, etc.) who currently dominate and profit most from the industrial food system (Harper and Le Beau, 2003). While Ontario’s climate may appear limiting, there are a wide variety of seasonal options available year round (Foodland Ontario, 2008). Given that the benefits of these foods are so widespread, and that 52% of Canada’s class 1 farmland is found in Ontario [mainly in the Greenbelt (Ontario Farmland Trust; CIELAP, 2008)], we propose that York University could feasibly increase its use of local food supplies, provided that an internal support structure is put in place.

FAIR TRADE

Fair Trade is an alternative trading system that creates partnerships between importers and producers. Fair Trade products are produced under principles of democratic organization (using cooperatives and unions), do not use exploitative child labour, are environmentally sustainable, and meet the standards of the International Labour Organization (ILO) Conventions for all paid employees (Fridell, 2007). The products are all purchased under terms that guarantee a minimum price and have an ingrained social premium that goes directly back to the community. The social premium can be spent in accordance with how the community feels it can best be used; for example, money can be spent on hospitals, transportation, schools, roads and other communal necessities (Fridell, 2007). Fair Trade certification bodies visit the cooperatives, ensuring that the products continue to be made under the required conditions to be certified. Fair Trade, as the name implies, is not a form of charity, rather an ethical trading system based on the education of importers and consumers about where their products come from, how they are made, and who makes them.

The most relevant certification body for York University is TransFair Canada, a partner of the Fair Labelling Organization (FLO). Commodities that are currently certified by TransFair Canada include: coffee, tea, bananas, soccer balls, cocoa, sugar, wine, cotton, flower, spices, and rice (TransFair Canada,

2009). Although not all Fair Trade goods are certified, certification from organizations like TransFair Canada is essential because it provides greater assurances to consumers.

York University has its own brand of coffee, Las Nubes, which comes from Costa Rica and is Fair Trade certified by TransFair Canada. Increasing the use of Fair Trade products at York would require that businesses provide, for purchase, a larger selection of certified goods such as coffee and tea and greater visibility of the TransFair certification label.

VEGETARIAN

The common definition of a vegetarian is anyone who does not consume any “meat, poultry, game, fish, shellfish or crustaceans, or slaughter by-products” (Vegetarian Society, 2008). However, there are, in fact, many different types of vegetarianism that involve various food restrictions – see chart below. With proper nutrition the vegetarian diet is recognized as a healthier lifestyle choice. Some of these health benefits include; “lower blood pressure, improved cholesterol levels, healthier weight and less incidence of Type 2 diabetes, heart disease and stroke” (Heart and Stroke Foundation, 2009). One comment that was made by a number of survey respondents is that York University currently offers fairly limited numbers of nutritious vegetarian options for community members with these eating restrictions.

Types of Diets	Ovo-Vegetarian	Lacto-Vegetarian	No Red meat	Omnivore	Pescitarian
Beef				*	
Pork				*	
Dairy		*	*	*	*
Fruit/Veg	*	*	*	*	*
Eggs	*		*	*	*
Poultry			*	*	
Sea-food			*	*	*

Special Diets & Definitions:

Vegan: vegetarian diet that excludes meat, eggs, dairy products and all other animal-derived ingredients

Macrobiotic : includes unprocessed vegan foods, such as whole grains, fruits and vegetables in specific proportions, and allows the occasional consumption of fish (Hackett, 2009)

Flexitarian: those who eat a mostly vegetarian diet, but occasionally eat meat (Hackett, 2009).

Raw-Vegan: consists of unprocessed vegan foods that have not been heated above 115 degrees Fahrenheit (46 degrees Celsius) (Hackett, 2009).

Celiac: is a condition resulting from an immune (allergy) reaction to gluten, a protein found in wheat (Hackett, 2009).

Kosher: prohibits foods that include pork, game, horse, shellfish, fish without scales and snakes. Slaughtered animals must be ritualistically prepared (Kosher, 2006).

Halal: Animal or poultry has to be slaughtered in a ritual way known as Zibah (Khawaja, 2001).

ORGANIC

There are several definitions of the term organic. The Ministry of Agriculture Food & Rural Affairs defines organic as “a method of crop and livestock production that chooses not to use certain pesticides, fertilizers, genetically modified organisms, antibiotics, and growth hormones” that are not acceptable by organic standards (2009). For a farm to be “Certified Organic” the products must not use “synthetic pesticides, synthetic fertilizers, sewage sludge, genetically modified organisms, growth hormones for animals” (Organic Council of Ontario, 2007). Organic products are available in Ontario and are considered by many to be a healthy alternative for consumers and the earth, although the debate about the cost, accessibility and benefits of organic, is ongoing (Barclay, 2009).

NATION WIDE DATA: EATING HABITS

It is generally assumed that a majority of consumers tend to value price and convenience over other factors. However, according to our survey results, members of the York community rated health as the most important factor that determines their food choice. Similarly, a 2006 study commissioned by Agriculture and Agri-Food Canada suggests that in Ontario nutritional value is the most important factor in a food purchasing decision (Ipsos-Reid, 2006). In terms of the considerations that determine consumer behaviour, the results of our survey are fairly similar to those of the Canadian population. Consumers at York ranked environmental sustainability as the least important factor when purchasing food. The Ipsos-Reid study found that,

“Health claims, environmentally responsible production, natural foods and foods produced in Canada are fairly close in level of importance and are more important than price, the humane treatment of animals, brand and functional foods.” (2006, p.6)

According to the Ipsos-Reid study, organically produced foods, as well as new and innovative foods continue to be the least important aspect of the food choices made by Canadians (2006). However, food produced in Canada and foods produced in an environmentally responsible manner were more important factors than price and the brand of the food (Ipsos-Reid, 2006). The Ipsos-Reid survey looked at other factors that influence consumers that were not used in our survey, such as quality of ingredients, nutritional labels, and food safety (2006).

Another factor worth mentioning is vegetarianism. Our survey indicated that within the York community, vegetarians account for approximately 17% of the campus populations, including Glendon. This is a high proportion in relation to the Canadian population. According to a 2004 survey, approximately 8% of Canadian households are self-defined vegetarians, 2-3% are vegans, yet up to 30-40% of households actively seek out meatless alternatives (Sercon, 2005).

Canada-wide statistics show an increase in Canadian participation in environmentally conscious methods of waste management such as recycling and composting. In 2006, 97% of Canadian households with access to recycling made use of this service (Babooram, 2009). The diversion of organic waste has also increased due to the introduction of composting programs. From 2000 to 2004, the amount of

organic waste composted increased by 70%, two-thirds of which was generated by the residential sector (Elliott, 2008). Composting still has a long way to go, since only 30% of Canadian households with access to this service actually use it (Babooram, 2009).

FOOD SERVICES AT OTHER UNIVERSITIES

Sustainability is an important theme recognized by food services departments at universities across Canada. In terms of population size, York University, the University of Toronto (UofT), and the University of British Columbia (UBC) are comparable.

UBC Food Services, which oversees all of the campus food services, works closely with the Sustainability Office to optimize operations. UBC Food Services is committed to providing healthy food options for a variety of diets, and offers health education and dietitian services to students living in residence. They also are national leaders in sustainable procurement, serving only locally roasted Fair Trade coffee and almost exclusively sustainable seafood. All eggs, poultry and apples are purchased from local producers, all whole shell eggs are free range, and a portion of herbs and greens are sourced from the UBC Farm. Additionally, kitchen waste oil is collected and converted into biofuel, which powers 20% of the University's fleet (2009a). In collaboration with Waste Management, kitchens and dining areas are fitted with recycling and organics collection. UBC Waste Management operates Canada's first university campus in-vessel composting facility, which has a processing capacity of 5 tonnes per day, and accepts all forms of organic waste (except wood and biosolids), including animal products, paper plates and cups (2009b). All resulting compost is used in campus landscaping (2009c). Food waste is further reduced through incentive programs such as a lug-a-mug or lug-a-dish discount at many vendors (2009d).

UofT is also actively increasing the sustainability of its food services. The University's St. George campus has committed to work with Local Food Plus (LFP) to increase local food procurement (Rundle, 2007). Some vendors are required to provide 10% LFP certified foods, and others participate on a voluntary basis. The St. George campus requires all kitchens to collect organic waste, and three residence cafeterias offer post-consumption front-of-house organic collection (Macdonald, 2009). Kitchenettes are also being integrated into the organics collection program, where feasible (Strano, 2009).

YORK UNIVERSITY FOOD OPERATIONS

Food services at York University are structured in a complex manner compared with other university campuses. There are four separate oversight bodies, with a range of different policies and practices, and there are also a number of food services that are franchises of recognizable chains, which also have their own policies and practices. Since York University does not currently have a comprehensive policy guiding how food services should and could be provided across the institution, the outcome is that there is, in operation, a standard competitive business culture, in which the primary goal is to maximize revenue. There are few, if any, opportunities for those involved in food service operations to meet and to collaborate in developing and supporting more costly niche food service options, such as a purely vegan restaurant, for example.

York Lanes and the Student Centre are where the majority of the food sales on the Keele campus occur, while also being the most centrally located operators with the most customers. Schulich largely caters to its own students and guests. In conversations with staff from Food Services, we learned that those locations that are directly overseen by York University, struggle to operate profitably, mainly due to their being located in low-traffic basements that are often in need of repair. The York University Development Corporation (YUDC) manages York Lanes as a landlord, through the terms of its tenant leases. The extent to which the mandate of YUDC may include a role in actively enhancing the experience of members of the York community, was unclear to us. The impression that we gained, was that with respect to campus food service operations, YUDC functions primarily as corporate body that interacts solely with its leaseholders, and that there is no mechanism through which it communicates with or is accountable to members of the York community at-large, with the exception of those appointed to the YUDC Advisory Council. In other words, if the customers of food operations in York Lanes wish to see other types of food options and different kinds of businesses, there is, at present, no clear route by which they can communicate their views directly to YUDC.

The Student Centre is governed by a 14 member board of directors, 10 of whom are students. The Student Centre receives a student levy that contributes to the costs of operating the building and paying down the capital loan. This levy is approximately \$100 per full time student and can, in contrast to other student levies, be changed, without requiring a referendum. The Student Centre functions as one of the few large, centrally located places in which students and other members of the York community can simply “hang out”. However, based on a variety of informal conversations that we held with students, and survey comments, it is widely perceived to be inadequate in terms of size and services for the current York population. It should be noted, however, that preliminary discussions about the need for expansion are underway. Many students with whom we spoke held the view that a student centre should not be modeled on the food court of a shopping mall. The Student Centre ought, in our view, to have more casual gathering space with fun things to do that are not centred on food consumption. For example, the University of Waterloo’s Student Life Centre is home to some food, student services, club and groups offices, study rooms, piano room, and a multi-purpose recreational room (University of Waterloo, 2009).

Given the structure and operating culture of both the Student Centre and York Lanes, there are currently few incentives and mechanisms that allow individual vendors to lead or participate in building- or campus-wide sustainability initiatives. If York University were to adopt a comprehensive food services policy that incorporates sustainability principles and standards, then YUDC could more easily incorporate principles of sustainability into new leases as the old ones expire, which would in turn, lead to more sustainable operational practices. The Student Centre could also develop sustainability policies for both its vendors and building maintenance and operation. However, the ideal situation would be the development of a single policy governing all food services on both campuses.

York Food Services is a clear place for leadership on the issue of improvement in food sustainability practices, since there is already in existence a range of sustainability-related initiatives. Food Services and its main contractor, Aramark, have been forward thinking in addressing sustainability concerns. Las Nubes brand Fair Trade coffee is available throughout campus and comes from a plantation in Costa Rica

that helps to preserve an area of rainforest owned by York University. As part of the agreement with Aramark, Fair Trade coffee is now required at all non-franchise locations controlled by Food Services.

York also has a “lug a mug” program in which customers can bring their own coffee mug to receive a discount. The program is being revved up again, and is available at all Food Services locations. BPA free travel mugs are available from Aramark, along with a free coffee, for \$5.

Aramark is working with local food providers, and consulting with LFP to increase the supply of local and seasonal foods, and 17% of Aramark’s produce last year was local. Aramark is also switching some of their packaging over to biodegradable products. However, in the absence of a composting program that is capable of biodegrading this packaging, the effect will be minimal. Other waste management initiatives at York University have already been discussed in this report.

York University also has several locations that are Eat Smart certified. This certification process is run by Toronto Public Health, the Canadian Cancer Society, and the Heart and Stroke Foundation, and recognizes locations that offer a variety of healthier food choices, including foods prepared using healthier preparation methods and substitutions, have an excellent track record in food safety and at least one full-time kitchen employee certified in safe food handling, and are a smoke free environment (Eat Smart Ontario, 2009). According to the Eat Smart website, the York University locations that are certified include Complex I and Complex II cafeterias, the TEL cafeteria, the Glendon Cafeteria, and the Osgoode Hall cafeteria (2009).

The Absinthe Pub in Winters College is contracted through York’s Food Services but is accountable to the Winters College Council, making it one of three student-run pubs left on campus, along with the Graduate Student Lounge and the Underground (Winters College Council, 2008). The Absinthe offers inexpensive and healthy food without the use of a deep fryer. The management of the Absinthe seeks to balance its menu by providing vegetarian options at all meals. The Pub also donates a significant amount of its profits back to Winters College to improve the Junior Common Room and hold community events to instil a sense of belonging.

Clearly, some food vendors have a greater ability than others to make adjustments to their menus and operations that will improve sustainability. We would assume that any sustainability-related changes made by food vendors that are franchisees of large chains (and which constitute approximately half of York’s existing food service outlets) would have to be sanctioned by their corporate head office. There are a variety of mechanisms through which change could be encouraged or directed, but, the simplest and most direct, would clearly be the adoption and implementation of a university-wide food sustainability policy, with which all vendors would be required to comply.

The remainder of this report highlights the survey results and provides some specific recommendations based on the survey, about steps that the University could take to increase the sustainability of its food management and food service operations.

SURVEY RESULTS

Question 1: What faculty/administrative body do you belong to?*

Faculty / Administrative Body	Total Population at York University		Survey Respondents*		
	Population	Percent of total population	Respondents	Percent of total respondents	Sample as percent of population**
Glendon Campus	2,603	4.7%	62	5.0%	2.4%
Administration	2,430	4.3%	180	14.5%	7.4%
Atkinson Faculty	9,668	17.3%	77	6.2%	0.8%
Faculty of Arts	17,437	31.2%	392	31.6%	2.2%
Faculty of Education	1,170	2.1%	25	2.0%	2.1%
Faculty of Environmental Studies	1,269	2.3%	115	9.3%	9.1%
Faculty of Fine Arts	3,531	6.3%	65	5.2%	1.8%
Faculty of Health	9,244	16.5%	159	12.8%	1.7%
Faculty of Science and Engineering	4,249	7.6%	61	4.9%	1.4%
Osgoode Hall Law School	1,474	2.6%	17	1.4%	1.2%
Schulich School of Business	2,872	5.1%	34	2.7%	1.2%
Undecided	0	0.0%	7	0.6%	
N/A	0	0.0%	45	3.6%	
Total	55,947	100.0%	1,239	100.0%	2.2%

**Note: Sample as percent of population= # of respondents/# total population in that category

(Office of the President, 2008a, b, c, d)

The sample size was equivalent to 2.2 percent of the total York University population. Survey respondents were asked to classify themselves according to their corresponding Faculty or

Administrative body. Approximately 4 percent of respondents classified themselves as “undecided” or “N/A.” The Administration (consisting of staff and librarians) and the Faculty of Environmental Studies were over-represented in the sample group (Faculty of Environmental Studies were 9.2% as percent of population, yet represent only 2.3% of total population). The Faculty of Arts, Faculty of Education and Glendon Campus were all represented proportionally, whereas all other Faculties and Schools were under-represented.

Question 2: Are you an undergraduate, graduate student, faculty, staff, or other?

Sub-group	Total Population of York University		Survey Respondents		Sample as a percent of population
	Population	Percent of total population	Respondents	Percent of total respondents	
Undergraduate Students (full-time and part-time)	46,079	82.4%	513	42.3%	1.1%
Graduate Students (full-time and part-time)	5,910	10.6%	219	18.1%	3.7%
Faculty (tenured, probationary and contractually limited) °	1,528	2.7%	137	11.3%	9.0%
Staff (support staff, hourly paid staff and librarians)	2,430	4.3%	344	28.4%	14.2%
Total	55,947	100.0%	1,213~	100.0%	2.2%

(Office of the President, 2008a, b, c, d)

° In the survey, "Faculty" was referred to as "Professors"

~Respondents who self-classified as "other" numbered 26 (2.1% of sample), these 26 are subtracted from the total respondents of 1,239, hence 1,213.

Survey respondents were asked to classify themselves within one of the five population sub-groups. Respondents could also classify themselves as “other,” as was done by 26 individuals, who identified themselves as visitors, retired professors, or other functions that fell outside of the listed categories.

There was large variation in which sectors of the York community responded. Even though undergraduate students were the largest sub-group in both the population (at 82.4%) and the sample (at 42.3%), they were under-represented in the sample of the population surveyed compared with their

representation in the broader population. In contrast, all other sub-groups were over-represented, especially faculty, which were three times more heavily represented in the sample, and staff, which were five and a half times more heavily represented. These sub-groups of the York population showed a high degree of variation in their responses, and in future surveys, we would aim to increase the number of undergraduate respondents.

Question 3: Are you satisfied with campus food options?

	Response Percent	Response Count
Yes	8.5%	105
Somewhat	47.2%	585
No	44.3%	549
	100%	1,239

The general finding in answer to this question was “not really”. Of the five groups identified in question 2, staff and ‘others’ were most satisfied with campus food options with 11% and 15.4%, respectively, responding ‘yes’ to the question. Graduate students and professors were least satisfied with 61.6% and 51.8% responding ‘no’, respectively.

Question 4: How many times per week do you buy food on campus?

	Response Percent	Response Count
Never	6.7%	83
Less than 3	55.4%	687
Between 3-5	29.2%	362
More than 5	8.6%	107
	100%	1,239

Overall, the majority of respondents indicated that they buy food less than 3 times per week (55.4%), followed by between 3-5 times per week (29.2%). The table below isolates respondents that indicated “no” to question 3, in order to see how often these dissatisfied members of the York community purchase food on campus.

Number of times you eat on campus (per week) for those NOT satisfied with campus food options.	Percentage	Response Count Out of 549
Never	10.9%	60
Less than 3	54.6%	300
Between 3 and 5	26.6%	146
More than 5	7.8%	43
	100%	549

Respondents, who indicated they are not satisfied with campus food options, were more likely to never eat on campus. Even so, the majority of dissatisfied diners stated that they purchase food on campus 1 to 5 times per week, illustrating that members of the York community still buy food on campus regardless of whether or not they are satisfied with those choices. In a future survey, it would be interesting to link satisfaction level to the number of years that the respondent has been on campus – perhaps the more time that one has worked or attended classes at York plays a role in satisfaction.

Question 5: On average how much do you spend each time?

	Response Percent	Response Count
N/A	5.6%	70
Less than \$5	19.1%	237
\$5-\$10	68.5%	849
More than \$10	6.7%	83
	100%	1,239

The majority of respondents spent \$5-\$10 when they purchased food on campus. This finding is not surprising given the results to question four and the fact that the average price of a meal at most vendors would be within this range.

Interestingly, 83 individuals indicated in question four that they never eat food on campus, whereas only 70 indicated N/A for this question. There is no way of knowing what the other 13 people are spending money on if they indeed never eat on campus.

Question 6: Where do you buy food most frequently on campus?

	Response Percent	Response Count
Cafeteria Style	8.3%	103
Central Square	7.8%	97
Student Centre	20.7%	256
York Lanes	43.9%	544
Glendon Cafeteria	3.4%	42
Glendon Mr. Sub	0.4%	5
Other (please specify)	15.5%	192
	100%	1,239

York Lanes (43.9%) was the most common dining location followed by the Student Centre (20.7%). This finding did not change based on satisfaction with food options on campus. The third most popular answer was 'other', which is expanded in the table below.

Of the 192 respondents who answered 'other', only 187 have been included in the following table. The other five responses matched one of the locations already listed.

Location	Total Responses
Grad Lounge	62
Schulich (Tuchners, Timothy's, and Exec Dining Room)	28
Don't/Bring Own	19
William Small Centre (Tim Horton's)	14
TEL Building	14
Michelangelo's	12
Osgoode Cafeteria	11
Seneca Cafeteria	11
Hot dog vendors	6
Orange Snail (Stong)	5
Absinthe Pub (Winters)	3
Café (Computer Science)	1
Glendon Faculty Club	1
Total	187

Upon analysis it was realized that a N/A category should have been included to recognize those that do not eat on campus or bring their own food.

Question 7: When do you mostly buy food on campus (check all that apply)?

	Response Percent	Response Count
Fall term	82.5%	1,022
Winter term	88.5%	1,096
Summer term	37.4%	464
		1,239

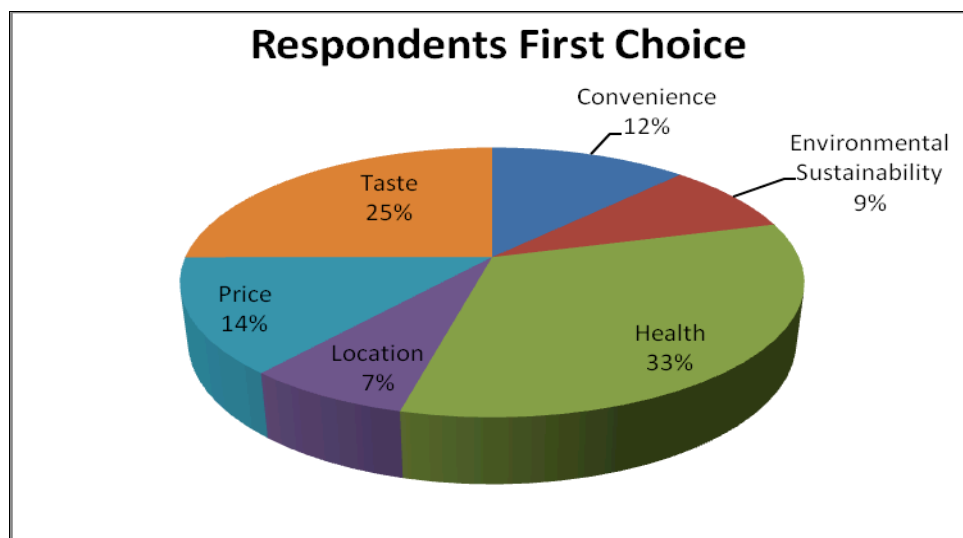
Not surprisingly, Fall and Winter terms are the most common periods in which food is purchased on campus. A possible reason that the Winter term percentage is slightly higher than the Fall term is, perhaps, because the survey was conducted in the winter term and the potential impact of the strike.

Question 8: What are the most important factors that determine your food choices on campus (rank in order, 1 being most important and 6 being least important)?

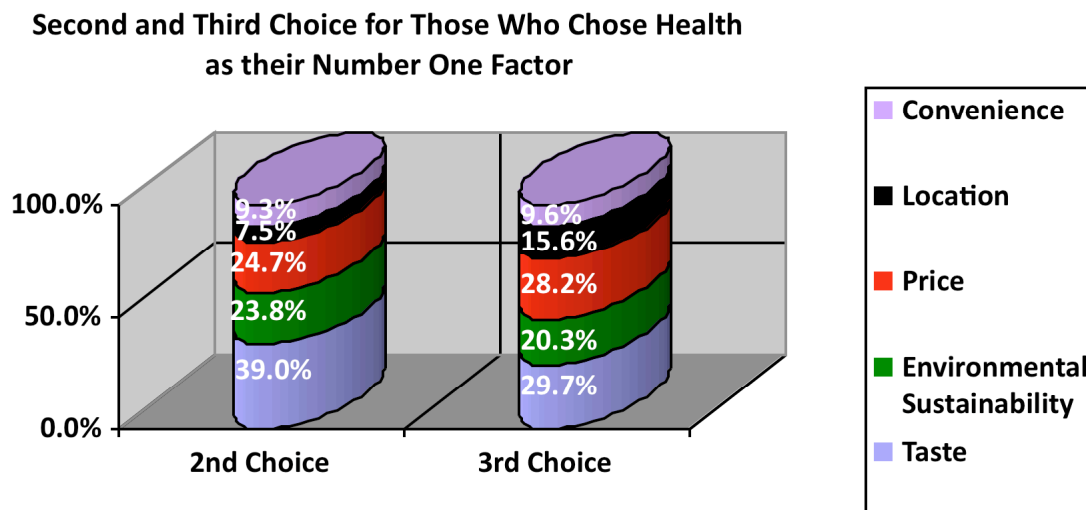
This question involved ranking all six factors: health, taste, price, convenience, location and environmental sustainability in order of importance in influencing food choices. The overall results for this question consist of a rating average. A low rating average shows high importance, while a high rating average indicates a low importance. For the six factors involved in this survey, health was considered the most important factor and had had the lowest mean rating (2.66), followed by taste (2.85), price (3.26), convenience (3.86), location (3.93), and finally environmental sustainability (4.04).

This means that health was the majority of respondents' priority in their food choices on campus. However it should be noted that the factor ratings were, overall, close together.

In examining the ranking of the first choices in isolation, the results were similar to the ranked averages, except that environmental sustainability jumped from the sixth most important factor to fifth. The chart below displays only the first choice rankings of all respondents.



Looking solely at the second and third choices of the 382 people who selected health as their highest ranked factor yielded some interesting insights. The chart below indicates second and third ranking of factors.



As with the overall results, this chart illustrates that taste and price are still important influences, but that environmental sustainability became more important for those whose food choices were primarily based on a concern for health. These results suggest that respondents are making a link, whether consciously or unconsciously between environmental sustainability and health, and that this relationship may bear further investigation.

Question 9: How important are brand names (familiar chains) when buying food or drinks on campus?

	Response Percent	Response Count
Very important	4.5%	56
Somewhat important	26.3%	326
Not important	69.2%	857
	100%	1,239

The rationale for including this question was to gauge the extent to which members of the York community might be influenced by the presence of recognizable chains that are common off campus. There was interest from Food Services in determining just how much of a demand there might be for chain restaurants not currently operating at York University. The results clearly demonstrate that there is little interest among members of the York community in having access to large corporate food chains.

When comparing the responses among those who eat primarily at York Lanes, the Student Centre and those who prefer cafeteria-style eating, the importance of brands changed considerably. Since these were the three most frequented locations (903 respondents total), and given the prevalence of chains in the Student Centre, and also in York Lanes, it is useful to compare the results for these locations (See chart below).

Chosen purchasing location on campus compared with preference for brand names.				
	Cafeteria Style	Student Centre	York Lanes	Response Totals
Very important	3.9% (4)	8.2% (21)	3.3% (18)	4.8% (43)
Somewhat important	26.2% (27)	38.7% (99)	22.2% (121)	27.4% (247)
Not important	69.9% (72)	53.1% (136)	74.4% (405)	67.9% (613)
Totals	103	256	544	903

The results are not surprising given the types of food vendors in each of these three locations. The Student Centre, which features large fast food chains had the lowest number of respondents indicating that chains were not important to them. In contrast, a higher proportion of community members who tend to eat in York Lanes and the Cafeteria Style locations were likely to respond that chains were unimportant, compared to the overall percentage of all those surveyed: 69.2%. York Lanes is currently a mixture of chains and independent restaurant owners. We hope that YUDC will take this result into account when considering whether to award future leases to large chains (currently a third of tenants with Second Cup, Taco Villa, Great Canadian Bagel, and Popeyes Chicken and Biscuits).

Question 10: How do you classify your dietary choices?

	Response Percent	Response Count
Vegan	3.4%	42
Vegetarian	16.9%	210
Omnivore	66.7%	827
Other (please specify, ie. alternate between vegetarian and omnivore)	12.9%	160
	100%	1,239

Most respondents self-classified as omnivores, with a high number of vegetarians. For those that chose 'other' there was a diverse range of responses, most of which are summarized in the chart to the right. The results from 143 out of the 160 who chose this option are included. The reason for this was that the meaning of the other 17 responses was unclear. A significant number of the 'other' respondents could, in fact, be characterized under the omnivore, vegetarian or vegan categories.

Dietary Choices	Total Responses
Alternate between vegetarian and omnivore	41
Omnivore	29
Flexitarian	25
Pescitarian	12
No red meat	11
Halal	8
Celiac	4
Kosher	3
No pork	2
Raw Vegan	2
Vegetarian	2
Vegan	2
Low glycemic	1
Gluten/dairy free	1
Total	143

Question 11: Which of these do you eat on CAMPUS, or would you eat if they were more available (check all that apply)?

	Response Percent	Response Count
Alternative grains (i.e. gluten free, wheat free)	34.9%	432
Alternative protein sources (i.e. soy, lentils, nuts)	54.5%	675
Dairy (i.e. milk, yogurt, cheese)	51.2%	634
Eggs	37.9%	469
Fish and Shellfish	32.4%	402
Fruits and Vegetables	80.7%	1,000
Grains	56.3%	698
Meat (i.e. beef and pork)	41.8%	518
Poultry (i.e. chicken and turkey)	53.5%	663
Other (please specify)	6.9%	86
	100%	1,239

Fruits and vegetables are readily available on campus, but these results indicated a need for even more, and perhaps a greater variety of choices. Alternative protein sources are not currently widely available and were requested by a significant percentage of respondents.

Question 12: How many meals per week do you eat meat?

	Response Percent	Response Count
Never	14.1%	175
Less than 5 times	40.5%	502
5-10 times	34.9%	433
More than 10 times	10.4%	129
	100%	1,239

Those respondents that indicated they “never” eat meat, and those that eat meat “less than 5 times” per week equal 54.6% of responses, representing the majority of responses to this question. While each faculty generally responded with the same breakdown of percentages, there were a few notable exceptions: participants from the Faculties of Education and Environmental Studies ate meat less frequently (52.0% of those in Education chose the “Less than 5 times” category, 26.1% of those in Environmental Studies chose “Never”), while respondents in Science and Engineering, Schulich, and the Administration ate meat more frequently (44.3%, 44.1%, and 47.2% respectively in the “5-10 times” category).

It is also important to note that some of these responses conflicted with those of question 10: how do you classify your dietary choices? For example, 32.4% of those who categorized themselves as vegetarian, and 19% of those as vegan, also said they ate meat fewer than five times every week, instead of zero. These results point to the complexity of dietary classifications, as well as the potential demand for a wide variety of food options on campus to order to accommodate these highly variable and varied diets.

Question 13: Would you like to have more vegetarian options on campus?

	Response Percent	Response Count
Yes	75.4%	934
No	24.6%	305
	100%	1,239

Question 14: Would you like to see more certified organic food on campus?

	Response Percent	Response Count
Yes	80.6%	999
No	19.4%	240
	100%	1,239

The majority of respondents showed interest in wanting more vegetarian (75.4%) and certified organic (80.6%) food options on campus. Interestingly, the results were similar when only omnivores were taken into account. One respondent stated in question 25 that,

“The one thing I find very frustrating is that there is no certified organic food offered at York.”

Of the 827 omnivores that took the survey, 67.5% wanted to see more vegetarian options, and 76.1% requested more certified organic options. When vegans were asked these questions, there were fewer than 5 individuals in both cases who did not request more vegetarian or certified organic options. Respondents showed an extensive amount of support for both more vegetarian and certified organic food, regardless of dietary needs and preferences.

According to the Ipsos-Reid study, 57% of consumers reported buying organic grains, fruits and vegetables in the last year, 43% organic free-range eggs, and 42% organic meats (2006).

Question 15: Are you aware of how food production, processing, and packaging practices affect the environment?

	Response Percent	Response Count
Yes	83.7%	1,037
No	16.3%	202
	100%	1,239

Overall, there is a significant awareness of the environmental impacts of food production.

Question 16: Are your food choices based on a concern for environmental issues (i.e. farming practices, pesticides, resource intensity and waste)?

	Response Percent	Response Count
Yes	29.0%	359
Somewhat	50.1%	621
No	20.9%	259
	100%	1,239

Overall, environmental concerns were one of many factors influencing food choices. These responses were consistent with the Ipsos-Reid study. In that poll, 39% of respondents reported boycotting a particular food product over concern that environmentally sustainable practices were not being used, while 35% would be concerned on how the animals were treated or slaughtered (Ipsos-Reid, 2006).

Question 17: Do you think York manages its food and packaging waste appropriately?

	Response Percent	Response Count
Yes	28.2%	349
No	71.8%	890
	Why/why not?	694
	100%	1,239

Overall, 71.8% of respondents expressed the opinion that York does not manage its food and packaging waste appropriately. It is noteworthy, though, that not all sub-groups evaluated campus waste services equally. A Chi Square test for homogeneity showed that Undergraduate Students and Staff were members of the same homogenous population that had mixed opinions about campus waste management; whereas, Graduate Students and Professors, who are members of a different homogeneous population, were closer to consensus in the opinion that waste is not appropriately managed (See table below).

Chi Square test for homogeneity amongst sub-groups regarding whether York manages its food waste appropriately

	Sub-Groups			
Responses	Undergraduate Students	Graduate Student	Professors	Staff
Yes	176	26	22	117
No	337	193	115	227
Total	513	219	137	344
Percent No	65.69%	88.13%	83.94%	65.99%

This question gave respondents the option of supporting their selection with commentary about whether waste is managed appropriately, and this elicited a wide range of comments from over half of the total respondents. The majority of comments pointed out limitations, such as the presence of too few composters and recycling bins, poor communication about what can be recycled, including sorting, too much litter and packaging, specifically polystyrene, and the lack of reusable dishes and financial incentives to reduce waste. Some positive comments noted the extensive recycling program and good administration and staffing of waste management services. A significant portion of respondents were concerned that this question was ambiguous and the response options were limited, by not including an alternative for respondents who were either unknowledgeable about the management of waste at York, or who neither agreed nor disagreed that it was managed “appropriately.”

For the list of comments contact irisinfo@yorku.ca.

Question 18: Would you use an outdoor compost bin for food waste if one was more readily available?

	Response Percent	Response Count
Yes	89.3%	1,106
No	10.7%	133
	100%	1,239

Nearly all respondents indicated a willingness to participate in composting. Given that there are already 40 outdoor compost bins on the Keele campus, there seems to be a need for better advertising of these locations and, perhaps, for more easily accessible composters. (Refer to Appendix III for compost digester locations)

Question 19: Would you bring your own mug to campus if you were offered a discount on your coffee, tea, etc?

	Response Percent	Response Count
Yes	90.1%	1,116
No	9.9%	123
	100%	1,239

Considering York's Food Services already offers a discount "lug a mug" program (CSBO, 2009), there is a need to increase the awareness of this program in order to increase its uptake.

Question 20: Would you like to see meal size options that are adjusted for price (i.e. smaller portions cost less than larger portions)?

	Response Percent	Response Count
Yes	94.4%	1,169
No	5.6%	70
	100%	1,239

Respondents showed over-whelming support (94.1%) for meal size options adjusted for price. This strong majority did not change when comparing responses among vegans, omnivores, professors, staff, or any other group; regardless of who was answering the question, the response remained over 88% in support of adjustable meal options. This issue was also frequently mentioned in the final commentary (Question 25). One respondent stated,

"I would like to be able to go somewhere with my reusable container and get a salad/grains/lentils...(and) pay by weight (but not the exorbitant amount charged in York Lanes) and leave!"

Another participant voiced their concern about the health concern of large portions,

“Portion size is a major health and sustainability concern, as is reuse of utensils, plates, etc.”

Adjusting meal size option by price received large support from a diverse group of participants.

Question 21: Please rank the following sustainable food options in order of importance to you (1 being the most important, 4 being least important):

This question involved ranking four sustainable food choices: fair trade, local (menu based on local and seasonal availability), organic, and vegetarian/vegan in order of importance. All responses were combined to calculate a rating average for each factor, where a low value shows high importance and a high value shows low importance. For the four factors involved in this question, local had the lowest rating average (1.95), followed by fair trade (2.49), organic (2.51), and finally vegetarian/vegan (2.95). Local was the majority of respondents’ priority in sustainable food selections. There was not a large gap separating each factor (most likely because they all are closely related).

When first choices were examined in isolation, “local” remained the highest priority, but organic dropped behind the vegetarian/vegan choice. The chart below displays only the first choice rankings with the percentages for all four factors.

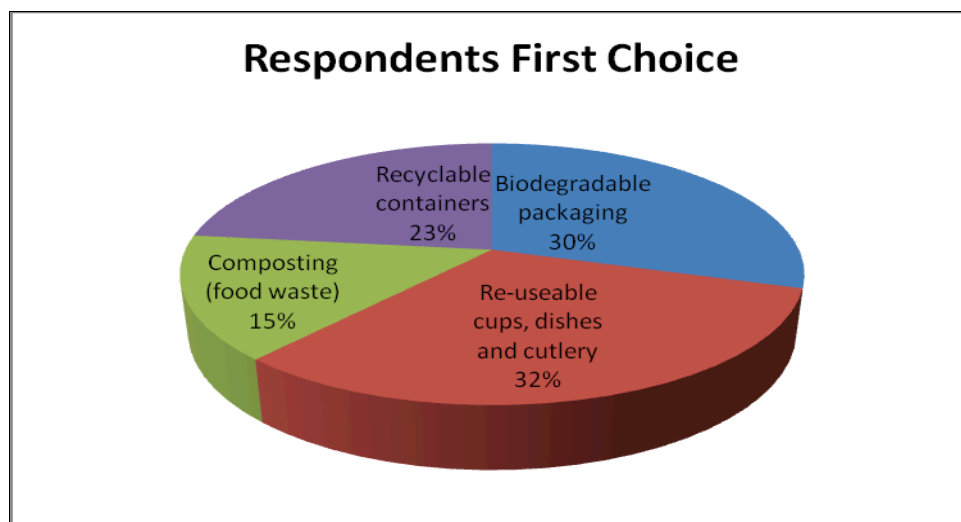


It must, however, be noted that several respondents did not find some or any of these sustainability factors to be relevant in their food selections. A few participants were not aware of what these options meant. Nevertheless, these results generally point to an awareness and increased demand for more sustainable food options, particularly local, seasonal foods, as well as non-local, fair trade products. These results also reflect those for questions 13 and 14 in which respondents overwhelmingly (80.6%) requested more organic options, while 75.4% wanted more vegetarian options.

Question 22: Please rank the following waste alternatives in order of preference to you (1 being the most important, 4 being least important):

For this question, re-useable cups, dishes and cutlery had the lowest rating average (2.37), followed closely by biodegradable packaging (2.39), then composting of food waste (2.58), and lastly recyclable containers (2.59). Given that there is considerable ongoing debate about which of these various waste alternatives is better for the environment, it is not surprising that there was no clear front-runner.

In examining respondents' first choices, a split appeared, favouring reusable and biodegradable over recyclable and composting.



Spearman's Rank Correlation for Preference of Waste/Packaging options amongst Sub-groups				
Sub-Group	Waste/Packaging Option			
	Biodegradable packaging	Re-useable cups, dishes and cutlery	Composting (food waste)	Recyclable containers
Undergraduates	1	4	3	2
Graduate students	3	1	2	4
Professors	4	1	2	3
Staff	1	4	3	2

A Spearman's Rank Correlation analysis, found that Undergraduate Students and Staff responses were positively correlated, in their ranked preference of biodegradable packaging, recyclable containers, composting, and lastly re-useable cups, dishes and cutlery. Their rankings were negatively correlated with those of faculty, who preferred re-usable cups, dishes and cutlery, followed by composting, recyclable containers, and biodegradable packaging. Graduate Students rankings were similar to those of faculty members. Those who categorized themselves as 'other' are not present in this analysis due to the small number of respondents for that category.

Question 23: Would you be willing to pay more for sustainable food options and packaging?

	Response Percent	Response Count
Yes	66.0%	818
No	34.0%	421
	100%	1,239

Undergraduate students were least likely to say ‘yes’ (56.7%) to paying more for sustainable food options and packaging. They were followed closely by staff at 59.6%. The other three groups (graduate students, professors, and ‘other’) were all over 75% in their willingness to pay more.

The Ipsos-Reid study found that half of consumers were willing to pay more for premium quality products, with those aged 55+, women, and incomes of \$75k or more being the most likely (2006).

Question 24: How much more would you be willing to pay?

	Response Percent	Response Count
Nothing	24.7%	306
Less than \$0.50	28.2%	349
\$0.51-\$1.00	34.5%	427
More than \$1.00	12.7%	157
	100%	1,239

The majority of undergraduates, graduate students, professors and ‘others’, were willing to pay \$0.51-\$1.00, ranging from a low of 31.8% for undergraduates to a high of 50% for ‘other’. Staff was the only group for which the majority of respondents (34.6%) did not express willingness to pay more for more sustainable food options.

Question 25: Do you have any other comments or concerns? Dietary or food services considerations not addressed in this survey?

Many students responded to this question with comments about corporatization, fast food, prices, and a lack of options. Fast food chains were commonly identified as offering only unhealthy food options. Respondents were very concerned about the implications of eating at fast food franchises for health of the general community. As stated by a participant:

“It is incredibly difficult to eat healthy without a) paying an arm and a leg b) locating a healthy place to eat, especially when you walk into the student centre and it is all fast food, high in cholesterol and fattening foods.”

Many of the participants asked for more independently run restaurants offering local, organic food, as well as requests for a grocer. Another trend was a concern with Pepsi products and bottled water. Some participants commented on the lack of water fountains to fill up water bottles, and the commercialization of the University.

“Too many concessions have been given to Pepsi on campus. It is impossible to buy drinks that are not owned by this brand and it is very limiting of choice. If York University is serious about food politics, the first thing it would do is sever ties with large food conglomerates and invite small entrepreneurs to set up shop on campus.”

“We give free rein to franchises without apparent regard for the way they conduct their business. One only needs to look at the areas surrounding franchises to see how much waste is generated by them every day. I'd like to see more independent outlets serving healthy alternatives.”

Many people took this opportunity to comment on whether they would pay more for healthier options. Participants repeatedly stated that it *should not* cost more to access healthier foods, which raises the issue of the general level of knowledge and education in the community, relating to food costs. Here are a few of these comments:

“I would not be willing to pay more (with respect to questions 22 and 23) because I believe these options should be the norm and not exceptions that drive up the cost. I think that places that produce excessive amounts of waste should have to pay for their disregard for the environment. If their existence (or at least presence on campus) is dependent on their disproportionate exploitation of the environment and they cannot survive otherwise, then maybe that type of service should not be offered.”

“I would be willing to pay more for sustainable food options, however, I feel that the food prices at York are already very inflated. I don't see how the food services on campus can justify charging us even more money. They should have to absorb those costs because the food is already unreasonably priced. If they charge even more money, chances are that most people will stop buying food on campus.”

“There is no reason why food can't be cheap AND healthier. If we stopped contracting to giant franchises for our food and had independent, small scale vendors, we could have edible food at cheap prices.”

Frustration with a perceived corporate agenda and a lack of interest in support for locally owned businesses was commonly expressed. Another respondent shared the following:

“Please, less chains on campus. Independent restaurants do more than sell interesting, perhaps more sustainable food options; they also create community and a sense of uniqueness about campus.”

A greater availability of religious accommodations in terms of food was also requested by many respondents. For example increased availability of Halal and Kosher options was commonly expressed and TEL will be offering a daily Halal menu time beginning in September 2009. There were also concerns expressed about other dietary needs, that some respondents felt were largely neglected on campus.

These include 'gluten, wheat, and dairy' free products, and vegan and vegetarian options. Often, in the same response, respondents asked for access to ingredient lists.

A couple of respondents took this space to bring up concerns with questions 8, 21, and 22. These were questions that required ranking, and it was set up so that there was no ability to rank issues as equals. One respondent asked if each option was a trade off, implying that the question was about competing resources. There was also a need for a 'Not Applicable' option. Other participants felt that these questions were based on assumptions and biases when not offered the option of declaring indifference.

For a full list of comments contact irisinfo@yorku.ca.

Question 26: How did you hear about this survey?

	Response Percent	Response Count
IRIS table in Vari Hall	8.3%	103
IRIS website	1.2%	15
IRIS Facebook	0.7%	9
E-mail	59.6%	739
Glendon table	3.1%	38
Other (i.e. word of mouth)	10.2%	126
	100%	1,239

PLACE, CULTURE AND FOOD

Not only were students, staff and faculty generally dissatisfied with the range of available food options on campus, but they also expressed dissatisfaction with the places or spaces where food can be consumed. This issue emerged from the comments section, as there was no specific question on this topic in the survey. For example, one survey respondent said,

"terrible environment to sit down and eat at York ... Can our eating spaces and quality of food not mimic a mall"

"We need more pleasant places to eat"

One professor wrote,

"There is no place on campus to take colleagues for quiet discussion with table service. The grad pub is too loud. The service at the Underground is too slow. The Schulich dining room is too expensive and inconveniently located."

Students, staff and professors are also not fully familiar with all of the options on campus. For example, one respondent said,

“It's hard to find the places to eat. The information is very well hidden about places and options on campus. I have no idea where the more than 50 options are other than the obvious York Lanes and Student Centre.”

This issue is due to the fact that many food outlets are located in the basements of buildings, and signage is not displayed outside of them.

Students also expressed frustration over the lack of space where one can consume food brought from home. A graduate student from the Faculty of Education said,

“I would like to see more eating space that is not cafeteria style where students are encouraged to bring and eat their own food from home. The only places on campus that I like to eat in (naturally lit, casual, have plants around, etc) are places where you have to purchase food to sit there.”

A graduate student from the Faculty of Arts also made the connection between space and food, in stating,

“Although it is very important to have sustainable, fair, and healthy food available at York, it is also important that there are ample spaces available for food to be consumed. York has a major space issue which contributes to on-campus waste. Spaces that are more accommodating to the numbers of students at York will help to create a more positive food culture.”

York's Student Centre was not generally perceived as providing an enjoyable hangout location for students, nor does it house a campus pub that generates a sense of pride and adoration, as is often the cases at many other universities.

Connecting food to overall culture, one student wrote,

“I think the spaces in which we eat have much to do with how we eat, and what degree of engagement there is with the environments we inhabit.”

A professor detailed,

“The lack of diverse food options at such a diverse university is an embarrassment. The emphasis on fast food and mall food fosters a campus atmosphere of cheapness that contributes to the sense that York is an unimportant place. Availability of good quality food -- and a RANGE OF VENUES more in keeping with the immense population of the campus and the diversity of the people on it -- can go a long way to enhancing the quality of life at York and to affirming that York is an important institution.”

It will be essential for York University to build a stronger culture and identity, both to aid in alleviating the short-term impacts of the recent strike, as well as to compete with other universities that are continually moving forward with sustainability initiatives. As York University moves forward with plans for its space, including the development and implementation of the Secondary Plan, it will be important for the location and provision of food to be planned in a more coordinated effort.

RECOMMENDATIONS

- York University should build sustainability into all of its policies including food services delivery, procurement and waste management to fulfill its commitments to the Talloires Declaration (see *Appendix I*).
- York University should provide more student-run independent food vendors that are supported by University subsidies. Glendon will soon have an independent co-op (Lunik Café), and it would be a positive step for Keele campus to expand such ventures. A student-run vendor could specifically cater to dietary needs while enhancing the sense of community, and, simultaneously addressing the commonly expressed concern that York's food options are too corporatized.
 - Given the governance structure of the Student Centre it ought to be feasible for The Underground to become an alternative restaurant catering to some of the interests revealed in this survey, such as, organic and locally sourced food.
- York University should develop a single coordinated business plan for all of the four separate food delivery agencies that is part of the Master Plan. This effort needs to be collaborative and coordinated to ensure equity across all campus food operators. This process could, in theory, involve centralizing control, in order to bring all food operators under standard university food services policies. While there are other mechanisms that may aid in implementing a sustainable food policy for the university, failure to address the decentralization of food services, is likely to result in the continued perception in the community that there is an unsatisfactory range of food options for students, staff and professors.
- York University should develop a food services policy that prohibits the use of external food service operations catering on campus, thereby circulating money within the campus. This recommendation is supported by Anthony Barbisan, Director YU-card & Food Services, and Helen Psathas, Senior Manager Environmental Design and Sustainability. By doing so, vendors would be more economically viable and more likely to invest in their operations, thereby enhancing campus experiences and other sustainability initiatives. This type of policy is the norm at other institutions that have successful food service programs (whether operated in-house or contracted out), such as Carlton (contracted out) and Guelph (in-house).
- York University should improve its outreach and communication to the York community regarding the range of food services available on both campuses. The York website should be updated and improved so that all members of the York community can easily access information about where to locate their preferred foods. Many survey respondents commented on a lack of options, and while this may be true, another significant factor relates to the distribution of food vendors across the Keele campus, that are located in poorly trafficked locations or without adequate signage.

- One option would be to have better signage on campus that directs people to the different options. We recommend producing the YORKW!SE guide to healthy living in an online interactive format that is easy to use. This guide provides valuable information about what locations offer vegetarian/vegan alternatives, as well where one can find Eat Smart certified locations, Halal foods, and Kosher foods. (For a pdf of this guide visit: http://www.yorku.ca/yorkwise/images/HealthyEatingBrochure_51.pdf or <http://www.iris.yorku.ca/projects/food-sustainability-on-campus/>.) UofT has an online interactive version that features similar categories for sustainable food. Their map is available at <http://www.foodmap.utoronto.ca/>.
- York University should enhance the use of space, improving access to microwaves, water fountains, and sinks for those that bring food from home or want to refill water bottles. There is also a lack of space where people who bring their own food from home can sit. This situation could be rectified by providing more furniture in existing commons spaces and including more outdoor seating areas. Enhancing the space would also provide more opportunities for members of the York community to mingle in a comfortable, inviting, and accessible way, creating a sense of belonging. Such a strategy would improve York University's reputation.
 - If the Student Centre were to undergo renovations or expansions it would be important to emphasize comfortable and accessible space.
- York University should continue to seek to improve its waste management operations, and increase access to local, organic and fair trade foods and products, while publicizing these initiatives. We applaud efforts undertaken thus far to reduce waste, increase the supply of local food, and the commitment to fair trade coffee. These initiatives are only the beginning.

CONCLUSION

Since York University is such a large institution it is not surprising that its food services operations are complex. However, there are many initiatives that the University can and is undertaking to improve the environmental, economic, and social sustainability of its food operators, at both the Keele and Glendon campuses. Given the widespread dissatisfaction with current food options at both campuses, the University should provide its decentralized food services operations with a clear guiding policy, and possibly consider centralizing some of the organizational structure and control. However, the onus should not be solely on the administration. All members of the York community have a role to play in changing the way food is delivered on both campuses. For example, several committed students from Glendon took the initiative to create a student run co-operative that would feature alternative food choices not currently available at Glendon. If members of the York community are dissatisfied with the options on campus they must voice their concerns and seek to actively participate in changing the *status quo*. We hope that the information presented in this report, as well as the recommendations, will assist in moving forward not only in the way food is delivered at York University, but also in improving both the quality of life at York and its institutional reputation.

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APPENDIX I – THE TALLOIRES DECLARATION

http://www.ulsf.org/talloires_declaration.html

We, the presidents, rectors, and vice chancellors of universities from all regions of the world are deeply concerned about the unprecedented scale and speed of environmental pollution and degradation, and the depletion of natural resources.

Local, regional, and global air and water pollution; accumulation and distribution of toxic wastes; destruction and depletion of forests, soil, and water; depletion of the ozone layer and emission of "green house" gases threaten the survival of humans and thousands of other living species, the integrity of the earth and its biodiversity, the security of nations, and the heritage of future generations. These environmental changes are caused by inequitable and unsustainable production and consumption patterns that aggravate poverty in many regions of the world.

We believe that urgent actions are needed to address these fundamental problems and reverse the trends. Stabilization of human population, adoption of environmentally sound industrial and agricultural technologies, reforestation, and ecological restoration are crucial elements in creating an equitable and sustainable future for all humankind in harmony with nature.

Universities have a major role in the education, research, policy formation, and information exchange necessary to make these goals possible. Thus, university leaders must initiate and support mobilization of internal and external resources so that their institutions respond to this urgent challenge.

We, therefore, agree to take the following actions:

1. Increase Awareness of Environmentally Sustainable Development

Use every opportunity to raise public, government, industry, foundation, and university awareness by openly addressing the urgent need to move toward an environmentally sustainable future.

2. Create an Institutional Culture of Sustainability

Encourage all universities to engage in education, research, policy formation, and information exchange on population, environment, and development to move toward global sustainability.

3. Educate for Environmentally Responsible Citizenship

Establish programs to produce expertise in environmental management, sustainable economic development, population, and related fields to ensure that all university graduates are environmentally literate and have the awareness and understanding to be ecologically responsible citizens.

4. Foster Environmental Literacy For All

Create programs to develop the capability of university faculty to teach environmental literacy to all undergraduate, graduate, and professional students.

5. Practice Institutional Ecology

Set an example of environmental responsibility by establishing institutional ecology policies and practices of resource conservation, recycling, waste reduction, and environmentally sound operations.

6. Involve All Stakeholders

Encourage involvement of government, foundations, and industry in supporting interdisciplinary research, education, policy formation, and information exchange in environmentally sustainable development. Expand work with community and nongovernmental organizations to assist in finding solutions to environmental problems.

7. Collaborate for Interdisciplinary Approaches

Convene university faculty and administrators with environmental practitioners to develop interdisciplinary approaches to curricula, research initiatives, operations, and outreach activities that support an environmentally sustainable future.

8. Enhance Capacity of Primary and Secondary Schools

Establish partnerships with primary and secondary schools to help develop the capacity for interdisciplinary teaching about population, environment, and sustainable development.

9. Broaden Service and Outreach Nationally and Internationally

Work with national and international organizations to promote a worldwide university effort toward a sustainable future.

10. Maintain the Movement

Establish a Secretariat and a steering committee to continue this momentum, and to inform and support each other's efforts in carrying out this declaration.

APPENDIX II – GENERAL REFERENCE WEBSITES

Websites for Interest: *These are general reference websites that have not been included as sources in the report.*

- <http://www.foodland.gov.on.ca/english/availability.html>
Foodland Ontario Availability Guide- tells you what fruits and vegetables are grown in Ontario and what months they are available.
- <http://www.veg.ca/>
Toronto Vegetarian Association- is an excellent resource on vegetarianism and finding vegetarian food in Toronto.
- <http://www.fao.org/docrep/010/a0701e/a0701e00.HTM>
Livestock's Long Shadow is a document prepared by the Food and Agriculture Organization of the United Nations in 2006, which describes the environmental impacts of livestock around the world.
- <http://www.toronto.ca/garbage/>
This website is the City of Toronto's resource for waste management information.
- <http://www.toronto.ca/environment/food.htm>
This website features the City of Toronto's resource for local food and food safety information as part of Toronto's Environment Office.
- <http://tfmn.ca/>
Toronto Farmers Market Network features information on where to find local markets as well as other resources.
- <http://www.cog.ca/index.htm>
Canadian Organic Growers is an excellent resource for all thing organic food, from production, what it is, publications, and other information.

APPENDIX III – LOCATION OF COMPOST DIGESTERS ON CAMPUS

YORK UNIVERSITY: KEELE CAMPUS SITE PLAN

★ COMPOST DIGESTER LOCATION

