CAP 011

Community Assistantship Program

Institutional Food Market Survey

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Institutional Food Market Survey

Conducted on behalf of
Community Design Center of MN- Southeast

Prepared by
Petr Bilek, Graduate Research Assistant,
University of Minnesota
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CAP Report 011

CURA RESOURCE COLLECTION

Center for Urban and Regional Affairs
University of Minnesota
330 Humphrey Center

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Summary

An exploratory mail survey was administered for the purpose of collecting detailed information on the quantities, qualities, delivery requirements, and seasonality of basic food and value added food products. The target institutions included restaurants, schools, conference facilities, and other food establishments in SE Minnesota.

We found that 90% of respondents buy meat, mostly chicken, beef, and pork; 75% buy vegetables, mostly in fresh form; 70% buy herbs, mostly basil and parsley in either dry or fresh form; 65% buy fruits, mostly strawberries and apples; 40% of respondents buy nuts either fresh or dried; 80% buy dairy products, mostly cheese, butter, milk, and cream; 70% buy baked foods, mostly bread loaves and dinner rolls; 50% buy various grocery products, mostly in fresh form; 85% of respondents are of café / restaurant-type, majority of respondents serve lunch and dinner; 45% of respondents have average ticket price between $5 and $10; the annual food costs are mostly either under $50.000 or over $100.000; 75% of respondents do not prefer irradiated foods; 20% of businesses are seasonal, most of respondents would buy from local suppliers if the price, quality, and ordering would be competitive; the ability of businesses to change suppliers is inconclusive; 45% of respondents developed specialty of house and 25% gave specific insights.

Despite the effort to secure high response rate through informing and involving respondents, the response rate was lower than expected. However, the collected information is statistically significant in most of the cases. A telephone campaign has proven to be effective in securing cooperation of respondents. In the future, a telephone campaign should precede any subsequent survey to secure desired response rate.

Introduction

A twenty-year-old Minnesota non-profit corporation - the Community design Center (CDC) assists rural and urban communities to reach their economic, social, and environmental goals of sustainability. CDC is currently carrying a local food system project in Southeastern Minnesota that is funded by the Bush Foundation.

Issues

Small farmers have fewer markets for their products. Consumers are tending toward fresh, local food choices. The Hiawatha Food Project links local producers with local consumers. There is a network of producers in the area and several of the producers process and directly market their food products. The CDC provides training for expansion of sustainable local production and processing, technical and new business assistance, market identification, networking, and consumer education.

Managerial Objective

The goal of the project is to identify market and economic opportunities while capturing and retaining a greater share of profit for the local economy and where appropriate, gain exposure to a wider market.

Research Objective

To determine the scope and volume of the institutional food market in the local area. Specifically to measure quantities, qualities, delivery requirements, and seasonality of basic food and value added food products. The target institutions include local restaurants, schools, conference facilities, and other food establishments.

Method

The target population for this exploratory research survey included schools, conference facilities, hotels, hospitals, and other food establishments. The objective was to survey such institutions in the geographical area of the Southeastern Minnesota, particularly in the counties of Winona, Houston, Fillmore, Olmsted, Goodhue, and parts of Dodge and Mower including the cities of Rochester and Winona. In this area, we identified over 600 institutional food facilities. To identify this target population, we used resources of the Business Reference Desk of the Wilson Library at the University of Minnesota, namely the "US Businesses Database" CD-ROM. This database was recommended to us as the most comprehensive and up-to-date source of information on US companies and institutions.

A geographically balanced sample of 200 institutions was selected for the survey inquiry. One of the bases for selection of respondents was their ability to make purchasing decisions locally. By such criteria, we excluded all chain businesses - mostly fast food restaurants and most public food institutions such as schools. The sample selection was also based on the perceived ability of the selected institutions to participate on the Hiawatha Food Project in the phases following the survey inquiry.

Being aware of this unique opportunity to gain insight into the buying patterns of selected cross section of local food institutions, we decided to secure their maximum cooperation. Our intention was to familiarize the respondents with the Community Design Center of Southeastern Minnesota, the Hiawatha Food Project and its vision. Through such education, we intended to raise awareness about the issue of preserving the local food sources and way of life in order to help maintain the local communities. We also identified the role of the local food institutions in this process as well as the viable business opportunities for local businesses. For this purpose, we designed an educational brochure and a cover letter summarizing the issues and opportunities.

This information was mailed to the sample of 200 institutions to the hands of their respective owners and general managers. We asked if they will participate on our project and requested to identify a person responsible for food purchases within the organization and send us this information on the pre-stamped postcard included in the mailing. To eliminate the perceived local bias toward the "big city" institutions, we mailed the information locally. Only about ten percent of institutions returned the requested information. To increase the participation on the project, we conducted a phone campaign to further educate the businesses, identify the purchasing managers, solicit cooperation on the project, and collect relevant information for the survey. After this campaign, many respondents agreed that the survey be mailed to them. This effort increased cooperation by over 100%.

Description of the Survey

Due to detailed nature of the information the survey asked for, we decided to conduct a mail survey. The questionnaire was pre-tested to eliminate errors, test the reaction to the complexity of questions, and estimate the completion time. We asked 124 question, most of them with three to five possible answers. A survey with over 500 possible answers and their combination can be effectively administered only by mail or perhaps on-line. The mail survey gives respondents the benefit of answering in their own time and where convenient. Respondents are also able to pause and finish the four-page survey later.

The survey itself has two main parts. The first part contains questions on the assortment and levels of processing of various food items purchased form suppliers. The second part includes questions on demographics of the institutions and food buying preferences. The beginning of the questionnaire gives the opportunity to identify the respondents and select reward for completing the survey. This section is followed by a short instruction with example on how to answer the questions.

The first part of the survey is divided into subsections for the major food groups. These are meats, vegetables, herbs, fruits, nuts, dairy products, and groceries. The second part includes questions on the type of business, meals served, seating capacity, average ticket price, annual food cost, buying preferences, ability to change suppliers, specifics of the business, and insights into the food related issues. Refer to the appendix for the sample of the survey.

Survey Results

The returned surveys rendered following information:

Meats

The most frequently used meats are chicken (95%), beef (90%), and pork including ham (85
various forms and levels of processing. The least used meats are game meat and lamb. For detailed of the findings refer to Table 1.

Tab.1

		Frequency of responses in %	Distributions in %				
		%	Fresh	Frozen	Oven ready	Pre-portioned	Pre-cooked
Beef	roast	60	53%	35%	6%	6%	
	steak	75	46%	42%		12%	
	ground	65	35%	50%		15%	
Pork	roast	60	50%	44%	6%		
	chops	70	50%	33%		17%	
	ribs	55	43%	57%			
Ham	whole	70	50%		50%		
	boneless	55	70%	10%	10%		10%
	slices	5	100%				
ausage	fresh	0					
	links	25		40%		40%	20%
	patties	25	9%	36%		27%	27%
	custom	5	50%	50%			
Poultry	**Chicken** - whole	45	70%	20%		10%	
	- breast	80	41%	45%		14%	
	- leg	25	50%	25%		17%	8%
	Turkey - whole	25	33%	67%			
	- breast	30	43%	14%		14%	29%
	- leg	5	50%			50%	
Lamb	chops	10	100%				
	leg	5	100%				
	other cuts	10	33%	33%		33%	
	fish	50	13%	60%		27%	
	game meat	5	100%				
	other	15	100%				

Most respondents prefer to purchase meats in fresh form (57%) and frozen (25%).

%) ii The least prefered form is the oven-ready (3%). See Figure. 2

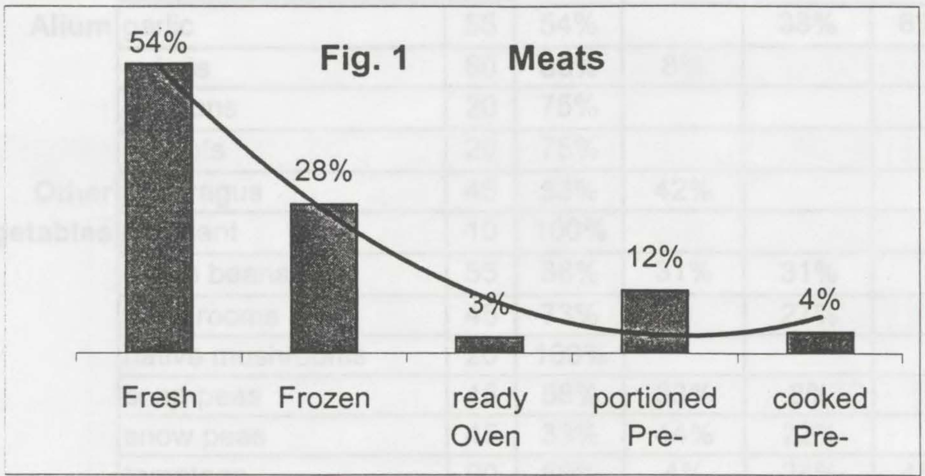


Fig. 1 Meats

Vegetables

The most used vegetables are tomatoes (90%), different types of lettuce (75%), potatoes (85%), and carrots (75%).
75% of respondents use various types of aliums.
See Table 2.

Tab. 2

	Frequency of responses in %		Distributions in %				
		%	Fresh	Frozen	Canned	Dried	Pre - washed
Lettuce	Boston type	15	60%				40%
	head type	25	90%				10%
	leaf type	50	63%			19%	19%
Greens	arugula, radichio	55	60%				40%
	green salad mixes	20	67%				33%
	spinach	40	70%	10%			20%
	sprouts	20	67%				33%
Roots	beets	25	40%		60%		
	carrots	75	67%	11%	17%		6%
	parsnips	5	100%				
	potatoes	85	81%	10%		5%	5%
	radishes	20	100%				
	rutabagas	25	80%		20%		
	turnips	5	50%				50%

table continues on the next page

Tab. 2 continued

	Frequency of responses in %		Distributions in %: Fresh	Frozen	Canned	Dried	Pre - washed
Alium	garlic	55	54%		38%	8%	
	onions	60	83%	8%			8%
	scallions	20	75%				25%
	shallots	20	75%				25%
Other vegetables	asparagus	45	58%	42%			
	eggplant	10	100%				
	green beans	55	38%	31%	31%		
	mushrooms	45	73%		27%		
	native mushrooms	20	100%				
	snap peas	45	58%	33%	8%		
	snow peas	45	33%	44%	22%		
	tomatoes	90	68%	4%	24%	4%	

The majority of respondents (71%) purchase vegetables fresh.
See Figure2.

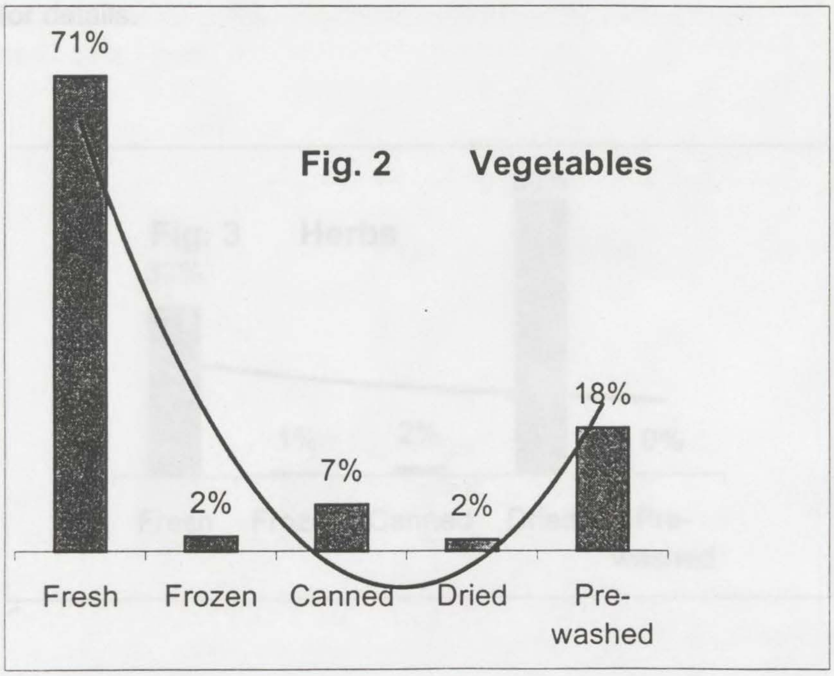


Fig. 2 Vegetables

Herbs

70% or respondents buy herbs. The most preferred herbs are basil (60%), parsley (50%), and dill and rosemary (both 25%). See Table 3 for details.

Tab. 3

		Frequency of responses in %	Fresh	Frozen	Canned	Dried	Pre - washed
			Distributions in %				
Herbs	basil	60	47%	7%		47%	
	chives	30	43%		14%	43%	
	dill	35	25%			75%	
	fennel	15	33%			67%	
	marjoram	20	40%			60%	
	parsley	50	50%			50%	
	rosemary	35	25%			75%	
	tarragon	25	33%			67%	

Majority of herbs(60%) are purchases in dried form. 37% respondents buy herbs fresh. See Figure 3 for details.

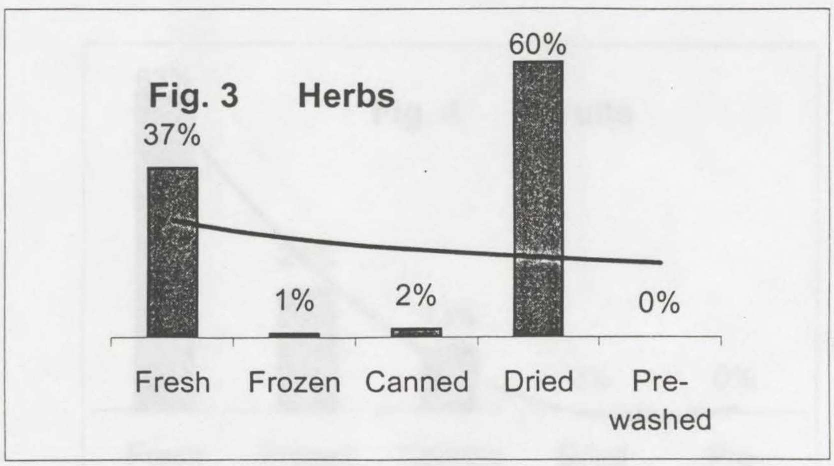


Fig. 3 Herbs

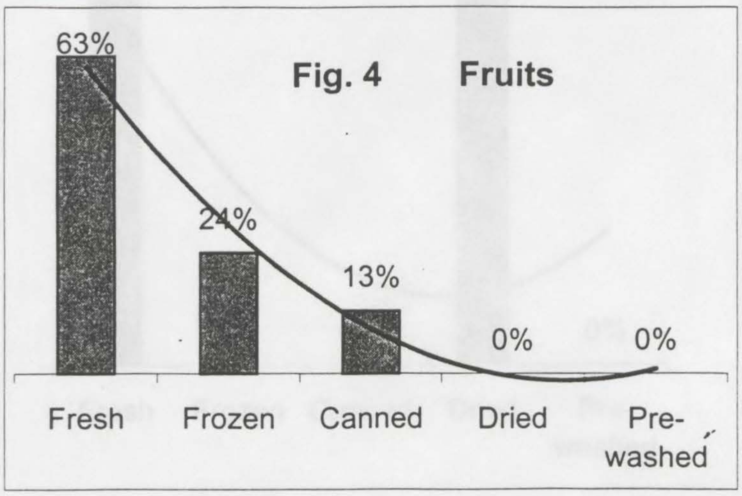
Fruits

65% of respondents buy fruits. The most widely purchased fruits are strawberries (55%), apples (50%), blueberries (40%), and also apple slices. 50% of respondents buy either apples or apple slices or both.
See Table 4.

Tab. 4

			Distributions in %				
Frequency of responses in %			Fresh	Frozen	Canned	Dried	Pre - washed
Fruits	apples	50	75%	8%	17%		
	apple slices	35	25%	25%	50%		
	black caps	5	100%				
	blueberries	40	56%	44%			
	plums	15	67%		33%		
	raspberries	25	33%	67%			
	rhubarb	20	75%	25%			
	strawberries	55	77%	23%			

The majority of respondents (63%) buy fruits in fresh form, 24% frozen, and 13% canned. See Figure 4



Nuts

40% of respondents buy nuts.

25% of respondents buy hazel nuts followed by sunflower seeds (20%), and black walnuts (15%). See Table 5.

Tab. 5

Frequency of responses in %			Distributions in %				
			Fresh	Frozen	Canned	Dried	Pre - washed
Nuts	black walnuts	15	67%			33%	
	hickory nuts	10	50%			50%	
	hazel nuts	25	60%			40%	
	sunflower seeds	20	50%			50%	
	soy nuts	10	50%			50%	

55% of nuts are purchased in fresh form, 45% in dried form.
See Figure 5.

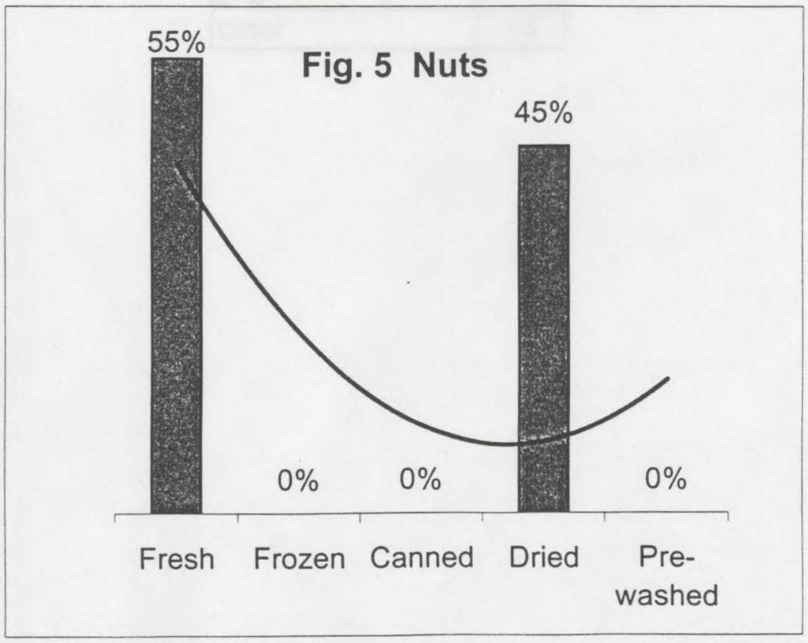


Fig. 5 Nuts

Dairy Products

80% of respondents buy dairy products.

The most frequent dairy products purchased are cheese (85%), butter and milk (both 75%), cream and eggs (both 65%), ice cream and gourmet cheeses (both 45%).

10% of respondents buy other unspecified dairy products.

See Table 6.

Tab.6

Frequency of responses in %	%
butter	75
milk	85
cheese	45
gourmet cheeses	65
cream	65
fresh eggs	5
frozen yogurt	20
fruit sherbet	10
sorbets	45
ice cream	5
yogurt	10
other	15

Baked Goods

70% of respondents buy baked products.

55% of those who responded buy bread loaves, 50% buy dinner rolls, and 35% buy desserts. See Table 7 for details.

Tab.7

Frequency of responses in %		Distributions in % Fresh	Frozen	Oven ready	Dried mix	Pre - cooked	Pre-portioned
Bread - dinner rolls	**50**	55%	36%			9%	
- dough	**5**	33%	33%	17%			17%
- loaves	**55**	60%	13%			13%	13%
- custom	**10**	33%				33%	33%
breakfast pastries	**20**	40%	40%	20%			
cakes	**20**	75%	25%				
cake mixes	**20**	33%			67%		
cookies	**15**	40%	40%	20%			
desserts	**35**	14%	71%	14%			
frostings & custards	**15**	33%	67%				

Baked products are usually purchased fresh (45%) or frozen (32%). See Figure 7.

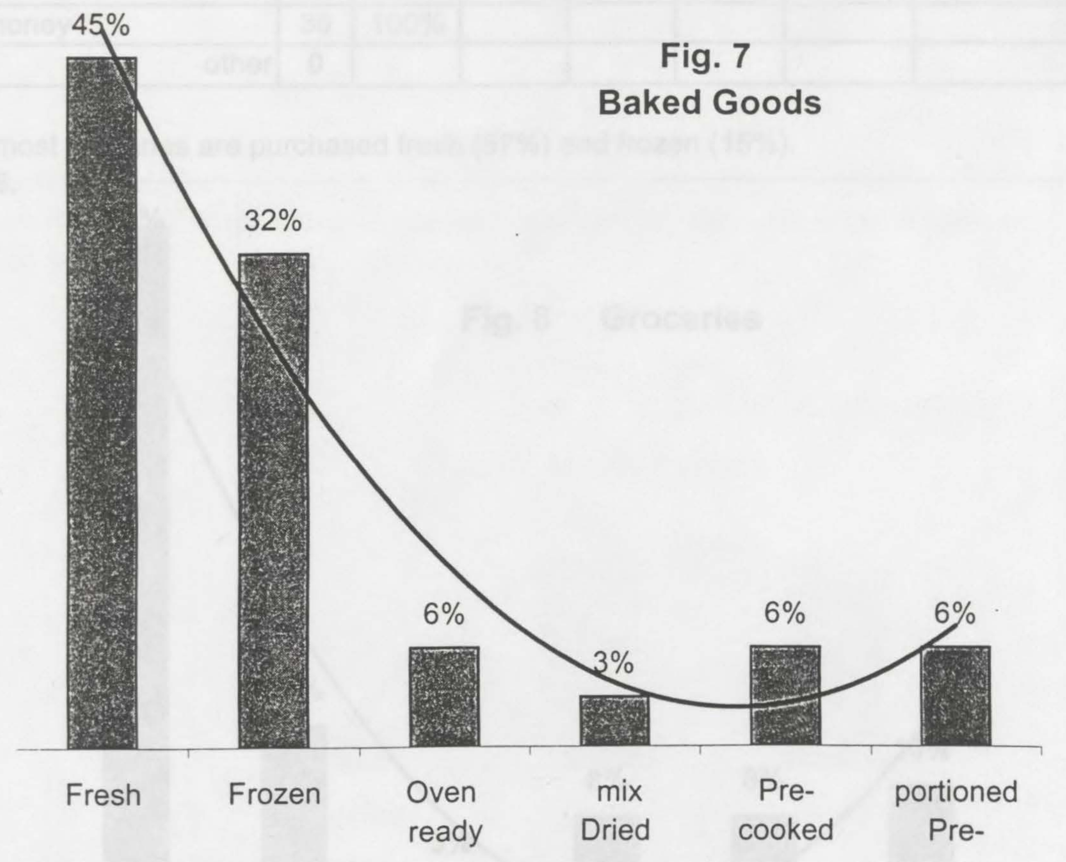


Fig. 7
Baked Goods

Groceries

50% of respondents buy various kinds of grocery products

French fries and salad dressings, and pickles are the most common (all 35%)

See Table 8 for the detail distribution.

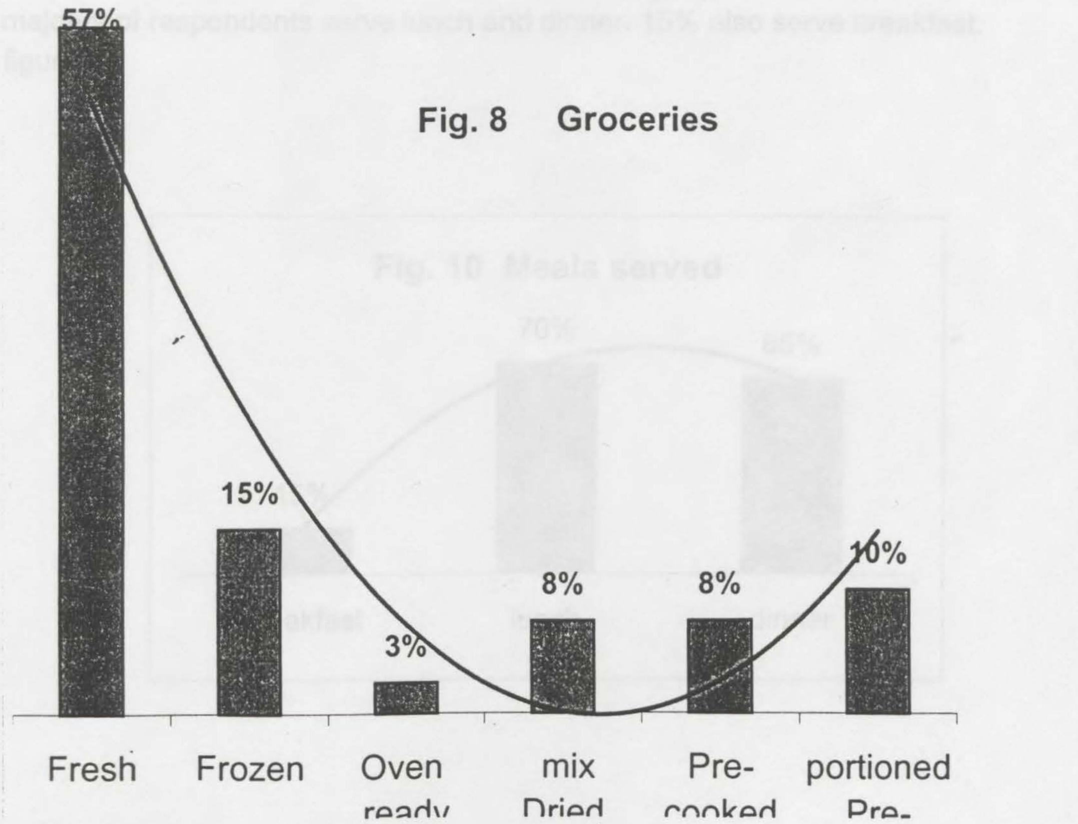
Tab. 8

Frequency of responses in %		Fresh	Frozen	Oven ready	Dried mix	Pre - cooked	Pre-portioned
		Distributions in %					
meat & veg.entrees	15	75%			25%		
pancake mixes	15	33%			67%		
pickles	35	86%					14%
pie crusts	30	83%					17%
pie fillings	25	40%	60%				
pizzas	15	60%	20%				20%
potato/pasta salad	25	80%					20%
ready made soups	25	25%				25%	50%
salad dressings	35	67%				11%	22%
sauces	30	57%		29%		14%	
side dishes	5					100%	
soup bases	30	43%			43%	14%	
soup stock	5					100%	
vegetarian entrees	5	50%	50%				
French fries	35		100%				
honey	30	100%					
other	0						

Overall, most groceries are purchased fresh (57%) and frozen (15%).

See Fig 8.

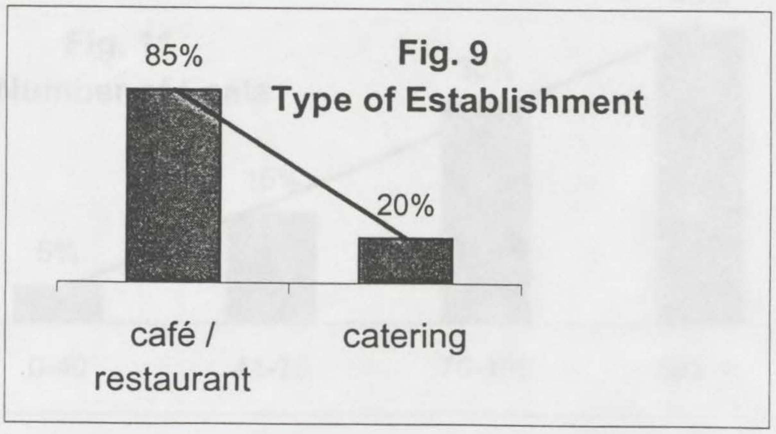
Fig. 8 Groceries



Question # 112

Most of the food institutions surveyed (85%) were of a café / restaurant-type. 20% were catering operations. Some of the restaurants (5%) provide also catering services. One institution was a school.

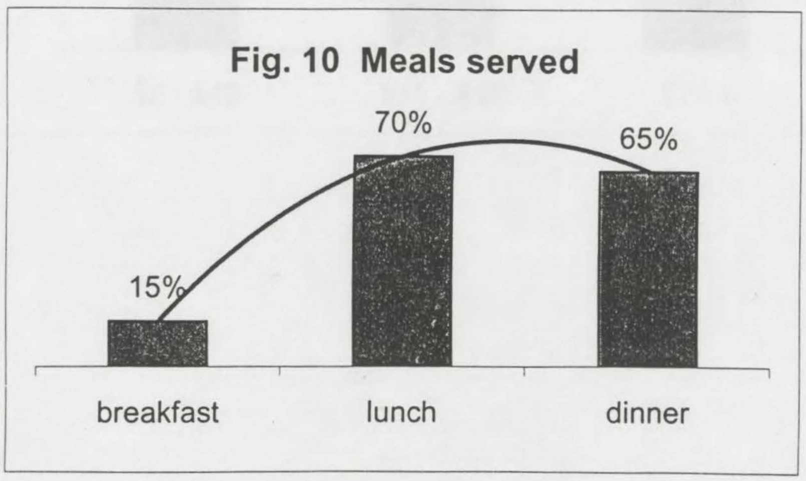
See Figure 9.



Question # 113

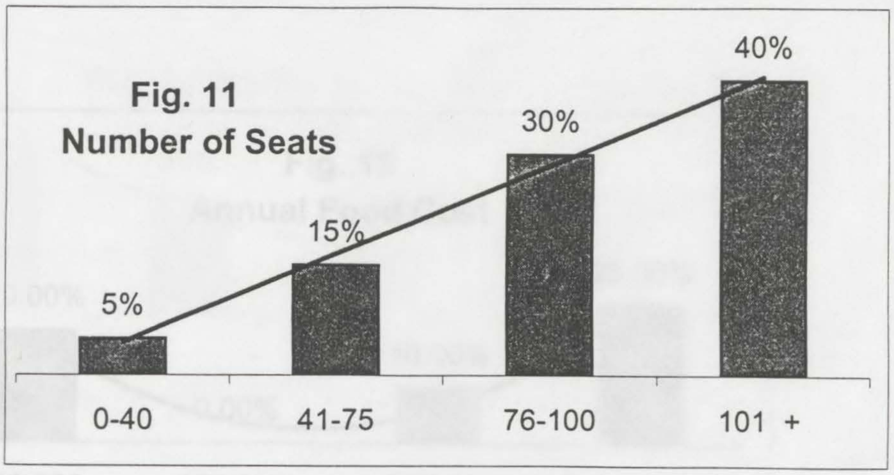
The majority of respondents serve lunch and dinner. 15% also serve breakfast.

See figure 10



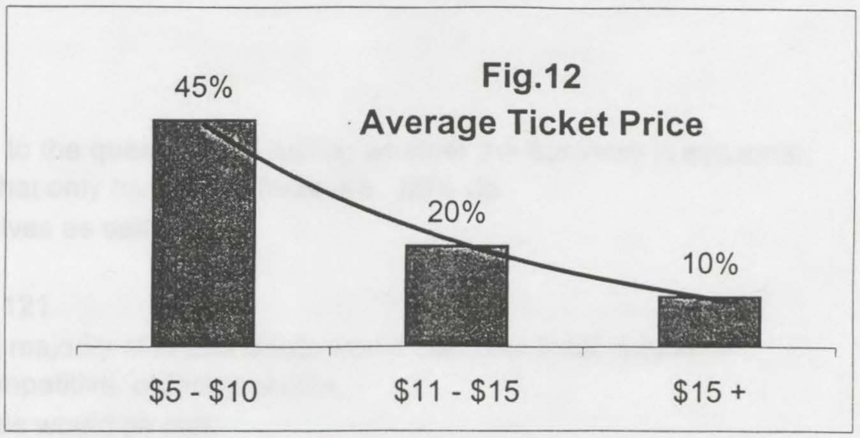
Question # 114

Most of the respondents (40%) can seat over 100 people,
30% can seat between 76 and 100 people.
See Figure 11.



Question # 115

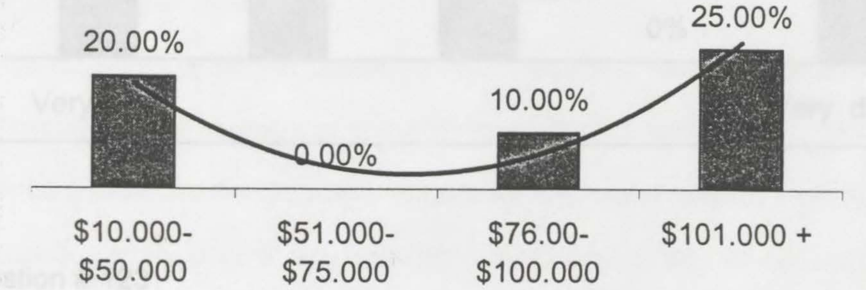
45% of respondents stated their average ticket price to be between $5 and $10,
20% between $10 and $15, and 10% over $15.
See Figure 12.



Question # 116

25% respondents stated their annual food cost to be over $101.000,
20% stated that is between $10.00 and $50.00
See Figure 13 for details.

Fig. 13
Annual Food Cost



Question # 117
25% of respondents prefer irradiated foods.

Question # 118
From the answers to the question 118 asking whether the business is seasonal, we can conclude that only minority of them are. 80% do not regard themselves as seasonal.

Questions # 119 - 121
The overwhelming majority of respondents would buy from local suppliers if the price was competitive, ordering simple, and customer needs would be met.

Question # 122

Responses to this question are somewhat polarized.

For 25% of respondents it is very easy or easy to change supplier.

15% of respondents find changing supplier to be very difficult.

See Figure 14.

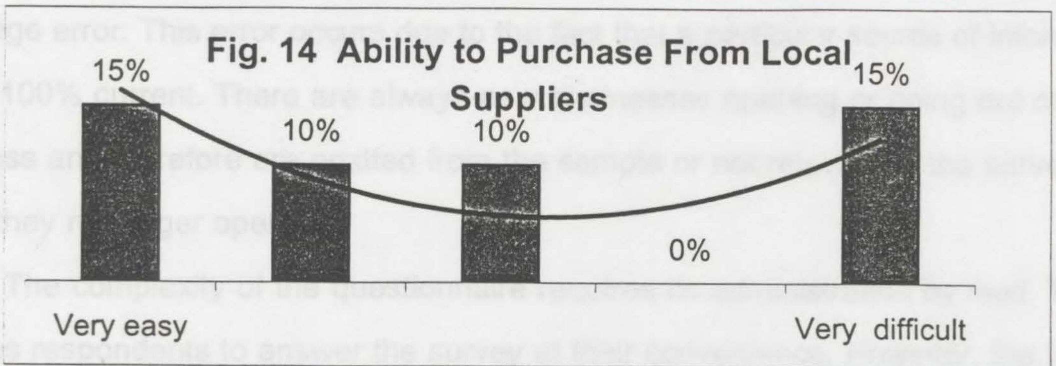


Fig. 14 Ability to Purchase From Local Suppliers

Question # 123

45% of respondents developed a specialty of house. The responses are summarized in Table 9.

Tab. 9

sauces	soups
cookies	BBQ sauce
Lavosh	jellies
salad dressings	pre-cooked ribs

Question # 124

25% respondents answered the open ended question asking for the most important things a local supplier need to know about supplying local food institutions.

The respondents expressed concerns about quality and suppliers certification. Important issue was also the cost of products.

For the full answers refer to the conclusion.

Limitations of Survey

This exploratory research was based entirely on primary data. The sample was selected from the US Businesses database. Even though this database was current for the year 1999 when the survey was conducted, there is still opportunity for non-coverage error. This error occurs due to the fact that a particular source of information is not 100% current. There are always new businesses opening or going out of business and therefore are omitted from the sample or not relevant to the survey since they no longer operate.

The complexity of the questionnaire requires its administration by mail. This enables respondents to answer the survey at their convenience. However, the lack of direct contact with the respondent allows for increase rate of non-response error. Respondents simply do not answer the survey for variety of reasons including the length, complexity, lack of interest, or time among others.

Many respondents did not answered all questions (items) in the survey. Such item non-response occurs due to the lack of knowledge, complexity of a question, or sensitivity of a question. Answers to sensitive questions about financial information were omitted by several respondents. This survey did not directly address the issue of purchase volumes. It was not feasible to incorporate additional questions on this subject in the already complex survey. The purchase volume can be estimated indirectly from the information on seat capacity, meals served, and annual food cost. More research could be done for questions on seat capacity and annual food cost. These questions list intervals for the respondents to choose what applies to their situation. 40% answered the seat capacity to be over 100 seats. The increased interval at the high end of the range would render more accurate information on the seat capacity over 100. Likewise, 25% of respondents selected annual food cost to be over $101.000,- Again, increased range on the high end would afford better information from this particular question.

APPENDIX

Conclusion

The survey rendered the following information:

- 90% of respondents buy meat - mostly chicken, beef, and pork mostly fresh and frozen
- 75% buy vegetables - mostly in fresh form
- 70% buy herbs - mostly basil and parsley in either dry of fresh form
- 65% buy fruits - mostly strawberries and apples in fresh form
- 40% of respondents buy nuts either fresh or dried
- 80% buy dairy products - mostly cheese, butter, milk, and cream
- 70% buy baked foods - mostly bread loaves and dinner rolls either fresh or frozen
- 50% buy various grocery products mostly in fresh form
- 85% of respondents are on café / restaurant-type
- Majority of respondents serve lunch and dinner
- 45% of respondents have average ticket price between $5 and $10
- Annual food costs are either under $50.000 or over $100.000
- 75% of respondents do not prefer irradiated foods
- 20% of businesses are seasonal
- Most of respondents would buy from local suppliers if the price, quality, and ordering would be competitive
- The ability to change suppliers is mixed and inconclusive
- 45% of respondents developed specialty of house. These are sauces, cookies, salad dressings, soups, BBQ sauces, jellies, and pre-cooked ribs
- 25% of respondents gave specific insights into quality, cost, delivery requirements, and certification of local suppliers. Particular answers to this question are as follows:

  - quality, consistency in availability, cost; concerns: health standards, quality
  - open to cooperation with local suppliers; concern: cost
  - interested in fresh vegetables; concern: availability, cost, cleanliness
  -requires a year-round main supplier; concern: consistency

  These answers can be found in surveys #14,15, 16, 17.