

A Look Inside The Shopping Cart Santropol Roulant's Food Audit, 2010

Maddie Guerlain & Béatrice Lego December 12, 2011











Table of Contents

Part I

A Short History of Sustainability at Santropol Roulant	3
A Renewed Focus on Food	4
A Follow-up Food Audit	5
Part II	
Definitions	6
Methodology	8
Results and Discussions	13
Recommendations	19
Conclusions	23

A Short History of Sustainability at Santropol Roulant



Santropol Roulant is situated in the heart of the Plateau Mont-Royal, one of North America's most populous and dense neighborhoods. With the help of a dedicated staff and over one hundred volunteers each week, we run one of the largest meals-on-wheels programs on the island of Montreal.

Since its inception in 1995, Santropol Roulant's work has had an implicit environmental focus, encouraging sustainable transportation by delivering the majority of our meals by bike or on foot. Over the past ten years, our commitment to a more sustainable urban food system and a healthier urban ecology has grown with the addition of the Rooftop Garden Project, our vermicomposting bins, the Santrovélo Community Bike Shop, as well as a myriad of smaller initiatives and behavioral changes amongst our kitchen and office staff.

In addition, in 2010 Santropol Roulant bought and renovated a new building in the Plateau neighborhood. A large part of the renovations were focused on improving the sustainability of our operations and increasing our growing capacity, such as the implementation of a 1,500 square foot green roof, expected to produce up to one ton of fresh vegetables for the client meals, the weekly baskets and summer community markets. This garden will be run in tangent to the existing Edible Campus Garden at McGill University, which is made up of over 250 self-watering containers, two raised beds and a new berry patch. The new rooftop space also includes two honeybee hives, a greenhouse for starting seedlings in the spring and a rooftop terrace with 50 self-watering containers. Finally, our new enlarged kitchen and walk-in fridge/freezer will provide space for further food preservation (canning, freezing, etc.) during the summer and fall to keep our shelves stocked with local food all winter long.

A Renewed Focus on Food

Food is at the heart of **what** we do, and so **how** we do it is something we take to heart. Santropol Roulant is conscious of the choices it makes in feeding the community and strives to work in a way that respects the delicate balance of the earth on which we all depend. We view serving ethical, healthy and sustainably produced food as an investment towards our common future. As such, strengthening the food cycle and working towards a sustainable urban food system will remain at the heart of our sustainability programming for the years to come.

The case for building a sustainable urban food system is strong. The disconnect between producer and consumer is ever growing, and consequently, warnings of a looming food crisis continue to fall on deaf ears. The average meal travels more than 2400km from field to plate, be it by plane, by truck, by ship or by train. Copious amounts of fossil fuels are burned in the process, contributing to the climate crisis through the emission of harmful greenhouse gases. Conventional agricultural remains highly dependent on petro-chemical fertilizers. Characterized by large expansive monocultures, it is highly mechanized, burning even more fossil fuels to run the tractors and other farm equipment.

The total global contribution of agriculture to climate change, including deforestation for farmland and other land use changes, is estimated to be equivalent to between 8.5 -16.5 billion tonnes of carbon dioxide or between 17- 32% of all human-induced greenhouse gas emissions (Source: Greenpeace Canada). The significant carbon footprint of our food choices are thus reason enough to favour the use of local and organic options, while simultaneously growing our own produce and composting our kitchen waste as part of sustainable urban food cycle. As urban agriculturalists, it is our responsibility to also support the peri-urban regions. We do this through our purchasing policies and by promoting the virtues of local and organic agriculture amongst our members. Supporting local economies, countering the heat island effect, reducing rainwater runoff, protecting the health of our client members and ensuring biodiversity serve only to strengthen the argument in favour of sustainable food.

A Follow-up Food Audit

In 2008, a group of volunteers and staff from Santropol Roulant collaborated on a food audit of the kitchen's purchases for the year 2007, *Of Meat Pies and Pie Graphs: Findings from Santropol Roulant's Food Audit*. The team compiled and analyzed all of the bills from 2007 to create a comprehensive report that demonstrates what the kitchen is buying, how much and where it comes from, as well as a list of recommendations as to how the Roulant can improve the sourcing of its food to fit with a more sustainable model. For us, this means seeking out food suppliers that provide local, organic and/or fair trade options. For further discussion on the definition of sustainable food, see Chapter 6: Results and Discussion. Three years later a new team has come together to do a follow-up food audit for Santropol in order to continue this process of self-reflection and improvement. Our goal was to compile a new data set for the year 2010 which could be compared to the 2007 report in order to reassess and measure our progress.

A food audit is the first step in understanding the many different places from which our food comes from, and how costs are distributed among these different sources. A follow-up audit is necessary to understand what recommendations and changes were implemented, as well as what sort of impact they have had on the kitchen, the meals and the budget. We hope that this year's audit demonstrates how we have improved our food purchasing choices and where we still have room to grow.

Since the first food audit in 2007, the Roulant has made a number of significant changes to its menu in response to the audit's recommendations. The annual menu has slightly changed each year to reflect a more seasonal selection. For example, during the winter, heavier, meat-based meals are served more often, such as Meatloaf, Sheaprd's or Pie. Likewise, during the summer and fall, meals are more based on seasonal vegetables, like Tabouleh or Chef's Salad. In addition, as a way to offset the cost of buying organic meat, a few of the recipes have been adjusted to use less meat per serving. For example, the amount of chicken in Chicken Cacciatore was reduced and rice was added. Overall, the total quantity of chicken was reduced from 16kg to 10kg per recipe, beef cubes were reduced from 16kg to 12kg, and ground beef from 16kg to 12kg.

Definitions

Our definitions for the 2010 food audit are largely based on the definitions from the 2007 audit, as we felt consistency would provide the most reliable assessment.

We continue to define **local** as food that was grown or raised in Quebec, regardless of the size or practices of the farm. As such, we did not consider "local" to automatically correlate with sustainable farming. For example, Quebec is home to many large industrial farms that use unsustainable farming practices, such as intensive spraying of chemical fertilizers and pesticides, monoculture planting or concentrated animal feeding operations (CAFOs). While the environmental costs of transporting this food to Santropol may be lower than food shipped in from outside of the province, the overall environmental impact of these farms is harmful and cannot be considered sustainable.

Gleaned is a term used to describe edible, surplus food that has been recovered from farms or stores, food that would otherwise end up in the trash. Santropol currently gets weekly deliveries of gleaned food from two organizations, Moisson Montreal and Fruiterie Mile-End.



Organic is defined as food coming from a certified organic or trusted organic producer. Organic agriculture does not allow the use of synthetic pesticides, including fungicides, insecticides, rodenticides; defoliants, desicants and wood preservatives; synthetic fertilizers; materials and products produced from genetic engineering; sewage sludge; synthetic growth regulators (hormones); synthetic veterinary drugs, including antibiotics and parasiticides; irradiation; synthetic processing substances, aids and ingredients, and additions to food including sulphates, nitrates and nitrites; equipment, packaging materials and storage containers, or bins that contain a synthetic fungicide, preservative or fumigant; genetically modified organisms.

Canada has had a national organic standard in place since 1999. Under the new organic regulation, passed December 2006, organic certification bodies are to be accredited by the Canadian Food Inspection Agency based on the recommendation of approved accreditation bodies. Certification bodies are tasked with the job of ensuring that the organic farms or processing facilities that they certify as organic are in compliance with the organic standard.

Fair trade refers to products that come through a supply chain that is built on and functions according to standards of fairness, transparency and accountability. Fair trade foods are certified by a third-party organization, which monitor the production, processing and distribution of these products.

According to these definitions, we define sustainable food as meeting one of the described criteria or a combination of any of them.

Methodology

The following section details the methodology used to compile, organize and analyze the data of the present food audit.

Step 1: Collecting data

We began by reviewing the receipts for all food purchased during the twelve month



period of January to December 2010. The information was divided into six categories: fruits, vegetables, meat, dairy, fish and other. All sorts of vegetables (canned, frozen and fresh) are included in the vegetable category. Eggs are included in the dairy category along with cheese and milk. Elaborated meat products, such as sausages, are included in the meat category. All types of fish (frozen, canned, smoked and fresh) are in the fish category. The "other" category is subdivided into spice & herbs, non-perishable proteins (i.e. tofu, vegetable protein), pasta, and other (nuts, any powder, oil, margarine, flour, sugar, starchy food, any dried fruits, rice, cacao, etc.). All the information was organized in Excel tables (Table 1) with each category on its own sheet.

Table 1. Data retrieved from the receipts and classified into relevant information.

A	В	С	D	E	F	G	Н	I	J	K
Item	Date ^a	Supplier	Unit ^b	Qty c	Weight	Cost (\$)	Total	Local	Organic	Code
					(kg)	/ kg	cost (\$)			
Artichokes	01/26/10	Alimplus	L	14.52	14.52	3.97	57.65	no	no	0
(canned)										
Cabbage	07/09/10	Vegifruits	piece	1	22,7	0.52	11.75	yes	no	1
Cabbage	01/25/10	Jardins du	kg	18.2	18.2	0.60	10.92	yes	yes	1.1
		petit								
		tremble								

^{a.} m/d/y, ^{b.}piece, L, kg, lb, ^c Quantity

To facilitate comparison, we chose kilograms as the standard unit of measure, as used in the 2007 food audit, converting all items into kilograms. Items whose weight was unspecified were weighed at Santropol and an average weight (in kg) was calculated for one unit of that item.

In order to easily obtain the amount of only local, only organic, local & organic and non-local & non-organic purchased food, we created a simple code that attributes numerical value to each criterion (see step 2).

Step 2: Classifying the retrieved information

We collected information about the food purchases themselves: whether the items were produced locally or not and whether or not they were organic. As explained in the Definitions chapter, local food refers only to the province of Québec, independent of the travel distance. Each item falls into one of the 4 following criteria: only local, only organic, local & organic and non-local & non-organic.

If necessary, we visited the supplier website or we contacted them for information if it was not included on the receipt or packaging of the product. Table 2 reports all the food suppliers dealing with Santropol Roulant in 2010.

Table 2. List of all food suppliers dealing with Santropol Roulant in 2010.

Food supplier	Classification	Category
Agropur, division Nätrel	Only local	dairy product
Alimplus	Non-organic & non-local	Vegetables, fish, other
Fermes Morgan	Local & organic	meat
Franco vrac	Non-organic & non-local	other
Les fermes St Vincent	Local & organic	meat
Les jardins du petit tremble	Local & organic	vegetables
Aliments Merci	Only organic	other
Pierre en gros	Non-organic & non-local	fish
Oeufs Pétrin inc.	Local & organic	egg
Segal	Non-organic & non-local	fruits, vegetables, other
VegiFruits Inc.	Non-organic & non-local	fruits, vegetables
Viandes St Laurent	Non-organic, local and non-	meat
	local	

The suppliers VegiFruits Inc., Segal and Alimplus did not know for certain which items were produced in Québec, because they select produce based on lowest market price. Therefore these suppliers were by default considered as non-organic & non-local.

The supplier Agropur is a Canadian dairy cooperative that sells dairy products throughout Canada. Agropur Division Natřel is the distributor of Québon, the Québécois dairy product brand. Therefore, all milk was considered local as well as the cheddar from Natřel, as specified on the packaging. The eggs were purchased at Jean Talon market from different local and organic farms. The name of the producer was not specifically written on the receipt, except for the supplier Oeufs Pétrin Inc.

The suppliers Les fermes St Vincent and Fermes Morgan are the two main local and organic meat suppliers of Santropol Roulant. The supplier Viandes St Laurent sells local and non-local meat. For instance, capon and roast beef are not locally sourced, while ham toupie and pork roast are from local sources. None of the meat from this supplier is organic.

The main fish supplier of Santropol Roulant is Pierre en gros. Some of the fish were purchased from Alimplus. The suppliers Frenco vrac and Aliment Merci fall into the "other" category suppliers.



Santropol Roulant keeps a rough tally of the gleaned food donated by Moisson Montréal and Fruiterie Mile-End every week. We used this tally to estimate the approximate monetary value of the gleaned items. This is the only case where we used dollars instead of kilograms for comparison. However, this data was kept separate from our calculations as it is not part food *purchased* by Santropol. The information was only used when looking at the origin of total food used by Santropol.



The Roulant's garden is also a source of organic and local food. The total amount of food produced by the garden in 2010 was 1000kg, of which 250kg was used by the kitchen for the client's meals. The remainder was distributed through a fresh basket program and weekly neighbourhood markets. The information was also only used when looking at the origin of total food used by Santropol.

To the collected and classified information, a numerical code was applied to calculate the total quantity (kg) and cost (\$) of each criterion. The numerical code is as follows:

Non-local & non-organic = 0

Only organic = 0.1

Only local = 1

Local & organic = 1.1

In the Excel table (Table 1), the formula used for the code column is the following:

$$=SI(I2="yes";1;0)+SI(J2="yes";0,1;0)$$

with "I2" being the local column and "J2" being the organic column. From this code, the amount of only local, only organic, local & organic and non-local & non-organic purchased food was extracted for each category by applying the formulae described in Table 3.

Table 3. Formulae used in the Excel Table 1 to obtain the amount of non-organic & non-local, organic & local, only local and only organic for each category of purchased food.

Criterion	Weight	Cost
Non-organic & non-local	=SOMME.SI(K2:K492;0;F2:F492)	=SOMME.SI(K2:K492;0;H2:H492)
Organic & local	=SOMME.SI(K2:K492;1,1;F2:F492)	=SOMME.SI(K2:K492;1,1;H2:H492)
Only local	=SOMME.SI(K2:K492;1;F2:F492)	=SOMME.SI(K2:K492;1;H2:H492)
Only organic	=SOMME.SI(K2:K492;0,1;F2:F492)	=SOMME.SI(K2:K492;0,1;H2:H492)

with "F" being the weight column, "H" being the total cost column, "K" being the code column.

Step 3: Compiling the information

We used the formula detailed in Table 3 to obtain the total amount in kilograms and the total cost in dollars for each of the defined categories (i.e. vegetable, fruit, dairy, meat, other) of only local, only organic, local & organic, and non-local and non-organic purchased food. The results obtained for each category and the total results obtained for all the purchased food were compiled in one final Excel Table (Table 4).



Results and Discussions

The following section reports the data retrieved by percentage, by kilogram or by dollar, as specified.

Table 4 summarizes the final data obtained for each category (fruits, vegetables, dairy, meat, fish and other) and for each criterion used to classify Santropol Roulant's purchased food.

Table 4. Final data table.

	Total	Only organic	Only local	Org. &	Non-org. &	
				Locala	non-local ^b	
		Fruits	5			
Total cost (\$)	2430.08	0.00	0.00	0.00	2430.08	
Total weight (kg)	1458.11	0.00	0.00	0.00	1458.11	
		Vegetab	les			
Total cost (\$)	7634.22	0.00	1015.21	1801.47	4817.54	
Total weight (kg)	5649.08	0.00	1504.00	1519.86	2625.22	
		Dair	y			
Total cost (\$)	2394.02	0.00	1971.66	0.00	422.36	
Total weight (kg)	481.68	0.00	444.94	0.00	36.74	
		Mea	t			
Total cost (\$)	21 862.10	0.00	831.04	20 528.09	502.98	
Total weight (kg)	1471.42	0.00	183.30	1216.92	71.20	
		Fish	1			
Total cost (\$)	6349.16	0.00	0.00	0.00	6349.16	
Total weight (kg)	551.05	0.00	0.00	0.00	551.05	
Other						
Total cost (\$)	6387.88	1029.71	0.00	0.00	5358.17	
Total weight (kg)	2632.67	658.30	0.00	0.00	1974.37	
Total						
Total cost (\$)	47 057.47	1029.71	3817.91	22 329.56	19 880.29	
Total weight (kg)	12 244.01	658.30	2132.24	2736.78	6716.69	

^a Organic & local, ^b Non organic & non local

Figure 1 shows that 44% of the food purchased by Santropol Roulant is either organic and/or local. The percentage in the 2007 food audit was 50%. Therefore, there is a slight decrease compare to the last food audit. However, a closer look at the data shows that despite there being an overall decrease in the amount of organic and/or local food purchased, there was a significant increase in the percentage of organic and organic and local food purchased. This is important because local can encompass both industrial and sustainable farms.

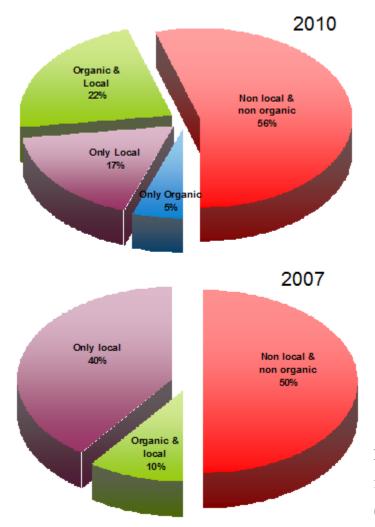


Figure 1. Percentage breakdown of food purchased in 2010 and in 2007 (kg).

According to Figure 2, all fruits and fish are non local and non organic while most of the purchased meat and the purchased dairy are local. Furthermore, most of the purchased meat is local and organic, which represents a 45% increase between 2007 and 2010. Only a bit more than 50% of vegetables are local or local & organic.

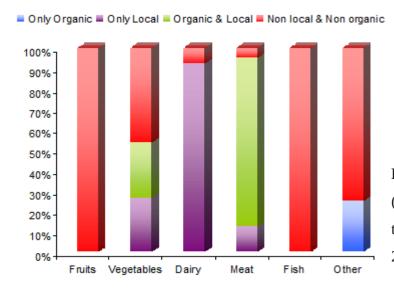


Figure 2. Percentage breakdown (kg) of each food category for the total amount of food purchased in 2010.

By only considering local and local & organic purchased food, 62% of local purchased food is vegetables, 29% is meat and 9% is dairy (Figure 3). In 2007, the local food included meat (53%), fruits and vegetables (36%) and dairy (11%). In 2010, no purchased fruits were local however the percentage of local vegetables increased by 30% from 2007 to 2010.

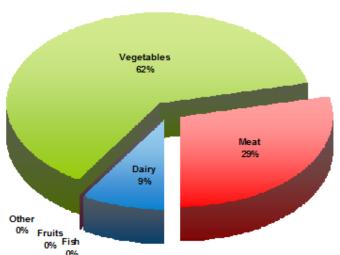


Figure 3. Percentage breakdown (kg) of total local food purchased in 2010.

When including food produced by Santropol's garden, the main categories of local & organic food are vegetables (59%) and meat (41%) (Figure 4). In 2007, 83% of total organic and local food was meat and while the other 17% came only from the Roulant's Rooftop Garden. Therefore, there has been a 42% increase in the total amount of local & organic vegetables, partly due to the partnership with Les jardins du petit tremble. In 2007 the only local & organic meat used by Santropol was beef while in 2010, local & organic meat included beef, chicken, sausages and turkey, thanks to the wide variety of options provided by Les fermes St Vincent.

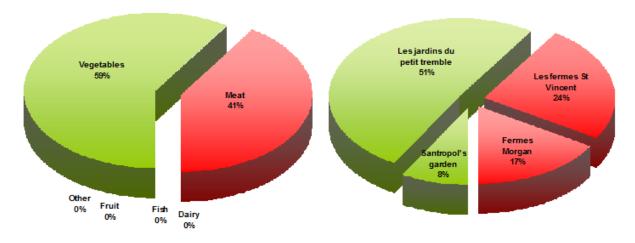


Figure 4. Santropol's sources of local & organic food (kg).

As the Rootftop garden provides a proportion of produce each summer, we analyzed the source of fruits and vegetables for July to September. the Roulant's garden provides 11% of the kitchen's produce, 36% is purchased from Les jardins du petit tremble, 14% comes from other local sources and the rest (39%) is from non local sources (Figure 5).

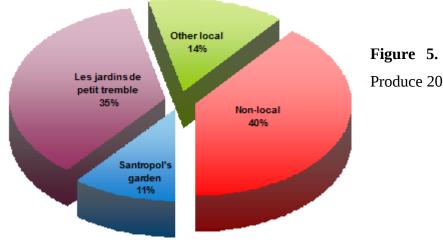


Figure 5. Distribution of Summer Produce 2010 (kg).

Because the Rooftop Garden produces predominately vegetables, and very little fruit, we did a further breakdown of the summer months to demonstrate the sources of vegetables only. Compared to Figure 5, the amount contributed by the Rooftop Garden does not change significantly (Figure 6). However, the amount of food coming from non-local sources decreases by 11% demonstrating that the Roulant does source more of its food from local sources when it is fresh and available in Quebec.

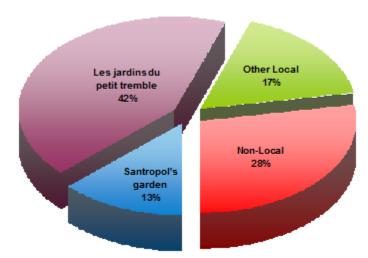


Figure 6. Distribution of Summer Vegetables 2010 (kg)

The type of purchased food is directly influenced by the meals served by Santropol. As was recommended in the 2007 food audit, Santropol Roulant changed their menu to increase the number of vegetarian meals, thereby partially offsetting the purchase of organic (more expensive) meat. In 2007, only 16% of meals were vegetarian while in 2010, vegetarian meals represents 32% of the menu (Figure 7).

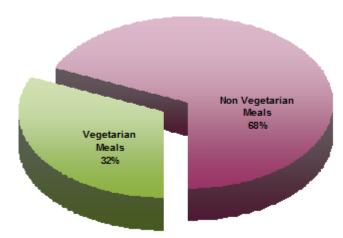


Figure 7. Percentage of vegetarian and non-vegetarian meals served in 2010.

The choice of purchasing more local and organic food should have a direct impact on the expenses of the kitchen. Figure 8 represents the distribution of food costs for 2010 and 2007. For comparison, the total cost of purchased food by Santropol in 2010 was \$47,057 versus \$43,302 in 2007. If the spending of 2007 is adjusted for inflation¹ over the last three years, the spending would be \$45,552 in 2010, resulting in a \$1500 difference. This difference could be attributed to the choice of purchasing more organic and local food. In 2007, organic food only represented 20% of the total cost while in 2010 it represents 48% of total costs, an increase by a factor of 2.37. It is important to note that despite significant changes in food purchasing, specifically the increased purchasing of organic and local meat and vegetables, the distribution of costs among different products has not changed significantly since 2007, with meat being the most costly product.

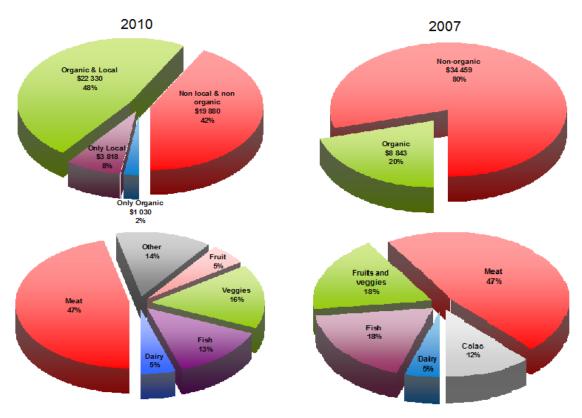


Figure 8. Distribution of Total Food Costs (CAN\$) in 2010 and 2007.

¹ http://www.bankofcanada.ca/rates/related/inflation-calculator/

Based on our criteria of sustainable food, defined in chapter 3, purchased food categorized as only organic and local and organic meet those criteria. We did not include food defined as only local as according to our definition of local is does not correlate with sustainable farming. Sustainable farming would consider the size (small to medium size farm) and the practices of the farm. Figure 9 shows the percentage of sustainable food of Santropol's kitchen in 2010 and 2007. It is clearly seen that this percentage significantly increased by 40% since the last food audit, as a result of the policy of purchasing more local and organic food (Figure 9a). The monetary value for products from Santropol's garden and gleaned food are estimated to \$8000 and \$9000, respectively. When including gleaned food and Santropol's garden production, sustainable food represents 63% of the monetary values of the kitchen needs compare to only 35% in 2007.

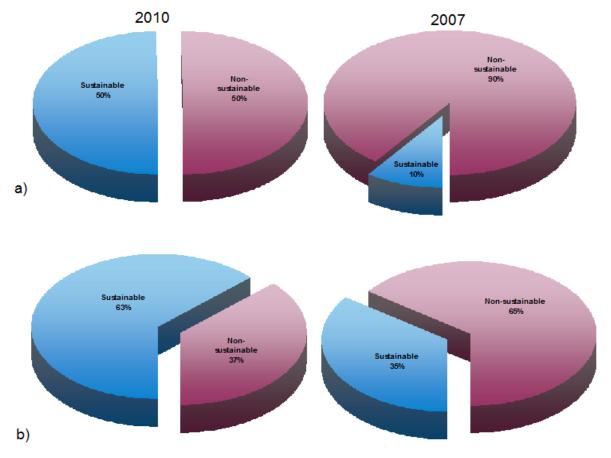


Figure 9. Percentage of sustainable food (based on cost): a) only considering organic, local and organic purchased food, b) considering organic, local and organic purchased food, gleaned food and Santropol's garden production.

Recommendations

- 1. Continue purchasing dairy products primarily from Nätrel, a local source and consider purchasing a proportion of organic milk in the future. The next step towards sustainability would be to purchase organic milk. Liberté and Nätrel have both recently begun to offer organic milk. Both sources offer 1%, 2% and 3.8% organic milk and Liberté also offers organic skim milk. Organic skim milk from Liberté costs \$2.8/L while normal skim milk form Nätrel costs \$1.33/L. It is important to notice that purchasing organic milk would be costly.
- 2. Continue purchasing organic and fair trade sugar and flour from Aliments Merci and consider purchasing organic and/or fair trade cacao, rice lentils and couscous from them as well. In addition to the coffee, which is donated by the neighbouring Santropol Cafe, Santropol currently purchases certified fair trade sugar and organic flour and sugar for its kitchen. However Aliments Merci offers a wide selection of organic and/or fair trade bulk goods that are also frequently used by Santropol and could be considered for purchasing.
- 3. As the Roulant already sources a significant number of root vegetables from local farms, we recommend **sourcing more root vegetables from local, organic sources**. For example, potatoes are occasionally purchased from Les jardins du petit tremble for \$0.60 per kilo, but most often purchased from Vegifruits for \$0.47 per kilo. Beets cost on average \$1.00 per kilo from Vegifruits, but \$0.70 per kilo from Les jardins du petit tremble. Thus, while some local, organic root vegetables are more expensive, this price increase can be balanced by others which are less expensive (Table 5). The majority of onions are already purchased from Les jardins du petit tremble, so we recommend continuing this trend to include more root veggies year-round.

Table 5. Cost comparison of some vegetables from Les fermes du petit tremble (a local & organic source) and Vegifruit (a non organic & non local source). The cost range corresponds to the minimum and the maximum price / kg over the year 2010

Vegetables	Les fermes du petit tremble	Vegifruits	
	Cost (\$) / kg	Cost (\$) / kg	
Beet	0.65 - 1.25	0.86 - 1.40	
Cabbage	0.60 - 0.80	0.50 - 1.00	
Carrot	0.60 - 0.85	0.47 - 0.91	
Potato	0.60	0.47	
Onion	0.80 - 1.40	1.30 - 1.97	
Tomato	1.00	1.40 - 2.00	
Zucchini	1.00 - 1.50	1.30 - 2.18	

4. In complement to fresh vegetables, Santropol Roulant also purchases frozen vegetables such as corn, peas, beans, brussel sprouts and spinach from Vegifruits. Recently, Santropol Roulant has started to purchases local frozen food from Arctic Gardens. This supplier grows vegetables in the Monteregie region in Quebec and in southwestern Ontario. According to Table 6, the cost/kg of frozen vegetables is higher for Arctic gardens products than Vegifruits products. In 2010, frozen vegetables represented 22% in weight of the purchased vegetables and 6% of the total cost of purchased food. We encourage Santropol to continue purchasing local frozen food knowing that it will be costly.

Table 6. Cost comparison of frozen vegetables from Arctic Gardens and Vegifruits

Frozen vegetables	Arctic Gardens	Vegifruits	
	Cost (\$) / kg	Cost (\$) / kg	
Brussel sprouts	2.69	2.21	
Corn	2.31	1.98	
Green beans (whole)	2.70	1.40 or 1.56	
Green beans (cut)	2.18	4.13	
Peas	2.56	1.98	

- 5. During the winter, we recommend trying to establish a partnership with Lufa Farms to source a variety of fresh, local vegetables, particularly lettuce for the daily salad. Lufa Farms provides year-round fresh vegetables from their 31,000 square foot rooftop greenhouse situated in Montreal.
- 6. To increase the amount of local fruits, we recommend **purchasing fruits highly produced in Québec such as apples, melons and berries when in season**. A "self-picking" day could be organized during the summer season to harvest different fruits followed by a few afternoons dedicated to preserving, i.e. freezing berries, canning applesauce. During the warmer months, the daily fruit salad could vary according to season to incorporate fresh, local fruits, and during the colder months applesauce could be an occasional substitute.
- 7. Because of specific climate and soil conditions, certain areas of Ontario allow producers to grow a wide variety of fruits. Ontario fruit growers grow apples, peaches, grapes, pears, nectarines, apricots, plums, prunes, cherries, raspberries, strawberries and blueberries (http://www.omafra.gov.on.ca/english/crops/facts/04-045.html). The major fruit-producing areas in Ontario are spread along the shores of Lake Ontario, Lake Erie, Lake Huron and Georgian Bay, areas that are much further than 100 km. Although they would not be considered "local" within our current definition, **purchasing fruits from Ontario** would still be an improvement from on purchasing fruits from California, for example.
- 8. Furthermore, we recommend taking full advantage of the new walk-in fridge and freezer by **bulk purchasing fresh vegetables in the summer and fall and organizing large-scale preserving events** (freezing, drying and canning) in order to store them throughout the winter. This could be done with corn, spinach, peas, brussel sprouts, beans and tomatoes. As was said in the 2007 audit, we recommend freezing and drying before canning in order to avoid high levels of sugar, salt or vinegar in the fruit or vegetables. As a follow-up the workshop on solar ovens this summer, a solar dehydrator could be researched and built in order to facilitate further food preserving.

- 9. Fish is one of the two categories that cannot be considered sustainable from the present study as it is not sourced locally. However, the sustainability of the Roulant's fish purchasing could be improved by **following the Green Peace list on sustainable world production of fish**, More information can be found on their "Red List of Species" on their website http://www.greenpeace.org/international/seafood/red-list-of-species.
- 10. For a more nuanced idea of sustainability, **the definition of "local" should be reevaluated in future food audits**. In the 2007 and present food audit, "local" is only considered food that comes from Quebec. The two main local and organic meat suppliers of Santropol Roulant, Les fermes St Vincent and Fermes Morgan, are located at 86 km and 110 km from Montreal, respectively. For similar distances, farms located in Ontario should also be considered "local", as those farms might be closer to Montreal than Quebecois farms located in Saguenay or the Gaspé peninsula, for example. Criteria such as "within 100km" and Quebecois producer could be an alternative definition of the term "local".
- 11. In order to have a complete idea of the kitchen consumption, we recommend to register all the items received from Moisson Montreal in an Excel file, as we did for the present food audit. Such a document would demonstrate the type of food being gleaned, and perhaps could why Santropol does not purchase local fruits.



Conclusions

A Look Inside The Shopping Cart represents Santropol Roulant's second food audit and reveals significant improvements in Santropol's food purchasing habits since the last audit in 2007. The amount of sustainable food (based on kg) increased by 17% since 2007 as a result of a policy to purchase more local and organic food. This policy also resulted in 40% more of the budget being spent on sustainable food, as organic food is generally more expensive, especially organic meat.

The findings of the food audit help us locate specific areas that have been improved, such as the sourcing of vegetables, areas where habits should be continued and expanded, such as the purchasing of local frozen vegetables, and areas where action should be taken, such as the sourcing of fruit. We hope that this follow-up food audit can help Santropol establish a sustinable food policy that encompasses a holistic purchasing policy and accounts for the social impacts of food purchases and food waste. We also hope this food audit can be a useful resource for other studies by Santropol about their food use, such as the nutritional content of meal, as well as an inspiration for other organizations to follow a similar path of self-reflection and assessment.

We highly recommand that future audits follow our methodology to facilitate comparison over the years. In the future and according to the development of a sustainable policy, the definitions used in the present audit might have to be redefined.

The authors would like to thank Santropol Roulant's Director of Sustainability, Tim Murphy, for his help and his trust in us to accomplish this work. We also would like to thank Armel Nevo, Santropol's Roulant's kitchen manager, for his help in giving us usefull and needed information.