

FINAL report
LNE94-49

**PROJECT FARM FRESH START
PILOT PROGRAM**

**Prepared by:
The Hartford Food System
509 Wethersfield Avenue
Hartford, CT 06114
Tel: 203-296-9325**

Project Farm Fresh Start

OBJECTIVES

1. Through a demonstration program linking nearby growers with the public school food service, increase the amount and the variety of locally-grown fruits and vegetables supplied to Hartford's school lunch program to 10% by volume in the second year and with a target of 40% by the fifth year, with half from low-input sources.
2. Develop the local food service market for local growers, including organic and/or sustainable growers with the goal of enlisting 10 school districts by year three. Produce food utilization guide for food service staff and urban food service marketing guide for farmers to help replicate the Farm Fresh Start Program.
3. Develop an interdisciplinary curriculum outline and list of activities for the pilot schools that promote the understanding of the links between agriculture, nutrition and environmental health.

Project Farm Fresh Start

Abstract

During the 1994-1995 school year, the Hartford Food System implemented a pilot program to increase the amount of locally grown fruits and vegetables served in the school lunch program in Hartford, Connecticut. A 650-student elementary school and a 450-student middle school participated in the program. During the 8-week fall/winter pilot period, local growers, including 2 low-input producers, supplied a total of 3,484 pounds of produce, 50% to 75% of the total volume of fresh fruits and vegetables used in the cafeterias. During the pilot, average weekly fresh fruit servings increased from 2 to 3 pieces per student and fresh vegetables served increased from 2 ounces to 6 ounces per student.

Approximately half of the total volume of produce purchased in 1994 by the pilot schools in the pre-intervention period could be supplied by Connecticut growers for \$4.74 per student per year. The value of CT grown produce supplied at this price for the 23,691 students enrolled in Hartford's public schools would amount to \$112,245. For the state's 447,501 public school students, the sales value would amount to \$2.12 million, approximately 5.5% of the state's total 1994 fruit and vegetable farm sales of \$38.15 million.

During the 8-week intervention period expenditures for local produce averaged \$.515 per student per week, or \$4.12 per student. Assuming that local produce purchases are \$.10/student per week for the remaining 32 weeks of the school year, annual per-student expenditures for local produce would be \$7.32. If all Hartford's students were supplied, potential sales for local growers would amount to \$173,418; at the state level, this expenditure would generate \$3,275,700 or 9% of Connecticut's total fruit and vegetable farm sales.

Records of student acceptance of local produce in the program showed that 30% of the middle school students took optional fresh fruits, 70% took fresh green salad and 15% took cooked fresh vegetables. In the elementary school 60% of the students took the fresh fruits, 70% took green salad, and 25% took cooked fresh vegetables.

An intervention group of 40 students from each school participated in food and nutrition curriculum, including farm visits, lectures by visiting farmers and chefs and hands-on cooking activities. Students who could correctly recall the names of 5 local fruits or vegetables used in the cafeteria increased from 15.8% to 77.8%; the number of students who could identify the local growing seasons increased from 47.4% to 77.8%.

Findings & Accomplishments:

Introduction

The National School Lunch Program is a major factor in the nutritional health of 447,500 Connecticut school children, 26% of whom are eligible for free or reduced-priced school meals. USDA surveys indicate that 35% of NSLP participants eat no fruit on an average day, while 25% eat no vegetables. Health experts agree that American children, especially those from low-income households, should consume more fruits and vegetables and fewer foods that are high in fat and sodium.

Hartford, Connecticut is the 8th poorest city in the United States. A lack of adequate access to reasonably priced full-service supermarkets, low educational attainment and poor nutritional knowledge places poor city residents at increased risk for nutritional deficiencies. Fully 80% of Hartford's 24,000 school children are eligible for free or reduced-priced school lunch. School breakfast and lunch are the main meals of the day for many of these children, and may provide their only opportunity to eat fresh fruits and vegetables.

While the Connecticut Farmers' Market Nutrition Program has increased retail market opportunities by creating 45 farmers' markets and 60,000 new customers for local growers in Hartford and across the state, farmers have not established significant links with institutional markets. The objectives of Project Farm Fresh Start are to develop market opportunities for local growers with the public school food service and to improve the nutritional status of school children's by increasing their consumption of a wide variety of fresh local produce, including organic and low-input produce. The development of stable diversified local agricultural production will help strengthen farming, while assured markets for organic and low-input growers will support environmentally responsible farming.

A review of 1993-94 purchasing records of the two pilot Hartford schools for fresh fruits and vegetables (excluding commodities and frozen and canned fruits and vegetables) for the 40-week school year showed that a total of \$11,368 was spent on fresh produce for a total of 1189 students. This amounts to an annual total of \$9.56 per student, or \$.24 per student per week. Approximately 50% of this total volume could be supplied by Connecticut growers at a dollar value of \$4.74 per student per year (See attachments A & B).

In the City of Hartford, with a school lunch enrollment of 23,691 students, the potential value of Connecticut grown produce supplied could have amounted to \$112,245. If the state's enrollment of 447,501 students consumed \$4.74 worth of Connecticut grown produce annually in their school lunch, the sales value would amount to \$2.12 million, approximately 5.5% of the state's total 1994 fruit and vegetable sales of \$38.15 million (This figure excludes Connecticut's mushroom industry sales of \$42 million).

Objectives and Accomplishments

1. Through a demonstration program linking nearby growers with the public school food service, increase the amount and the variety of locally-grown fruits and vegetables supplied to Hartford's school lunch program to 10% by volume in the second year and with a target of 40% by the fifth year, with half from low-input sources.

During the spring, fall and winter semesters of the 1995 school year, The Hartford Food System implemented a pilot program to increase the amount of locally grown produce served in the school lunch program in Hartford Connecticut. Cafeteria staff and the food service director modified the lunch menu to include or substitute more local produce for 1 week in the spring and for 8 weeks in the fall. Produce was delivered directly by three farmers and by a produce broker who deals with 300 local growers. An organic and low-input grower provided produce for the program during the fall pilot.

The following fresh fruits and vegetables were used in the school lunch menu, including items which had not been used in the schools in recent years: Low-input apples and pears, peaches, watermelon, snap beans, broccoli, cabbage, cauliflower, field lettuce and low-input hydroponic lettuce, potatoes, tomatoes and winter squash. Generally, local produce was fresher and riper than the shipped-in equivalent, and required more careful handling and storage.

During the 8-week fall pilot period a total of 3,484 pounds of fruits and vegetables were supplied to the pilot schools, 50% to 75% of the total volume of the fresh fruits and vegetables used in the cafeterias. As compared to average amount of produce served in the previous school year, average weekly fresh fruit servings increased from 2 to 3 pieces per student and fresh vegetables served increased from 2 ounces to 6 ounces per student.

A total of \$4693 was spent on the produce. On average, prices were 12% to 33% above the cost of conventional sources. However, certain items such as apples were 20% to 25% below the cost of shipped-in produce.

2. Develop the local food service market for local growers, including organic and/or sustainable growers with the goal of enlisting 10 school districts by year three. Produce food utilization guide for food service staff and urban food service marketing guide for farmers to help replicate the Farm Fresh Start Program.

In the first year, three growers (including one organic vegetable grower and one low-input orchardist) supplied produce directly to the school. The produce wholesaler obtained produce from several of the 300 local growers that supply him. A low-input hydroponic lettuce producer supplied most of the lettuce used during the pilot through the wholesaler. Following the conclusion of the Farm Fresh pilot period, the project findings will be disseminated to Connecticut's school food service directors, and professional culinary and nutrition education organizations. Preliminary discussions for expanding to other schools

have been held with individuals interested in implementing the program in Bridgeport and Canaan, Connecticut.

A purchasing guide for food service staff and a marketing guide for farmers is presently being developed. The guides will include the following information:

Food Service Purchasing Guide for Connecticut Grown Fruits and Vegetables:

1. A list of locally grown fruits and vegetables and seasonal availability, including a price calendar for 1995
2. A regional list of fruit and vegetable growers from the Connecticut Department of Agriculture and The Northeast Organic Farmers Association.
3. A list of produce brokers who support local growers.
4. A guide to storage and handling of local fruit and vegetables
5. A discussion of the issues and opportunities presented by supporting local growers.

Farmers' Marketing Guide for Institutional Customers:

1. A list of Connecticut's School districts and food service directors.
2. A calendar of school lunch menus
3. Explanation of school food service specifications, purchasing procedures, payment schedules.
4. Description of typical school cafeteria work schedule
5. List of fruits and vegetable varieties most commonly used in school cafeteria by grade level

3. Develop an interdisciplinary curriculum outline and list of activities for the pilot schools that promote the understanding of the links between agriculture, nutrition and environmental health.

Two groups of 4 teachers from Burns and South Middle schools developed learning activities focused on local farms, produce, and nutrition and integrated them into their curriculum. Each teaching team carried out the activities with a select group of 40 students who participated in all activities and related classroom instruction and assignments. Teachers received copies of the special menus that featured the week's Connecticut-grown produce (please see attachment C) and reminded students in the intervention groups to try the new items.

Students in both intervention groups were Spanish-speaking in transitional English-language programs. While most students had some level of English-speaking ability, a few could not speak or write English. Approximately 80% of the students in both schools are Hispanic, mainly of Puerto Rican background. Twelve percent are African-American, and the remaining students are white or Asian. Approximately 95% of the students participating in the school lunch program in these schools are eligible for free or reduced priced lunch.

Prior to the start of the program, students completed a pre-intervention survey that identified food habits and knowledge of nutrition and local agriculture (Attachment D). A post-intervention survey was administered to the intervention groups. Students who could correctly recall the names of 5 local fruits or vegetables used in the cafeteria increased from 15.8% to 77.8%; the number of students who could identify the local growing seasons increased from 47.4% to 77.8%.

South Middle School Curriculum and Activities:

Social Studies: Local agricultural issues were explored in the context of U.S. development from colonial times to the present, including the consequences of unsustainable land-use practices, the New England apple industry, urbanization and farmland values in Connecticut.

Mathematics and Science: Teachers related local agriculture and nutrition to science lessons and math exercises. Lessons included charting crops by seasonal availability, defining healthy foods, and completing a “food web” exercise.

Field Trip: 7th and 8th grade students visited an apple and vegetable farm in Enfield, Connecticut where they picked their own apples and toured the vegetable fields. The grower gave a lecture about his apple operation and discussed his daily and yearly work schedule.

Farmer lecture: A Glastonbury apple grower made two hour-long presentations to 7th and 8th grade classes about his farm and the farming lifestyle including the larger economic issues of land values and competition from large growers, marketing decisions, and other considerations involved with operating a profitable farm. He provided samples of 6 apple varieties and discussed the growing season, and responsible pesticide use.

Hands-on cooking: In a 6-day life-skills class, the 7th grade intervention group participated in a tasting and sensory evaluation of 6 local apple varieties, prepared applesauce and compared the price to the store-bought equivalent, prepared fat-free muffins with the apple sauce, were introduced to 8 winter squash varieties and prepared roasted squash, squash cookies, and roasted seeds. A nutritionist gave an hour long lecture on the food pyramid and stressed the importance of eating fresh, seasonal fruits and vegetables.

Tommy Armstrong, a well-known local chef, conducted a broccoli class (using local broccoli) for the group. In his lecture, he discussed the value of buying vegetables in season, the need to be aware of its origin and the growing practices used to produce it, and the necessity to wash conventionally grown produce to remove pesticides. After watching a simple cooking demonstration, students prepared their own broccoli and consumed it in class. After school, students returned to the classroom to pick up broccoli to cook at home.

Language skills and writing exercises: Students wrote three descriptive essays about the field trip, the presentation by the visiting farmer, and the broccoli cooking class. Students learned new words for foods and farming activities.

Burns Elementary School Curriculum and Activities:

Ms. Andrea Johnson lead a team of three teachers who conducted activities and lessons for a 4th and a 6th grade group.

Mathematics and Science: Teachers related local agriculture and nutrition to science lessons and math exercises.

Students participated in a tasting and sensory evaluation of 6 local apple varieties. Following the donation of a new stove to the school by the American Institute of Wine and Food, students prepared roasted acorn squash and roasted squash seeds for a Thanksgiving festival, and prepared apple pies from scratch. A professional chef led the children through the lessons in cooking and sensory evaluation. The students' squash activity was expanded to the cafeteria where the students' recipe was prepared for the school lunch.

Field Trip: Students visited the 4-H Resource Farm in Bloomfield, Connecticut. Activities included picking apples, making cider and feeding the apple pomace to the farm's cows. Students were given a farm tour and orientation to farm's life cycle and the characteristics of growing and harvesting in the fall season.

B. DISSEMINATION OF FINDINGS

Results from Farm Fresh Start's findings and the development of farmer and foodservice linkages will be presented in workshops and conferences for farmers, food service professionals, chefs, nutritionists and educators. Organizations and groups receiving information about the pilot will include the Connecticut Department of Agriculture, the Connecticut Dietetics Association, Food Service Directors Association, Connecticut Farm Fresh (a farmers' market association); NOFA (Northeast Farmers Association), Nutrition Education and Training members, the American Institute of Wine and Food

The Hartford Public School's newsletter described Farm Fresh Start in a November 13 issue. A feature story about the food education classes held at the Burns Elementary School will be published in December 1995 in the Hartford Courant. Articles about Farm Fresh Start will be forthcoming in the NOFA newsletter, the Connecticut Market Bulletin, and the Connecticut Food Service Director's newsletter. In addition, the project's findings will be included as part of the final report of the Connecticut Legislature Food Security Committee.

C. SITE INFORMATION

The Dominic Burns Elementary School and South Middle School were chosen for the pilot sites by the school foodservice director based on the quality of the cafeteria facilities and the staffs' level of experience. Both schools' chef-managers had more than 20 years of experience managing cafeterias. The cafeterias were large, clean and equipped with standard kitchen equipment in good operating condition.

Staff at both cafeterias consisted of a cook manager, one or two part-time assistants, 4 to 5 servers, 2 cashiers, 2 janitors and 2 security officers. The cook-manager and the assistant usually work 7 hours a day; part-time workers put in 4 hours a day, and servers 2 to 3 hours a day. All workers must work quickly to produce a large quantity of food in a short period of time. Generally, cooking consists of baking pre-processed foods in convection ovens.

The Burns cafeteria is a large open, freshly painted sunny room that seats approximately 300 students at tables of 12 - 14. The Middle School cafeteria, which seats about 200 in tables of 4, is in a large, dingy cinder-block room with a concrete floor and unfinished ceiling. During lunch service, students are scheduled in staggered "waves" of several hundred students. In both cafeterias, the sound level at lunch is deafening. Adult supervisors monitor the rooms to control fights and to keep students in their seats; the atmosphere is tense and somewhat hysterical.

Prior to the beginning of the pilot, the food service administrators and the project coordinator reviewed the lunch menus to determine where substitutions or additions could be made with local fruits and vegetables. During the spring, fall and winter phases of the pilot program, the cafeteria cook-managers carried out the plans and periodically recommended improvements and modifications. The cooks and the project coordinator developed new cooking techniques and recipes that would minimize labor and utilize the existing kitchen equipment (see Attachment E). The kitchen staff in both cafeterias were interviewed informally on a weekly basis about the work flow, and their observations about the students' responses to the new foods.

In order to become familiarized with the cafeterias' routine operation and to gain the confidence and cooperation of the cafeteria staff, the first Spring intervention was carried out by the pilot coordinator and student interns; kitchen workers were involved and informed but not required to do extra work. A former chef, the coordinator established a professional tone by giving cafeteria staff a brief orientation to the program and encouraging them to help with its development. The pilot staff wore appropriate food service garb and carefully observed kitchen sanitation and protocol.

In the spring pilot and the first few weeks of the fall program, the program coordinator organized the sourcing and ordering of the local produce from the farmers and through the produce wholesaler. Once size and quality specifications were established, the cafeteria chefs resumed their normal ordering routine.

During the one-week spring pilot phase, both school cafeterias added a simple tossed salad of lettuces, spinach and radishes the menu as an optional item. The salad was served from large pans rather than the customary individual plastic serving cups. Abundant displays of whole lettuces and radishes were arranged next to the salads, adding a dramatic touch to the cafeterias' no-nonsense appearance. As the students came through the cafeteria line, the staff encouraged the students to try the salad, offered tasting samples and described the different greens.

Due to a lean labor budget, the cafeteria staff at first had some difficulty taking on the extra processing time required for the pilot produce. Some menu items were additional, while others required more labor to prepare and cook. However, staff in both schools were able to incorporate the additional preparation tasks into the daily routine. The staff were not accustomed to handling riper and more fragile items such as tomatoes, peaches and watermelon, and were unaware of ripening procedures for pears and peaches. Skill levels were limited in regard to vegetable preparation and handling, as the cafeterias did not ordinarily process vegetables from scratch.

The extra labor required to process the fruits and vegetables in the pilot period has not been quantified by the School Food Service. However, informal daily records kept by the cafeteria managers show that an average of 5 extra hours per week were spent in food preparation. At \$8 an hour, the labor cost amounts to \$40/week, or \$1600 dollars per school year. More precise figures will be provided by the food service in the final report.

In general, the kitchens are not equipped for processing raw produce. Knives are in short supply and not always in optimal condition. Food processing equipment is limited to meat slicing machines and large-volume choppers and mixers. The use of some local vegetables requires special equipment. For example, a potato dicing machine and lettuce washing equipment could be purchased for \$200 - \$300 dollars apiece.

D. ECONOMIC ANALYSIS:

This project has demonstrated that local schools are viable markets for local farmers. While it is impossible to determine the number of farmers who would be affected by the development of this market, it is reasonable to assume that over \$3 million in additional sales per year could be divided among a substantial number of farmers. More importantly, every farm is close to the school system, which represents a new and significant market.

As stated in the "findings and accomplishments" section, the potential sales of locally grown produce to the school lunch program were determined with a straightforward analysis of records of the pilot schools' 1993-94 purchasing records for the 40-week school year and from purchases made during the pilot period. Items that could be provided in season from local sources were identified and priced according to wholesale market reports supplied by the Connecticut Department of Agriculture. According to these figures, Connecticut farms could produce \$2.12 million worth of fresh fruits and

vegetables for the state's school lunch program, approximately 5.5% of the state's total 1994 fruit and vegetable farm sales of \$38.15 million..

If all of Connecticut's public schools consumed the same average quantity of produce as was consumed in during the pilot program, the demand could generate \$3,275,700 for farmers, or 9% of Connecticut's total fruit and vegetable farm sales. This figure is based on the quantities of produce used during the pilot periods plus an estimate of the local produce that could be supplied for the remaining 32 weeks of the school year.

It is important to note that these projections are based only on the actual experience of a short term pilot project that made modest changes in the school menu. Over time, additional adaptations could be made to the menu that might accomodate more volume and variety of Connecticut grown produce. The public school system and the National School Lunch Program is just one potential market for local growers. Other institutions that operate food assistance programs, such as the summer meals program and the school breakfast program, also could purchase locally grown produce and further increase demand for local produce.

4. Potential Contributions and Practical Applications

The contributions and applications from Project Farm Fresh Start fall into three categories: The cafeteria or the food preparation, handling and serving workplace, the classroom or food education center, and the farm or the focal point for production and marketing.

Public school cafeterias are mini factories that essentially prescribe one form (one size fits all) of operation, require conformity and discourage innovation. What this project has shown is that when a number of positive factored exist and are interjected into that environment, change can occur and new ways of doing business can surface and even become part of the daily routine. By receiving ample support from the head of Hartford's school food service as well as from key food service management, the Hartford Food System was able to buy fresh locally-grown produce from almost anywhere it chose. By working closely and in a non-threatening manner with cafeteria staff, The Hartford Food System staff provided the necessary training and support for the cafeteria workers to learn how to handle high quality, highly perishable local produce. This close, almost personal relationship reduced the resistance from workers that is typical in an institutional setting.

The contributions from this phase of the project are significant. If cafeterias in other schools and other school districts and other states can see and appreciate the success that occurred in Hartford's two pilot schools, then it is likely that they will be more receptive and adaptable. The attitude that "if they did it in Hartford they can do it anywhere" could easily prevail throughout the foodservice network, laying the groundwork for the dissemination of this innovation. The precise size of the contribution has already been discussed in earlier sections, but it is essentially the calculation of the potential dollar

demand generated by the schools and the concomitant response of farmers to supply that demand.

In the classroom, the contribution is perhaps less quantifiable but probably more significant. As was identified in the beginning of this report, low income children tend to eat fewer fruits and vegetables than higher income children. Furthermore, these same children live in a poverty environment where hunger, poor nutrition, food shortages, and a host of environmental risks are prevalent. The size of the risk facing low income children speaks to the potential size of the contribution of increasing their consumption of fresh produce. To the extent that their increased consumption can also be linked to a better understanding of farming, the source of their food and the immediate environment where that food is produced, the more likely they will be to consume more produce and otherwise develop more responsible behaviors.

Similarly, teachers who understand and can effectively utilize the learning opportunities that exist for them already in the cafeteria, the community and the region will be able to integrate lessons about food, nutrition and environment. Teachers can be enormously important change agents for children, which suggests the potential for this project and ones like it to change people's understanding and attitudes about our local food supply. Hartford has 24,000 children who eat lunch every day. If they each are one more serving of fresh produce than they do now and if they each understand a little bit more about the source of their food and how it is grown, it is likely that regional agriculture would be considerable stronger than it is today.

On the farm the story is the same. When farmers recognize the potential of institutional buyers, especially local schools which are not far from their farms, they can begin to orient their production accordingly. They can support their own marketing by speaking to classes of kids or by hosting school farm tours. They can, in effect, sell themselves to their customers while investing in their own futures at the same time.

Farmer Adoption and Direct Impact

While on-farm cultivation practices were not affected by the pilot program, farmers discovered a new opportunity to market their farms through the educational farm activities they could offer, including "pick-your-own" tours and in-school lectures. The tours generated extra farm income and created an opportunity to develop new customers both for more school tours and produce.

B. Operational Recommendations

The opportunities the school system represents suggests that farmers should actively enlist farm organizations such as the Farm Bureau and the Department of Agriculture to help remove marketing barriers and to orient institutional purchasing policy towards local

ATTACHMENT A

	A	B	C	D	E	F
153	Produce Expenditures by Category: Burns and South Schools 1993-94					
154						
155		Burns (700 students)		South (489 students)		Combined Total
156		School Total	per student	School Total	per student	
157	Fresh Vegetables	\$1,873.45	\$2.67	\$449.60	\$0.92	\$2323.05
158	Fresh Fruit	\$6,012.00	\$8.59	\$3,033.25	\$6.20	\$9045.25
159	Canned Fruit	\$1,630.83	\$2.32	\$1,242.01	\$2.54	
160	Canned/Frozen Veg.	\$ 491.45	\$0.70	\$107.38	\$0.22	
161						
162	Total Fresh	\$7885.45	\$11.26	\$3482.85	\$7.12	\$11368.30
163	Total per student Fresh = \$9.56 per 40 weeks, or \$0.24 per student per week					
164						
165	Totals	\$10,007.73		\$4,832.24		\$14839.97
166		\$14.30 per student		\$9.88 per student		\$12.48 per student
167						

ATTACHMENT B Page 2

	A	B	C	D	E
115	Burns and South schools: Annual produce totals 1993-94				
116					
117					
118	Pears	50 cs (6750 ea)	\$.10 ea	\$713.00	
119					
120					
121	Strawberries	492 pints	\$.97 ea	\$476.00	
122					
123	Apple slices, canned	18 #10 cans	\$3.12 ea	\$56.25	
124					
125	Applesauce	69 #10 cans	\$3.63 ea	\$250.20	
126					
127	Marachino cherries	10 gallons	\$9.75 ea	\$97.50	
128					
129	Mixed fruit, canned	138 #10 cans	\$3.82 ea	\$527.80	
130					
131	Mandarin orange, canned	36 #10 cans	\$3.73 ea	\$134.52	
132					
133	Peaches, sliced, canned	216 #10 cans	\$3.46 ea	\$747.00	
134					
135	Pears, diced, canned	84 #10 cans	\$3.85 ea	\$323.52	
136					
137	Pineapple tidbits, canned	318 #10 cans	\$2.31 ea	\$736.00	
138					
139	Broccoli, frozen	120 #	\$.82/#	\$99.08	
140					
141	Corn, canned (.53/#)	72 75 oz cans	\$.53/#	\$178.20	
142					
143	Instant potatoes	6 cs		\$147.70	
144					
145	Crushed tomatoes, canne	90 #10 cans	\$1.93 ea	\$173.85	
146					
147	Potential CT-grown		\$4.74 / stude	\$5635.88	14244#
148					
149					
150					
151					
152					

SAMPLE
 Price Comparison of Connecticut-Grown vs. Shipped-in Produce
 Hartford Public School Food Service

PRODUCE QUOTATION SHEET

DATE ITEM	9/11/95 QUANTITY	FOWLER PRICES	FOWLER TOT	BET BRAN PRICES	BB TOT	R & R PRICES	R & R TOT	Native Prices	Native Comments	Burns Quantity	Burns Cost	South Quantity	South Cost	Burns Diff.	South Diff.
APPLES 120'S	11	15.00	165.00	11.90	130.90	14.50	159.50	10.00			0.00	0.00	0.00	0.00	0.00
APPLES 140'S	23	12.50	287.50	12.55	288.65	12.50	287.50	10.00			0.00	0.00	0.00	10.00	0.00
PETITE BANANA	37	14.50	536.50	13.40	495.80	15.00	555.00				0.00	0.00	0.00	0.00	0.00
ORANGES	20	15.50	310.00	17.20	344.00	16.00	320.00				0.00	0.00	0.00	10.00	0.00
PEARS	32	16.50	528.00	0.00	0.00	14.50	464.00	14.00	4/5 Bartlett	4	56.00	0.00	0.00	0.00	0.00
LETTUCE	33	24.75	816.75	26.90	887.70	24.00	792.00	23.00	Root Wrap/16 cl. 7	5	115.00	3	69.00	-33.33	-20.00
TOMATO 25#	22	10.00	220.00	10.70	235.40	10.00	220.00	12.00	20 #	3	36.00	1	12.00	-12.00	-4.00
TOMATO 10#	3	7.50	22.50	5.75	17.25	6.00	18.00				0.00	0.00	0.00	0.00	0.00
KIWI	44	17.00	748.00	17.26	759.44	16.50	726.00	12.00	8q/15#	12	144.00	7	84.00	-69.12	-40.32
PEACHES (36#)	43	16.00	688.00	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00
LETTUCE,SHRED	2	16.00	32.00	25.40	50.80	14.00	28.00				0.00	0.00	0.00	0.00	0.00
GRAPES	14	20.75	290.50	0.00	0.00	0.00	0.00	0.40	# price		0.00	0.00	0.00	0.00	0.00
POTATO,BAKE	0	0.13	0.00	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00
CANTALOUPE-15#	51	28.50	1453.50	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00
CANTALOUPE-5#	35	9.50	332.50	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00
HONEYDEW-15#	58	28.50	1653.00	0.00	0.00	0.00	0.00				0.00	0.00	0.00	0.00	0.00
GREENPEPP-5#	20	8.75	175.00	0.00	0.00	0.00	0.00	0.70	# price	20	14.00	5	3.50	0.00	5.25
ONION-DICED-5#	20	6.75	135.00	0.00	0.00	0.00	0.00	0.70	# price	25	137.50	17	127.50	13.00	3.25
Watermelon	0	7.00	0.00	0.00	0.00	0.00	0.00	5.50	Medium Stripe	25	137.50	17	127.50	37.50	-8.50
Cukes	0	0.60	0.00	0.00	0.00	0.00	0.00	0.30	each price	10	3.00	3	0.90	3.00	0.90

FOWLER TOTAL= \$8,393.75 B.B. TOTAL= \$3,209.94 R & R TOTAL= \$3,570.00 Burns Cost TOTAL= \$545.50 South Cost TOTAL= \$300.40 Burns Diff. TOTAL= (\$40.95) South Diff. TOTAL= (\$63.42)

Note: 7.50 for Watermelon @ South
 Positive differences indicate savings

ATTACHMENT B

	A	B	C	D	E
77	Burns and South schools: Annual produce totals 1993-94				
78		Amount	Unit price	Total Dollars	Total Pounds
79					
80	Cabbage	20 #	.30/#	\$ 6.00	20#
81	Carrots	195#	.40/#	\$78.00	195#
82	Carrot sticks	85#	\$1.35/#	\$114.75	85#
83					
84	Celery sticks	80#	\$1.35/#	\$108.00	
85	Celery stalks	58 ea	\$1.06 ea	\$61.75	
86					
87	Cucumber	304 ea	\$.45 ea	\$138.60	114#
88					
89	Iceberg let.	61 cs (1464 ea)	\$.51 ea	\$745.90	2440#
90					
91	Onions	64#	\$.56/#	\$36.25	64#
92					
93	Peppers	69#	\$.88/#	\$60.85	69#
94					
95	Potatoes, baking	5 cs	\$10.00/cs	\$50.00	750#
96					
97	Radish	124 cello bags	\$.37 ea	\$46.20	46#
98					
99	Spinach	274 #	\$1.14/#	\$313.25	274#
100					
101	Tomatoes	995#	\$.62/#	\$615.25	995#
102					
103					
104	Apples (5,120 #)	177 cs (21,240 ea)	\$.10 ea	\$2142.75	7080#
105					
106					
107	Bananas	216 cs (32,400 ea)	\$.10 ea	\$3,314.50	
108					
109					
110	Melon (180 ea)	270 ea	\$.96 ea	\$259.00	
111					
112	Oranges	147 cs (16,611 ea)	\$.13 ea	\$2140.00	
113					
114					

-CONTINUED-



***Connecticut
Farm Fresh
Menu Items:
9/18 to 9/22***

**Locally Grown Fresh Fruits
and Vegetables This Week:**

Monday: Chilled Watermelon

Tuesday: Pan Roasted Potatoes
Fresh Native Bartlett Pear

Wednesday: Lettuce & Tomato (grinder)
Native Green Beans
Fresh Crisp Apple

Thursday: Lettuce , Tomato, Cucumbers,
Green Peppers (salad)

Friday: Cabbage & Carrot Salad
Fresh Native Bosc Pear

Farm Fresh Start Program

Burns Elementary School

December Survey

Name _____ Grade _____

Teacher _____

Food Habits

What are your **3** favorite foods?

- 1.
- 2.
- 3.

What are your **3** favorite fruits?

- 1.
- 2.
- 3.

What fruits don't you like? What don't you like about them?

How often do you eat fruit? 1X week ___ 2X week ___ 3X week ___ 4X week ___
5X week ___ 6X week ___ 7X week ___

More than 7X week ___ More than 10 X week ___

What are **3** of your favorite vegetables?

- 1.
- 2.
- 3.

What vegetables don't you like? What don't you like about them?

32
How often do you eat vegetables? 1X week___ 2X week___ 3X week___ 4X week___
5X week___ 6X week___ 7X week___

More than 7X week___ More than 10 X week___

Do you eat fruits and vegetables at home? Yes___ No___

Do you eat fruits and vegetables at school? Yes___ No___

What do you usually eat for lunch?

Do you bring your lunch from home? Yes___ No___

Do you eat the school lunch? Yes___ No___

How often do you eat the school lunch in the cafeteria?

1X week___ 2X week___ 3X week___ 4X week___ 5X week___

Do you think school lunch tastes good? Yes___ No___ Sometimes___

What is your favorite lunch to eat at school?

What lunch foods don't you like? What don't you like about them?

Do you think the school lunches are good for you?

Yes___ No___ Sometimes___ Don't know___

Name 5 vegetables or fruits from Connecticut that you ate in the cafeteria this year.

1.

4.

2.

5.

3.

Nutrition Knowledge

Do you think you eat healthy foods? Yes___ No___ Sometimes___ Don't know___

Name 5 different kinds of foods that make you strong and healthy:

- 1.
- 2.
- 3.
- 4.
- 5.

Name 5 foods that are not good for you:

- 1.
- 2.
- 3.
- 4.
- 5.

What are junk foods?

Do you eat junk food? Yes___ No___

If yes, name 3 junk foods you like to eat.

- 1.
- 2.
- 3.

How often do you eat junk food? 1X week___ 2X week___ 3X week___ 4X week___

5X week___ 6X week___ 7X week___

More than 7X week___ More than 10 X week___

What do you usually eat for dinner?

What do you really like to eat for supper?

Who fixes your dinner?

Do you ever help fix dinner? Yes ___ No ___ Sometimes ___

Do you help shop for food? Yes ___ No ___

Do you ever skip dinner? Yes ___ No ___ Sometimes ___

If yes, how often do you skip dinner? 1X week ___ 2X week ___ 3X week ___
4X week ___ 5X week ___ 6X week ___ 7X week ___

What are 3 things that are cooked at your house?

1.

2.

3.

Name 3 vegetables you know how to cook:

1.

2.

3.

Name 3 vegetables you can eat both raw and cooked:

1.

2.

3.

How often do you eat take-out food or in restaurants? 1X week ___ 2X week ___
3X week ___ 4X week ___ 5X week ___ 6X week ___ 7X week ___

Do you like to try new foods? Yes ___ No ___

What new foods did you try recently?

What 3 foods would you like to learn to make?

1.

2.

3.

Food Production

Imagine you are a farmer. Put a X next to all the things a farmer does or knows to grow food:

- Fix machines
- Prune trees
- How to do math
- Hunt deer
- How to feed cows
- Know the color of fruits and vegetables when they are ripe
- How to plan five years ahead
- How to protect bees
- How to keep the land healthy
- What kinds of food people like to eat
- How to paint cars
- How to decide the right time to plant different seeds

When do fruits and vegetables grow in Connecticut?

Are fruits and vegetables growing in Connecticut now? Yes ___ No ___ Don't know ___

Why do people like to work as farmers?

What are some problems farmers have with making a living from the farm?

Pan Roasted Potatoes

Recipe developed by Geraldine Schuler, South Middle School
and Jose Velazquez, Burns Elementary School
Hartford, Connecticut, September 1995

South Middle School: Portion size: 4 oz

1 5# sheet pan yields 20 portions

115# potatoes = approximately 450 servings

Burns Elementary School: Portion size: 3 oz

1 5# sheet pan yields 27 portions

115# potatoes = approximately 613 portions

Recipe:

25 # potatoes, cut in 1-1/2 inch pieces

1-1/2 cups vegetable oil

2-1/2 tablespoons salt

1-1/2 tablespoons pepper

2 tablespoons oregano

1. Heat the convection oven to 375 degrees.
2. Toss the potatoes with the oil and seasonings until thoroughly mixed. Spread 5 pound batches on a paper lined 18 X 36 -inch sheet pan. Cover with aluminum foil or another sheet pan. Bake for 20 minutes. Uncover and bake for 5 to 10 minutes longer until the potatoes are lightly browned and cooked through. Hold in a warming oven.