

Urban Agriculture and Local Foods

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Introduction:

Avid supporters of local food consumption are often called “locavores.” Yet for us who in a city where eating fast food is the norm and where Dunkin Donuts and golden arches can be found on every corner, “locavorism” is not yet a huge part of our Midwest-American culture. But as people become more conscious of its benefits, we will hopefully be able to make local consumption the standard. This not only keeps money in the community through support of local businesses, but creates conscientious consumers who know where their food is coming from and helps to make the food production and consumption cycle a closed one. Buying foods locally also reduces the number of miles travelled to get the food from farm to the market or store, also reducing gas consumption.

For our purpose we are limiting “local” to everything within the Great Lakes region. We also considered the organic food market. Supporting the organic food system eliminates the use of synthetic pesticides and synthetic fertilizers that can lower biodiversity and pollute our water supply. However, organic can be a very controversial word, in terms of sustainability and for political reasons, it can be related to who decides what is and is not organic. We decided to include organic food in our project along with local food, because most of the time it is still more sustainable to buy organic rather than conventional.

One obstacle to the organic and local food movements is the current economic crisis. We all know that organic and local foods are notorious for being more expensive than their conventional counterparts. This can make it difficult for consumers to become more sustainable while also trying to become more budget-conscious. However, we as a group felt that buying organic and local foods could be just as affordable as conventional foods with careful planning, such as reducing meat consumption and centering meals on other cheaper items. We wanted to find out if the people Edgewater felt the same way.

Setting up our project took some thought, because looking at affordability often involves simply looking at price comparisons between organic, local and conventional products, which most of the time ends in organic and local being less affordable. Instead, we decided to combine price comparisons of neighborhood grocers with consumer surveys to find out what Edgewater residents consider affordable when buying groceries. We hypothesized that local and organic foods were as available and affordable as conventional foods within Edgewater.

Hypothesis: “In all of the Edgewater community, local (Great Lakes region for our purposes) and organic food are as available and affordable as conventional, mass grocery retail.”

Methods: We used a variety of methods to determine the availability and affordability of local food. We created surveys for the citizens of Edgewater where each student conducted twenty surveys in various quadrants of Edgewater. For example, Stephanie surveyed at Dominick’s while Andrea surveyed in the

northeast corner of Edgewater, near Granville and Kenmore. We hoped that by surveying in each area we could get a more representative image of the community's attitudes towards local and organic foods. We also did case-studies at areas where people get food in the area, which included: True Nature Food Store, Devon Market, Edgewater Farmer's Market, and Uncommon Ground. For each location we were able to speak with the owner/manager to ask them about their efforts to buy from local growers, minimize 'food miles,' and other efforts to make their establishment more sustainable. Each case demonstrated unique and interesting efforts toward sustainability and reflects the many challenges and solutions that local food poses to business and the community as a whole. Lastly, we created price indices for Devon Market, Dominicks, True Nature, Jewel, and Scheeringa's Farms (Farmer's Market) to compare prices, both of organic and conventional food.

Results:

❖ Case Study: True Nature Foods

- Has a variety of organic and local goods
- Bread from Red Hen (fresh and local daily)
- Fresh never frozen chickens from Fisher, IL (no growth hormones)
- Organic spices, honey, vitamins, candy bars, etc.
- Also some local artisan work
 - True Nature stresses its local and 'organicness' via very noticeable labels
 - Also coordinates the farmers market and works with other farmers/growers
 - Emphasis is on smaller, more local markets
- "Brings community together...both vendors and citizens"
- With help of Urban Habitat of Chicago, True Nature developed a soil-free roof-top garden
- Blueboard meshing and per-lite...no soil and not hydroponic
- Features both agricultural and horticultural products from flowers to tomatoes, lettuce, and chard
- Diverse plants help each other out and promote the health of the garden
- Cools the building down in the summer

❖ Case Study: Uncommon Ground

- Putting together Criteria for a LEED community
- As green as possible, clean restaurant association
- Green Seal
 - Certified body in Washington and developed hotels and working on restaurant seal for sustainable purchasing and waste products
- Working on getting a large composter
- Certified organic for upstairs rooftop garden
- Working on organic farming and composting to close the circle
- Local Purchasing

- Want to know where their food comes from
 - They don't have to be organic certified but must be sustainable
 - Can't produce as much as conventional therefore pricier
 - Local= great lakes region
 - Plans menus according to seasonal availability
 - Some farmers do indoor growing like greens that she purchases
 - Tropical fruits from overseas because she has no choice
 - Nuts and etc from the US
- Learning preservation techniques to save more of her products
- Future= purchasing whole animal to use, but not ready yet
- Garden
 - anything produce
 - use in menu within a day or two
 - trial and error in figuring out which plants grow best in climate, soil, elevation
- Another Uncommon Ground can be found in Wrigleyville but the community is not as invested in it as Edgewater
- Global First
 - What money is used locally stays locally
- Affordability will always be an issue
 - Can I sell it and at what price will people pay for it and who will buy it
- Trying to accommodate with people's taste with normally expecting corn fed beef as opposed to grass fed
- The Arc
 - Is trying to produce and save the plants and animal genetic diversity
- Local beers and increasingly wine
 - Hopps crisis therefore price gone up
- Shipping
 - US foods= local distributor
 - Produce distributor buy locally whenever they can
 - Beef and poultry comes from the farmer
- Gas prices force menu prices up
- Solar panels heat water to reduce gas consumption
- Conservation of water is key
 - Now paying for water by usage
- Recycle everything
 - They have garbage though because there is no composting in the area
 - Transporting organic material to compost is illegal
- About 50% sustainable produce purchasing
- Organic consumer association.org
- Farmer's Market
- Organic food from Wisc. Friday night

❖ **Case Study: Devon Market**

- Not much of the produce is local nor organic (California, Washington, Brazil, Canada, all around the world)
- Meat comes from <http://www.certifiedmeatproducts.com/>. Meat mainly comes from Nebraska. Organic frozen rabbit meat is available. Fernando, the man who orders meat, says that no customers ask about where the meat comes from. The lamb comes from Wisconsin. The meat choices change by week.
- There are organic milk and egg options. This decision was made 3 years ago.
- Owner said that he buys organic whenever it is possible. Michigan apples are an example. Every day at 4 am, he goes to a market on Damen called Blue Island. The fruits and vegetables come from all over the world: California, Washington, Brazil, Canada etc. Manache, the owner, says that he tries to buy local whenever possible because it saves money on transportation costs, but sometimes that option is not available.
- Locally owned (consumer choices are important).
- Customers- Mainly Hispanic and European.

❖ **Case Study: Edgewater's Farmer's Market**

- As much local food as possible but price and variety make it difficult
- Local soaps
 - Made in Edgewater
- Pasta Puttana
 - Made in Edgewater, Organic
- Organic pet food
- Earth Fine Apples
 - Grown 100 mi outside Chicago in Berrian Center, MI (Growers live in the area)
 - Primarily wholesale
- Backlash felt among small growers because when Federal government defined 'organic products'
 - Seen as too bureaucratic and require too much record keeping

- Make it more difficult for smaller farmers to compete Some follow organic principles and practices without using the label

Price Comparisons

Organic			
Dairy	Meat	Vegetables	Fruits
Milk: \$4.99/gal	Ground Beef: \$7.70/lb	Zucchini: \$3.25/lb	Apples: \$.75 each
Eggs: \$4.49/doz	Chicken Breasts: \$5.69/lb	Carrots: \$.99/lb	
Conventional			
Dairy	Meat	Vegetables	Fruits
Milk: \$3.50/gal	Ground Beef: \$5.29/lb	Zucchini: \$1.99/lb	Apples: \$.69/lb
Eggs: \$2.29/doz	Chicken Breasts: \$1.49/lb	Carrots: \$.69/lb	
Local			
Dairy	Meat	Vegetables	Fruits
Milk: \$3.25/gal	Ground Beef: \$6.49/lb	Zucchini: \$1 /lb	Apples: \$.99/lb
Eggs: \$4.59/doz	Chicken Breasts: \$3.69/lb	Carrots: N/A	

Contingency Table and Chi- Squared

Contingency Table

- #5 Are you aware of local food labels?
- #10 Do you think that local foods are as available as conventional foods?

Observed

Question	Aware	Unaware
Think Available	32	18
Think Unavailable	21	29

Expected

Question	Aware	Unaware
Think Available	26.5	23.5
Think Unavailable	26.5	23.5

Results

- Chi squared= 4.857 with 3 degrees of freedom
- P-Value= .1825

Analysis

- By conventional analysis, this observed difference is considered to not be statistically significant

Chi- Square

- # 7 Do you think that organic foods are as reasonably priced
- # 8 Do you think organic foods are as available as conventional foods?

Observed

Question	Reasonable	Unreasonable
Available	26	4
Unavailable	26	37

Expected

Question	Reasonable	Unreasonable
Available	19	17.76
Unavailable	33	30.24

Results

- Chi square= 8.148 with 3 degrees of freedom
- P-Value= .0430

Analysis

- By conventional analysis this difference is considered to be statistically significant

Discussion: The case studies of our project were very illustrative in getting to know the Edgewater community. By talking to store owners, we gained access to valuable information such as the direct source of food. Each of the case studies showed us that store owners do care about sustainability and consumer preference. Although we did not conduct interviews with chains like Jewel, Dominick's, or McDonalds, we know from the interviews that we did that local and sustainable food choices are feasible for business owners.

The surveys that we conducted provided us with valuable information about consumer choices. As Edgewater works to become LEED certified, we need to be aware of what the community thinks and feels, and how the community will react and participate. The last question of our survey asks, "If local and/or organic foods were as available and the same prices as conventional foods would you choose them?" Although this is a best case scenario question, the vast majority of people that we surveyed answered yes. From this question, we concluded that more local and organic food options would benefit the community. From our contingency tables and chi-squared analysis, we analyzed four of the questions from our survey. We found that of the people who were aware of local food labels, more thought that local food was as available as not local food. Of the people who were not aware of local food labels, more people thought that local foods were not as available as non local foods. These results do not seem to be very accurate or consistent. We did not find this test to be statistically significant by looking at the p-value. A possible source of error is that we did not define the term "local" in our survey. The other two questions that we analyzed proved to be more useful and were also statistically significant. We compared people's perception of organic food price with perception of organic food availability. We found that of the people who found organic foods to be priced reasonably, half thought

that organic foods were as available as conventional foods, and the other half thought that organic foods were not as available as conventional foods. The people that we surveyed that considered organic foods to be unreasonably priced largely thought that organic foods were also not as available as conventional items. We can translate these results to mean that a large contingency of the people that we surveyed considered organic foods to be mostly unavailable and not reasonably priced, which are two issues that should be addressed when we think about food in Edgewater.

From our price indices, we derived valuable information about the economic viability of local and organic foods. We found that the local factor does tend to make foods cheaper, while the organic factor tends to make them more expensive. For example, from a price index at Dominick's, *Organic Lucerne* eggs produced in the very ambiguously denoted "USA" are \$4.49/ dozen while *Phil's Fresh Eggs*, organic, cage free, vegetarian fed eggs are \$3.49/dozen, a full dollar cheaper per dozen. Both products are organic, but the local eggs are much cheaper. For another example, the cheapest zucchini that we found was \$.99/lb, from a local farm in Indiana. Zucchini from other parts of the US was from \$1.99/lb to \$3.29/lb- a very large price gap. Due to decreased transportation costs, local foods are definitely economically viable. We predict that as more customers demand and buy organic foods, they can also become more economically viable. Organic foods are probably more expensive because the demand is not as high as it is for cheap, industrial, conventional foods. Organic foods do not require the petrochemical inputs of pesticides, herbicides, or fertilizers, so they can be cheaper.

Some problems and limitations that we encountered with surveying were: small survey size, not so random sample size (confounding factors). We each surveyed 20 people, which added up to 100 people surveyed. This is not representative of Edgewater which has over 60,000 inhabitants. We each sampled at different times of day, which hopefully gathered a diverse group of people as the time of day and day of the week selects for different people. Despite our efforts, our survey results are limited to the people who were willing to take the time to stop. Many people who shop and eat did not stop, and due to that, we do not have their answers.

Our recommendations for the next class include:

- A continued, more comprehensive survey of where people get their food in Edgewater
- More case studies of stores and markets
- Going to the new Farmer's Markets located at First Evangelical Free Church 5255 N. Ashland and the one at Ebenezer Lutheran Church, both located in the Southwest corner of Edgewater
- Studying local, community garden projects

Our recommendations for Edgewater in becoming LEED certified regarding urban agriculture and local foods:

- Provide monetary, advertising, and community support for Farmer's Markets
- Be aware of food miles as a community and create tax incentives or restrictions to encourage local food production
- Support urban farms. Provide land for community gardens. Here is a direct suggestion: take out fast food chains and use that land for gardens!
- Make the use of food stamps available at Farmer's markets- this would allow and encourage people using government aid to get fresh, local produce

Conclusion: Judging by surveys and observations, there is a desire for local and organic food, but the needs of the community are not being met. The True Nature food store and Farmer's Markets are limited and located only in the Northeast side of Edgewater. Additionally, the farmer's markets are only seasonally available. We need more local agriculture! Uncommon Ground grows their own food and is a great example of keeping agriculture local! By making more community garden space we can greatly reduce shipping costs.

Based on the results of our surveys, about ¾ of respondents were not even aware of the local food label! However, if local and organic foods were as available and priced the same, an overwhelming majority responded they would choose local and organic. This demand demonstrates a market that would experience extensive growth if given a proper catalyst (in this case, knowledge and catchy trendy advertising). Edgewater going green should be no secret and should freely make use of some billboards if it can to spread the message. From a business standpoint, Edgewater should look into supporting pro-farmer's market advertising to not only increase awareness of local foods, but to also advertise the community's commitment in going green and getting LEED certification. No doubt, the effects of this would be two-fold: it would bring more customers to the farmer's markets (making it a more profitable venture) and it would make Edgewater a more attractive candidate in getting LEED certification by going green, staying local, and reducing shipping costs/food miles.

An ambitious thought is to foster a federalized organization of farmer's markets and family chains that contribute to the distribution of local and organic food in the community. By having entrepreneurs take action around the community, and given the proper marketing, we believe a significant share of the foods market would opt for the conveniently located farmer's market that has competitive food prices.

This is all within the realm of possibility. With a comprehensive business plan and strategic execution of it Edgewater could maneuver itself into a more advantageous point on its quest for LEED certification and truly become a frontier community. The demand is there, and the potential profits to be realized as well. There needs to be investment, profoundly in the advertising sector, if more immediate progress is to be had. The very fact that Edgewater is working with Loyola undergraduates in this civic engagement project is a very positive and uplifting. Edgewater's prospects and possibilities are great. It has been taking the steps in the right direction, but there is still an immeasurable amount of unrealized progress to be made.