



*McGill Food Systems Project*

# Farm to Plate

Understanding the Institutional Supply Chain

**Researched by:**

Nate DeBono  
Lauren Boivin  
Jonathan Glencross  
Dana Lahey  
Anastasia Poholock  
Ian Vogel

**Authored by:**

Jonathan Glencross

**Edits by:**

Dana Lahey  
Rose Karabush

# Table of Contents

- Introduction: Unpacking McGill’s Food System..... 2**
- Farm to Plate: Understanding the Institutional Supply Chain..... 3**
  - The Industrial Food Web..... 3
  - Setting The Menu ..... 4
  - Ordering..... 4
  - Management Order Guides ..... 5
  - Suppliers..... 5
  - Brokers ..... 7
  - Farms ..... 8
- Coming Soon ..... 8**

## Unpacking McGill's Food System

*At the McGill Food Systems Project, we believe that out of any social issue seeking the attention of students and citizens, the sustainability of our food supply can claim the widest and most tangible appeal to—and impact upon—individuals. Not only does it clearly demonstrate the global impact of local choices, it is universally relevant: regardless of ecological awareness, social group, and political orientation, everybody needs to eat. Before we can revitalize our relationship with the food that we order and consume, we must first understand the system as it stands.*

This report is an attempt to pass on what was learned by five student researchers over the course of the summer of 2009. Our goal was to answer a few large questions: Where does McGill's food come from and why? Who is in charge of our food sourcing decisions? How can we, as the McGill community, improve the sustainability of our food chain?

To answer these questions, we met with everyone from top-level administrators to middle management, from chefs to kitchen managers. We met with professors, students, farmers, community groups, food service providers, distributors, suppliers...the list goes on. Over the course of one summer we interviewed more than fifty individuals, all in the service of what we had thought were a few, fairly straightforward, questions.

We have compiled this report in the interest of helping future researchers, as well as broadening the awareness and discussion of the issues behind what we eat. In it, we will walk you through our food's journey from farm to plate, doing our best to explain McGill's relationship to the forces which drive the commercial food industry and create the complex food procurement and delivery system we will refer to as "the industrial food web."

We hope that the information amassed in this report will be a resource for the individuals and groups who are as passionate as we are about revitalizing our relationship with the food that we consume.



## Farm to Plate: Understanding the Institutional Supply Chain

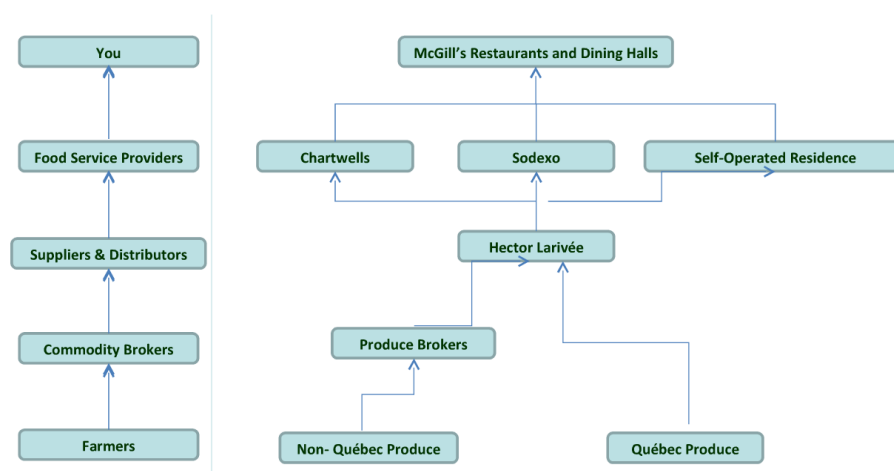
*Imagine the following scenario: You are a first year student living at the newly constructed Carrefour Sherbrook Dining Hall, and the winter semester has just begun. As you walk into the dining hall for your first dining experience of the year, you behold a myriad of choices; chicken soup or tomato salad, a cold sandwich or a hot meal, fruit salad, an organic apple, or freshly baked cookies? Beyond this, larger and more pressing questions may come to mind: Where does all this food come from? Is any of it local? Who sets the menu? How is it that I can be served fresh tomatoes in the middle of January?*

This Farm to Plate section is a step-by-step explanation of the decisions and choices that determine what we eat at McGill, where this food comes from, and who is involved. Instead of presenting the entire supply chain for every product, we will focus on the example of fresh produce. Please note that as Food and Dining Services at McGill is currently undergoing significant internal changes, some of this section is subject to change.

## The Industrial Food Web

The basic path of produce, from production to consumption here at McGill is as follows:

The farmers who grow the food sell it to brokers, who sell it to suppliers and/or distributors, who find and ship it to food service providers, who prepare and serve the food to McGill students.



In the following explanations of operations at the McGill Food Services level, we have chosen to focus on Residence Dining Halls. The reason is that the large scale of their operations gives them more influence than any other location: Bishop Mountain Hall alone serves 650 students two to three meals a day, five days a week, eight months of the year. In total, the five campus residences serve 2,500 students on a daily basis.

## Setting the Menu

Traditionally, chefs and dining hall managers work together to set the rotating menu weeks or months in advance, taking into consideration the nutritional needs, ethnic background and personal tastes of the students living in the five residences on any particular year.

**Did You Know?** Students can influence what's on the menu! All residence dining halls have whiteboards for students to give feedback on the menu throughout the semester.

## Ordering the food

Once the menu has been set, the chefs must decide from whom to order their food. For the individuals looking to make more sustainable choices in our cafeterias, this is the most important step on the farm to plate journey, as these orders are simple to change and directly within our control at McGill. There is no *single* factor that guides this decision making process. What we eat, when we eat it, and how we expect our food to be prepared are all cultural conventions reinforced by habit and tradition. Together with the physical and organizational structure of the existing "industrial food web," these cultural values set the basic parameters for what kinds of produce we order, which in turn determines the type of suppliers from whom our food services locations can source that produce.

Within those larger boundaries, there are many more specific criteria that influence sourcing choices. At every cafeteria on

campus, the managers and chefs ordering food agreed on the most important factors guiding their ordering decisions.

- Price: *Can the food service providers afford it? More specifically, are students willing to pay for it?*

- Quality: *Defined as taste, appearance, and freshness (a hazy concept: one supplier defined fresh as "anything that can get to us within 1½ days").*

- Volume: *Can the supplier provide for hundreds of students on a daily basis?*

- Safety: *Has the supplier been inspected by a third party for food safety standards?*

- Reliability: *Can the food service providers order without having to worry about shortages?*

- Accountability: *Who takes legal responsibility if the food makes anyone sick? Is the farm, distributor or supplier insured for this?*

And an honourable mention goes to:

- Demand: *Will the type of food on the menu be popular with this year's students?*

- Local Origin: *Can the suppliers provide locally grown produce at the same the quality and price?*

## Management Order Guides

To help them satisfy the abovementioned ordering criteria, the cafeterias that are run by corporate food service providers—Chartwells at New Residence Hall and Carrefour Sherbrooke, and Sodexo at the Centennial Hall at MacDonald Campus—have approved lists of inspected products and suppliers compiled into Management Order Guides (MOGs). These pre-approved suppliers (or “authorized vendors”) are all inspected by a third party to ensure a ‘safe and reliable’ product.

MOGs often specify the product type and volume, as well as the frequency of supply for a set time period (e.g. 2,000 lbs. of Granny Smith apples delivered twice a week for the next year from Hector Larivée), and leave it to the supplier to figure out how to fill that order. This helps fulfill the dining halls’ criteria for both price and reliability, as the MOGs contract specific volumes over a defined period of time, enabling significant economies of scale (larger orders often receive better price margins). Although MOGs are theoretically locked, purchasing managers have the freedom to make special orders or to add new items to the list.

Sodexo does not have the same MOG system, although contracts are still established with the supplier for a certain volume and frequency of specific products, which is intended to increase economies of scale and reliability of supply.

In the past, the self-operated Residence Dining Halls have not used any formal management order guide. However, since these residences order almost all of their fresh produce from a single supplier—Hector Larivée—their entire order history

is saved to create a personalized supply list so that they can easily maintain continuity among the products they serve. The result is that even without MOGs, all food services locations’ ordering habits are quite similar.

### **Did You Know?**

Chartwells has a corporate policy that requires all seafood to meet the [SeaChoice](#) standards for sustainable fisheries. All seafood ordered at New Residence Hall or Carrefour Sherbrooke is never in SeaChoice’s “Avoid” category, only rarely in the “Some Concerns” category, and mostly from the “Best Choice” category. The independent residences are looking into sourcing according to the same standards.

## Suppliers

Although each has their own specialty, suppliers, like distributors and brokers, are essentially middlemen. Suppliers have well-established relationships with food service providers who do not always have time, resources or interest to search out competitive prices and farmers themselves. The supplier will often take financial responsibility (often in the form of insurance) on the produce to assure the quality and safety of the product.

### **Did You Know?**

All of the food services locations purchase their fresh produce from the same local supplier: Hector Larivée, the largest independent produce distributor in Québec. There are many reasons for this, although Hector Larivée’s reputation for high-quality produce and large economies of scale are the cited the most frequently. They can also supply everything from Honduran cantaloupe to edible flowers from a retired doctor living in Mont St-Hilaire, Québec.

For a more complete understanding of the role of suppliers, we will take an in-depth look into the operations of Hector Larivée, who gave us a tour of their warehouse during an interview this past summer.

*A short walk from Frontenac metro in the Ville-Marie district of Montréal, the Hector Larivée warehouse is, from the outside, an unassuming building with no indication of the true scale of operations at Québec's largest independent distributor of fresh produce. The interior, however, reveals four refrigerated storage rooms and a handful of small offices, collectively comparable in size to a small aircraft hangar. These climate-controlled storage rooms maintain independent temperature and moisture profiles 365 days of the year, despite being directly adjacent to one another. With an average turnover of less than twenty-four hours, no item will call the warehouse home for more than a day and a half. Yet somehow, with the exception of the quiet humming of electric forklifts manoeuvring through the endless stacks of produce, the efficiency of the warehouse workers creates a calm and quiet order, masking the staggering volume of produce entering and exiting the warehouse every day.*

*The typical day at Hector Larivée begins with a sales meeting, where the team of buyers and sellers are given updates on the current and forecasted temperatures in Québec, California, Mexico, etc. Provided by an association based in Québec and the US, this forecast alerts the team up to five days in advance of any significant fluctuations in price, quality or other, more general sourcing issues that might affect the company's*

*purchases. It is the supplier's job to find the most reliable produce for the best price, which means they must maintain constant dialogue with all of their possible growers.*

Since both Chartwells and Sodexo have year-long contracts with Hector Larivée, the magnitude of their orders creates large economies of scale. Often, the food service providers will ask for a set price for an entire week for the more than twenty pallets of produce that they order on a regular basis. However, since prices can fluctuate with the weather and temperature, sourcing does too. Specific farms cannot always guarantee the luxury of set prices, and a forecast of heavy rain in Laurentians is all it takes to move the order to California at a moment's notice—since if the weather is better in California, so too is the price, even with the additional \$7,000 it takes to transport a truck of mixed pallets 5,000 km to Montréal. The job of Hector Larivée is to find products that meet their customers' demands, and that usually means finding the cheapest fresh fruit and vegetables available, wherever they're being grown.

So, how is it possible for buyers at Hector Larivée to get cheaper strawberries from 5,000 km away with less than a few days' notice? The full answer requires an understanding of the complementary roles of politics, agricultural and oil subsidies, climate, weather, and a well established "on-demand" economy supported by everything from highways to lobbyists, and has been comprehensively addressed by Michael Pollan in his book *The Omnivore's Dilemma*. Part of

the short answer, however, is that they order through **brokers**.

## Brokers

So what *is* a broker? Brokers in the food industry are not all that different from brokers on Wall Street: both jobs involve buying something at a low price and selling it at a profit, without adding any value to the ‘thing’ itself. Essentially, food industry brokers buy produce from farmers and then resell it to distributors, wholesalers and suppliers without ever coming into physical contact with the produce. So, why are brokers even used? The primary reason is that farmers don’t always have enough time or expertise to maintain international contacts overseas and across borders. Brokers, by contrast, are professional networkers. If there is no local market large enough to keep the farm afloat, a broker is hired to get a farmer’s produce to retail contacts all over the world. Brokers help small farmers find markets, and, as previously mentioned, help ensure that suppliers like Hector Larivée can always find produce at the quantity and prices they need, but they also take cuts of the money that would have gone to farmers or consumers.

Hector Larivée has list of ten to twelve brokers from whom they buy every week, four to five of whom operate out of Montreal. To bring us back to the question of how distant markets manage to be more economically competitive, consider Pro Act, a purchasing group based in Salinas, California who are used regularly by Hector as a source for

fresh produce. Pro Act has a handful of employees who spend their time negotiating deals by phone with clients in far-away markets, taking specific orders from them and searching out the farms to fill each order. This involves significant amount of time in the field, searching for fresh, high-quality produce that is fit for international travel.

Without this legwork, it would be extremely difficult for the group of buyers at Hector Larivée to insure the quality of the produce (especially given the long distance that it must travel) or for them to provide their clients with competitive prices in the region.

Still, using brokers is not always the preferred course of action for the farms or the suppliers. Significant effort has been made on the part of farmers to eliminate the broker step by grouping together into cooperatives. When the cooperatives become large enough to act as brokers themselves, they are able to cut out the middlemen and still sell their produce at competitive prices in markets beyond the traditional range of each individual farmer.

When buying food locally is possible, given the product and the season, there can be a similar elimination of brokers. In Québec, for example, Hector Larivée doesn’t deal with brokers, as they prefer to go directly to the growers. *“Our first goal is to satisfy the farmer.”* –Eric Boucher, Sales. At the beginning of each season a few buyers from Hector Larivée will visit farms in the region and make a deal with each farmer directly. *“For example, we commit to buy all the*



*cauliflower we need from the Québec farmer for the rest of the summer, provided he can supply the specific caliber, quantity, and packaging we are looking for.” –Daniel T., Purchasing*

## Farms

Unfortunately, though we were able to trace some of McGill’s produce ordering down to a handful of Hector Larivée’s preferred Québec farms, we did not have time to interview enough farmers about their day-to-day relationship with the rest of the food web to justify any analysis. Generally speaking, farmers have a lot to deal with, including subsidies and regulations (municipal, provincial, national and international), quotas, agricultural and labour unions, difficult markets, and high risks in production due to weather and disease, to name a few. Currently, two students are undertaking independent studies on a few of these issues, and we hope to continue to investigate these factors and the role of the farmer in the near future.

## Coming Soon...

In future reports, we will:

- Discuss the impact of Québec’s new Bill 17 on the institutional supply chain
- Provide criteria for evaluating “sustainability” in McGill’s food systems
- Assess the currently unsustainable nature of McGill’s food systems
- Examine possible means of improving sustainability, such as seasonal, local, organic, or Fair Trade sourcing, and their current status at McGill
- Highlight the internal and external barriers to viable solutions’ adoption across campus
- Present a list of actions that are both realistic and necessary to overcome these barriers

In the meantime, please contact us at [mcgill.foodsystems.project@gmail.com](mailto:mcgill.foodsystems.project@gmail.com) for more information.