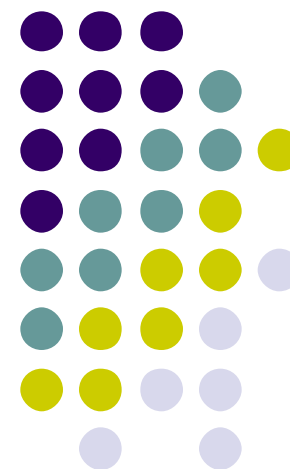


Fruit & Vegetable Access & Price Differences by Store Type Across Six Chicago Communities

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Market Basket Survey Methods

- Standardized 88 item shopping list based on USDA Thrifty Food Plan (TFP) used to assess availability & prices in all stores.
- Four ethnic modules with basic foods for other cultures developed – African American, Mexican, Asian, Polish; used in addition to TFP list.
- Store type & address verified prior to survey. Proportional random sample of stores surveyed within geographic area by store type (independent supermarkets, independent groceries [corner stores], convenience stores, etc.)
- 127 surveys completed; 13 unable to survey or refused
- Data collected with programmed pocket PCs
- USDA algorithm used to calculate costs across store types for TFP and ethnic modules

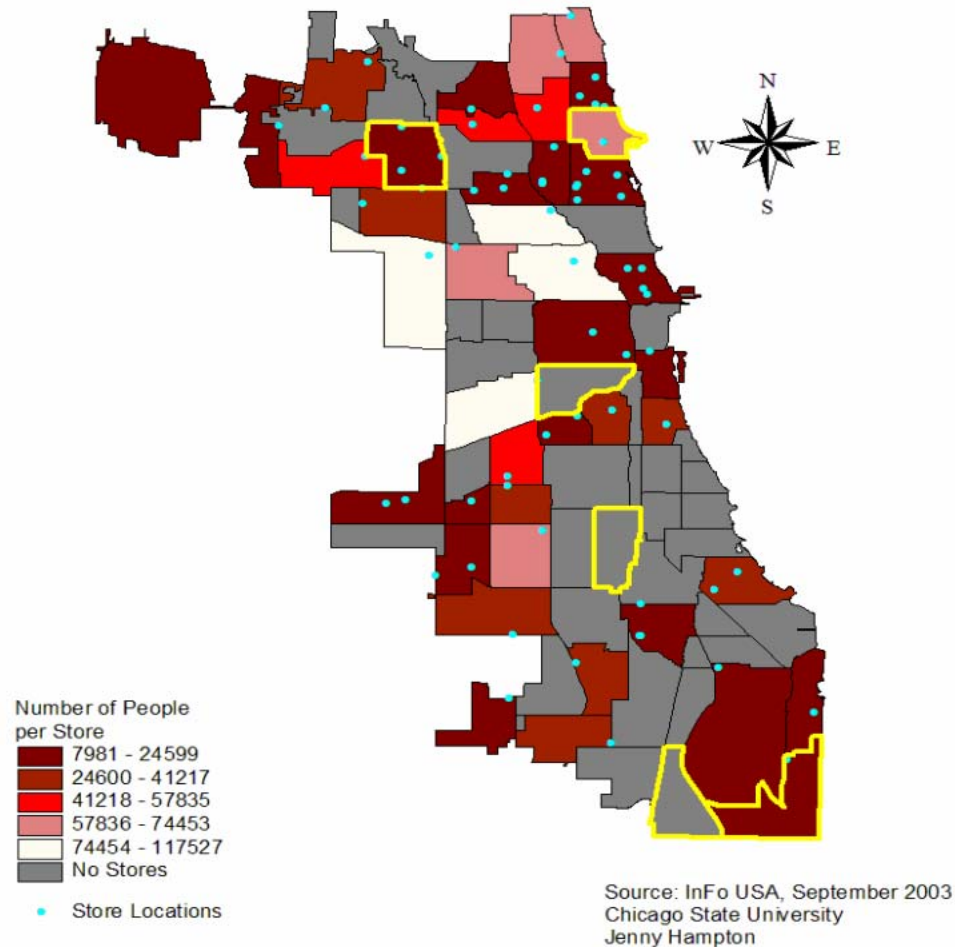


Community Areas Studied

- Riverdale – primarily African American, younger
- Hegewisch – mix of older whites and younger Latinos
- Englewood – primarily African American, mix of younger and older people
- Pilsen – primarily Mexican, younger, some elderly
- Uptown – multiethnic, includes some Asian
- Portage Park – white, Mexican, Polish, somewhat higher income than other communities



Large Chain Supermarkets with Case Study Areas





Ethnic Modules

- African American - 31 items, 10 F&V
- Mexican – 31 items, 12 F&V
- Polish – 16 items, 4 F&V
- Asian – 31 items, 11 F&V

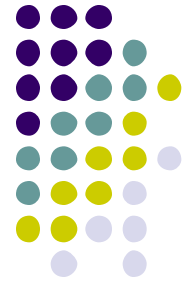
- 88 item TFP has 22 F&V

Ethnic Module Fruit & Vegetable Items



Food Group	Mexican	Polish	Asian	African American	USDA TFP
Fresh Fruits & Vegetables	avocado mango/papaya nopales chiles jicama tomatillos salsa/pico de gallo	beets cabbage turnips spinach	bean sprouts bitter melon cabbage (Napa, bok choy) long beans lotus root snow peas nori/seaweed green onion spinach	cabbage corn on cob (seasonal) greens-variety okra sweet potatoes green beans	apples bananas grapes melon oranges carrots celery green pepper leaf lettuce onions potatoes tomatoes
Canned Fruits & Vegetables	salsa verde cnd green chiles pozole cnd nopales		bamboo shoots water chestnuts	fruit cocktail collard greens cnd/fro corn cnd/fro spinach	Mandarin oranges Peaches (lt syrup) mushrooms spaghetti sauce tomato sauce
Frozen Fruits & Vegetables					orange juice concentrate broccoli French fries green beans green peas

Ethnic Modules Used by Community Area



Community Area	African American	Mexican	Asian	Polish
Riverdale				
Hegewisch				
Englewood				
Pilsen				
Uptown				
Portage Park				



Store Types

- Chain Supermarkets - sales > \$2.5 M/yr
- Discount Supermarkets – sales >\$2.5M/yr
- Independent Supermarkets – sales <\$2.5M/yr
- Independent Groceries – sales <\$2.5 M/yr
- Chain & Independent Convenience Stores
- Liquor Stores with Food
- Gas Stations with Food
- Specialty Stores – produce, meat, bakery, etc.

Store Types by Community Area



Store Types	Uptown	Englewood	Pilsen	Riverdale	Hegewisch	Portage Park
Chain Supermarket	1					4
Discount Supermarket	1	1	1			
Independent Groceries	19	19	21	2	5	8
Independent Supermarket				1	1	
Chain Convenience Stores	2				1	3
Independent Convenience Stores	1	1				1
Gas Stations	1	4	5			3
Specialty Stores	1					
Liquor Stores with Food		4	2			4
Chain Drug Stores			1			3
Total Stores Assessed	26	29	30	3*	7*	26

* Total number of stores in community-all were assessed



Results – TFP F&V Items Available

Mean Number of Fruit & Vegetable Items Available from the TFP by Store Type
Englewood

	Total # Items Surveyed	Discount Supermarket	Independent Groceries	Independent Convenience Stores	Liquor Stores with Food	Gas Stations	Average All Stores
Fresh Fruits & Vegetables	12	12.0	2.6	0	0	0	2.10
Canned Fruits & Vegetables	5	5.0	3.5	3.0	2.3	2.0	3.17
Frozen Fruits & Vegetables	5	5.0	1.5	0	1.0	0.3	1.34

Results – TFP F&V Items Available



Mean Number of Fruit & Vegetables TFP Items Available By Store Type
Hegewisch

	Total # Items Surveyed	Independent Supermarket	Independent Groceries	Average All Stores
Fresh Fruits & Vegetables	12	12	8.2	6.73
Canned Fruits & Vegetables	5	5	3.6	4.2
Frozen Fruits & Vegetables	5	3.6	1.2	2.07

TFP Availability Across Communities



- In communities without a chain supermarket, discount supermarkets tended to carry more fruit and vegetable items
- Canned item availability was more likely in smaller stores
- Only 2 communities had a chain supermarket; these stores carried all of the TFP F&V items
- In the two communities with an independent supermarket as the ‘largest’ store, it was more likely to carry the TFP F&V items compared to smaller stores

Results – Ethnic Module F&V Items Available



Mean Number of African American Fruit & Vegetable Items Surveyed by Store Type
Riverdale

	Total # Items Surveyed	Independent Supermarket	Independent Groceries	Average All Stores
Fresh Fruits & Vegetables	6	5	2	3.5
Canned Fruits & Vegetables	4	4	4	4
Frozen Fruits and Vegetables	0	0	0	0

Results – Ethnic Module F&V Items Available



Mean Number of Fruit & Vegetable Items Available from the African American module by Store Type *Englewood*

Food Categories	Total # Items Surveyed	Discount Supermarket	Independent Groceries	Independent Convenience Stores	Liquor Stores with Food	Gas Stations	Average All Stores
Fresh Fruits & Vegetables	6	2.0	3.0	0	0	0	2.75
Canned Fruits & Vegetables/	4	3.0	3.4	0	4.0	2.5	3.39
Frozen Fruits & Vegetables	0	0	0	0	0	0	0

Results – Ethnic Module F&V Items Available



Mean Number of Fruit & Vegetable Items Available from the Mexican Module by Store Type *Pilsen*

Food Categories	Total # Items Surveyed	Discount Supermarket	Independent Groceries	Chain Drug Stores	Liquor Stores with Food	Gas Stations	Average All Stores
Fresh Fruits & Vegetables	6	4.0	4.1	0	0	0	4.10
Canned Fruits & Vegetables	4	0	3.0	2.5	2.0	2.0	3.48
Frozen Fruits & Vegetables	0	0	0	0	0	0	0

Ethnic Fruit & Vegetable Availability Across Communities



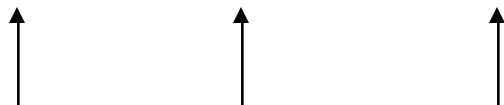
- Availability of ethnic foods varied by community—none of the stores had all of the items
- Independent groceries and chain supermarkets (in the 2 communities with them) were more likely to carry ethnic items
- Surprisingly, in Englewood liquor stores with food carried some of the ethnic African American items
- In general, most stores didn't carry sufficient ethnic items
- Few Polish or Asian fruits and vegetables were found in stores in the 2 communities where these groups live

TFP Fruit & Vegetable Weekly Costs



Total Cost of Fruit & Vegetables by Store Type in TFP Module in Dollars *Uptown*

Food Categories	Chain Supermarket	Discount Supermarket	Independent Groceries	Chain Convenience Stores	Independent Convenience Stores	Gas Stations	Specialty Stores	Average All Stores
Fresh Fruits & Vegetables	21.52	14.63	25.00	29.15	25.35	NAV	27.47	24.95
Canned Fruits & Vegetables	4.81	3.09	7.83	8.26	8.89	NAV	7.49	7.77
Frozen Fruits & Vegetables	14.81	10.49	21.74	NAV	21.75	NAV	26.86	21.26
Weekly Costs	41.14	28.21*	54.57	37.41	55.99		61.82	53.98



* Discount Market didn't have all of the items



TFP Fruit & Vegetable Weekly Costs

Total Cost of Fruits & Vegetables by Store Type in TFP Module in Dollars *Pilsen*

Food Categories	Discount Supermarket	Independent Groceries	Chain Drug Stores	Liquor Stores with Food	Gas Stations	Average All Stores
Fresh Fruits & Vegetables	12.65	21.14	NAV	22.68	19.00	20.28
Canned Fruits & Vegetables	3.01	8.74	8.47	12.28	9.0	8.82
Frozen Fruits & Vegetables	8.04	14.62	NAV	NAV	NAV	14.32
Weekly Costs	23.70	44.50	8.47	34.96	28.00	43.42



TFP Fruit & Vegetable Weekly Costs



Total Cost of Fruit & Vegetables by Store Type in TFP Module in Dollars ^a *Englewood*

Food Categories	Discount Supermarket	Independent Groceries	Independent Convenience Stores	Liquor Stores with Food	Gas Stations	Average All Stores
Fresh Fruits & Vegetables	12.22	18.40	NAV	NAV	NAV	18.09
Canned Fruits & Vegetables	3.09	8.32	8.14	7.89	8.61	8.12
Frozen Fruits & Vegetables	8.04	16.12	NAV	16.00	15.71	15.76
Weekly Costs	23.35	42.84	8.14	23.89	24.32	23.88



TFP Fruit & Vegetable Weekly Costs



- Weekly F&V market basket costs ranged from about \$23 to \$55 depending on location within the city and store type
- Discount supermarkets consistently had the lowest prices for F&V in areas where they were available; however, other study data indicated consumers had serious problems with quality and selection in the discount markets
- In some community areas, independent groceries and supermarkets sometimes offered the ‘best’ variety and lower prices for fruits & vegetables
- Chain supermarkets, available in only 2 communities, carried more items, but the weekly costs weren’t necessarily lower

Conclusions



- While there is some access to fruits & vegetables in ethnic, low income communities, there is a lot of room for improvement.
- Ethnic items were often not widely available in the low income communities.
- Unexpectedly, fruit & vegetable prices were higher on the north side of the city.
- Using national TFP Market Basket costs of \$519/month (2006) and spending an average of 20% of food dollars for fruits & vegetables, the Chicago average F&V weekly costs in low income areas would easily be nearly 30% of the TFP food dollars.