

### **III. CHARACTERISTICS OF PUBLIC UNIFIED NSLP SCHOOL DISTRICTS**

This chapter is devoted to a description of some of the more prominent characteristics of public unified school districts that participated in the NSLP in SY 1996/97. Since the universe for this study was restricted to those school districts that are both public and unified (kindergarten through twelfth grade), as described in Chapter II, the resulting estimates are not strictly comparable with those from other sources. The reasons for this and the expected magnitude of difference from other universes are also discussed in Chapter II.

This chapter is divided into two major sections. The first section describes overall characteristics of the districts, e.g. number and size of districts, number of schools, and attendance. The second section focuses more narrowly on characteristics of the feeding programs of these school districts. In this final section, we examine a variety of dimensions of these programs including eligibility and participation, meal prices, menu planning methods, the role of a la carte food sales, and the use of food service management companies.

#### **A. Overall School District Characteristics**

##### **1. Number of Districts and Student Enrollment**

An estimated 10,083 public unified school districts provided meals through the NSLP in SY 1996/97. These school districts were attended by an estimated 41.8 million students.<sup>1</sup> The distribution of school districts is skewed strongly in the direction of smaller school districts; the distribution of students is skewed almost as strongly in the opposite direction. Thus, the bottom one-third of all school districts in terms of enrollment accounted for only 5.0 percent of all students while the largest 2.5 percent of the districts accounted for one-third of all students.

---

<sup>1/</sup> This compares to USDA's estimate of the total enrollment in NSLP public schools in FY 1997 of 44.4 million students. The USDA estimate includes unified and nonunified public school districts in all 50 states, the District of Columbia, and US possessions.

**Table III-1: Total Student Enrollment and Number of Public Unified NSLP  
School Districts by Size of District, SY 1996/97**

School district enrollment	Total student enrollment		Number of school districts	
	Number of students	Percent of total	Number of school districts	Percent of total
Less than 1,000	2,094,593	5.0	3,411	33.8
1,000-4,999	12,024,975	28.8	5,009	49.7
5,000-24,999	13,292,858	31.8	1,410	14.0
25,000 or more	14,393,878	34.4	253	2.5
All districts	41,806,303	100.0	10,083	100.0

Note: Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study*, 1998.

These school districts included 75,696 schools within their systems in SY 1996/97 (Table III-2).<sup>1</sup> Of this number, 54.4 percent were elementary schools, 31.5 percent were middle/secondary, and the remaining 14.1 percent fell in the “other” category. Since larger school districts tend to operate schools with larger enrollments, the number of schools is not as highly skewed toward the larger systems as is the number of students. Not surprisingly, the number of “other” schools, many of which are kindergarten through twelfth grade, are found with greatest frequency among the smaller school districts.

<sup>1/</sup> This compares to USDA's estimate of 82,437 NSLP public schools in FY 1997, including unified and nonunified public schools in all 50 states, the District of Columbia, and the US possessions.

**Table III-2: Number of Schools in Public Unified NSLP School Districts  
by Size of District and by Grade Category, SY 1996/97**

School district enrollment	Elementary	Middle/ secondary	Other	Total
Less than 1,000	2,372	2,953	2,458	7,783
row percent	30.5	37.9	31.6	100.0
column percent	5.8	12.4	23.0	10.3
1,000 to 4,999	13,837	9,082	3,762	26,682
row percent	51.9	34.0	14.1	100.0
column percent	33.6	38.1	35.2	35.2
5,000 to 24,999	12,737	6,269	2,160	21,167
row percent	60.2	29.6	10.2	100.0
column percent	31.0	26.3	20.2	28.0
25,000 or more	12,205	5,562	2,298	20,065
row percent	60.8	27.7	11.5	100.0
column percent	29.7	23.3	21.5	26.5
All districts	41,152	23,866	10,678	75,696
row percent	54.4	31.5	14.1	100.0
column percent	100.0	100.0	100.0	100.0

Source: *School Food Purchase Study*, 1998.

Enrollment by grade category is more equally divided between elementary and middle/secondary than is the number of schools since elementary schools are generally smaller and in closer proximity to the neighborhoods they serve. Of the students enrolled in public unified NSLP school districts in SY 1996/97, an estimated 19.7 million (47.2 percent) were in elementary schools, 18.6 million (44.5 percent) in middle/secondary schools, and 3.5 million (8.3 percent) in “other” schools (see Table III-3).

**Table III-3: Student Enrollment of Public Unified NSLP School Districts  
by Size of District and Grade Category, SY 1996/97**

School district enrollment	Grade category			Total
	Elementary	Middle/Secondary	Other	
Less than 1,000	719,451	782,950	592,192	2,094,593
row percent	34.3	37.4	28.3	100.0
column percent	3.6	4.2	17.1	5.0
1,000- 4,999	5,183,315	5,650,823	1,190,836	12,024,975
row percent	43.1	47.0	9.9	100.0
column percent	26.3	30.3	34.3	28.8
5,000 - 24,999	6,412,234	5,887,464	993,160	13,292,858
row percent	48.2	44.3	7.5	100.0
column percent	32.5	31.6	28.6	31.8
25,000 or more	7,404,285	6,298,557	691,036	14,393,878
row percent	51.4	43.8	4.8	100.0
column percent	37.5	33.8	19.9	34.4
All districts	19,719,285	18,619,795	3,467,223	41,806,303
row percent	47.2	44.5	8.3	100.0
column percent	100.0	100.0	100.0	100.0

Source: *School Food Purchase Study, 1998.*

To more accurately determine the number of students who could potentially participate in the NSLP, survey respondents were asked to report average daily attendance as well as the number of students included in enrollment who did not have access to the lunch program for one reason or another. Some school districts have schools in their systems that do not participate in the NSLP. Likewise, students attending half-day kindergarten classes frequently do not have access to school meals.

National estimates of these measures appear in Table III-4. They indicate that, on average, 6.6 percent of the students enrolled in public unified NSLP school districts in SY 1996/97 were absent and another 1.5 percent of those enrolled students in attendance lacked access to the program. Rates of absence were found to rise with increasing size of district, going from 5.0 percent for the smallest districts to 8.1 percent for the largest. The share of enrollment that was in attendance but lacked access was highest among districts with less than 1,000 enrollment (3.0 percent) and smallest among districts with an enrollment of 25,000 or more (0.6 percent).

Despite this, the relationship with size is not very strong given that the next to the largest district size category has a rate of attendees lacking access that is nearly as large as the smallest size category.

**Table III-4: Student Enrollment, Average Daily Attendance, and Average Number of Attendees With Access to the Lunch Program in Public Unified NSLP School Districts by Size of District and Grade Category, SY 1996/97**

School district enrollment	Grade category			Total
	Elementary	Middle/secondary	Other	
	-----number of students-----			
<u>Less than 1,000</u>				
Enrollment	719,451	782,950	592,192	2,094,593
Daily attendance	683,691	743,531	562,828	1,990,050
Attendance with access	671,422	708,950	545,864	1,926,236
<u>1,000 to 4,999</u>				
Enrollment	5,183,315	5,650,823	1,190,836	12,024,975
Daily attendance	4,935,802	5,305,397	1,130,013	11,371,212
Attendance with access	4,813,775	5,304,614	1,119,495	11,237,884
<u>5,000 to 24,999</u>				
Enrollment	6,412,234	5,887,464	993,160	13,292,858
Daily attendance	5,981,824	5,531,097	951,674	12,464,595
Attendance with access	5,810,033	5,361,026	938,317	12,109,376
<u>25,000 or more</u>				
Enrollment	7,404,285	6,298,557	691,036	14,393,878
Daily attendance	6,844,674	5,752,230	624,538	13,221,442
Attendance with access	6,808,881	5,713,959	623,891	13,146,731
<u>All districts</u>				
Enrollment	19,719,285	18,619,795	3,467,223	41,806,303
Daily attendance	18,445,991	17,332,255	3,269,054	39,047,300
Attendance with access	18,104,112	17,088,548	3,227,567	38,420,227

Source: *School Food Purchase Study, 1998.*

Compared to results of the study conducted in SY 1984/85, there are now fewer districts and more students. The number of school districts fell 7.2 percent while the estimated number of students enrolled in these districts rose 20.9 percent over the 12-year period. The distribution of students continued to shift toward the larger districts. While districts of 25,000 or more accounted for 19.6 percent of total enrollment in SY 1983/84, by SY 1996/97, this share had risen to 34.4 percent. This growth in share is due to a combination of smaller districts growing into this size class and increased enrollment in districts that were already in this size class in SY 1983/84.

**Table III-5: Estimated Enrollment in Public Unified NSLP School Districts  
by Size of District Enrollment and by Grade Category, SYs 1983/84 and 1996/97**

Grade category	School year	All districts		Less than 1,000		1,000 to 4,999		5,000 to 24,999		25,000 or more	
		Enrollment	Percent	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent	Enrollment	Percent
Elementary	1983/84	17,217,203	100.0	807,431	4.7	6,245,298	38.3	6,646,796	38.6	3,517,678	20.4
	1996/97	19,719,285	100.0	719,451	3.6	5,183,315	26.3	6,412,234	32.5	7,404,285	37.5
Middle/secondary	1983/84	17,359,187	100.0	1,120,094	6.5	6,594,451	38.0	6,388,875	36.8	3,255,767	18.8
	1996/97	18,619,795	100.0	782,950	4.2	5,650,823	30.3	5,887,464	31.6	6,298,557	33.8
Other	1983/84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	1996/97	3,467,223	100.0	592,192	17.1	1,190,836	34.3	993,160	28.6	691,036	19.9
Total	1983/84	34,576,390	100.0	1,927,525	5.6	12,839,749	37.1	13,035,671	37.7	6,773,445	19.6
	1996/97	41,806,303	100.0	2,094,593	5.0	12,024,975	28.8	13,292,858	31.8	14,393,878	34.4

Note: The 1987 and 1996 Studies define their enrollment categories differently. The 1987 Study used "junior high schools and high schools" instead of "middle/secondary" and it did not allow for an "other" category.

Source: *School Food Purchase Study, 1987* and *School Food Purchase Study, 1998*.

## **2. Year-Round Operations**

Some school districts now operate at least a portion of their systems throughout the calendar year in lieu of the traditional 3-month summer break. Three different forms of year-round education are currently in use: single-track, multi-track, and extended year. Each of these forms results in a reconfiguration of the school year. As a result, year-round operations can affect the pattern of food acquisition and use as well as the utilization of physical facilities.

The single-track approach is used largely for the educational value of avoiding a three-month interruption in the instructional program. It does not result in more efficient use of the facility or the instructional staff; rather, it evens out the same 180 days of instruction across the school year. The multi-track approach, in contrast, makes it possible to extend the capacity of the school by about one-third if a four-track system is used. The extended year form, which is infrequently used, lengthens the school year up to 240 days of instruction.

The National Association for Year-Round Education reports that in SY 1996/97, some form of year-round education was used in 2,400 schools in 460 public school districts with an enrollment of 1.8 million students.<sup>1</sup> This level of enrollment reportedly represents a nearly 4-fold increase since SY 1986/87. According to Association records, more than half of all year-round program schools and 40 percent of the school districts are in California. Other leading states in terms of number of year-round schools are Texas, North Carolina, and Arizona.

Results of this study estimate that 431 public unified NSLP school districts, 4.3 percent of the total, were engaged in year-round education in SY 1996/97, as shown in Table III-6. It would appear from these findings that year-round instruction has substantially greater appeal for larger school districts. Nearly half (46.3 percent) of all districts with 25,000 or more enrollment were found to be applying the concept in some form in at least a portion of their schools.

---

<sup>1/</sup> National Association for Year-Round Education, *Year-Round Education Fact Sheet*, December 5, 1997.

**Table III-6: Number of Public Unified NSLP School Districts Operating  
Partial-Year and Year-Round by Size of School District, SY 1996/97**

School district enrollment	Partial-year	Year-round	All districts
Less than 1,000	3,411	0	3,411
<b>row percent</b>	<b>100.0</b>	<b>0.0</b>	<b>100.0</b>
<b>column percent</b>	<b>35.3</b>	<b>0.0</b>	<b>33.8</b>
1,000-4,999	4,926	83	5,009
<b>row percent</b>	<b>98.3</b>	<b>1.7</b>	<b>100.0</b>
<b>column percent</b>	<b>51.0</b>	<b>19.3</b>	<b>49.7</b>
5,000-24,999	1,180	231	1,410
<b>row percent</b>	<b>83.7</b>	<b>16.3</b>	<b>100.0</b>
<b>column percent</b>	<b>12.2</b>	<b>53.5</b>	<b>14.0</b>
25,000 or more	136	117	253
<b>row percent</b>	<b>53.7</b>	<b>46.3</b>	<b>100.0</b>
<b>column percent</b>	<b>1.4</b>	<b>27.2</b>	<b>2.5</b>
All districts	9,652	431	10,083
<b>row percent</b>	<b>95.7</b>	<b>4.3</b>	<b>100.0</b>
<b>column percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study*, 1998.

Districts that are engaged in year-round operations account for 17.2 percent of all public unified NSLP schools and report that, on average, 19.1 percent of their schools are year-round. As can be seen in Table III-7, the smaller school districts that have year-round schools are operating on this basis in a large share of their schools. For those districts of 1,000 to 4,999, nearly half of their schools (46.1 percent) were being operated on a year-round basis in SY 1996/97. It would also appear from these findings that the year-round approach is being used somewhat more in elementary than in middle/secondary schools, at least among the larger districts.

**Table III-7: Number of Schools in Public Unified NSLP School Districts Operating Year-Round Programs, by Grade Category and by School District Enrollment, SY 1996/97**

School district enrollment	Grade category			Total
	Elementary	Middle/ secondary	Other	
<u>Less than 1,000</u>				
Total number of schools	0	0	0	0
Number of schools year-round	0	0	0	0
Percent year-round	n/a	n/a	n/a	na
<u>1,000 to 4,999</u>				
Total number of schools	503	261	85	849
Number of schools year-round	219	136	36	391
Percent year-round	43.5	52.2	42.6	46.1
<u>5,000 to 24,999</u>				
Total number of schools	2,034	1,056	505	3,596
Number of schools year-round	540	129	101	770
Percent year-round	26.5	12.2	20.0	21.4
<u>25,000 or more</u>				
Total number of schools	5,204	2,248	1,120	8,572
Number of schools year-round	1,100	201	18	1,319
Percent year-round	21.1	8.9	1.6	15.4
<u>All districts</u>				
Total number of schools	7,741	3,565	1,710	13,016
Number of schools year-round	1,859	466	155	2,480
Percent year-round	24.0	13.1	9.1	19.1

Source: *School Food Purchase Study, 1998.*

While the number of schools on a year-round schedule accounted for only 3.3 percent of all public unified NSLP schools in SY 1996/97, the fact that this approach is being tried in so many school districts, particularly larger districts, suggests the potential for considerable expansion in the future.

## B. Characteristics of School Feeding Programs

### 1. Participation in NSLP and SBP

School district participation in the NSLP was a requirement for inclusion in the sample for this study. Thus, participation in NSLP, at least at the level of the school district, was assured. Participation in the SBP was not required for inclusion in the study. Nor was there a requirement that all schools within the district participate in the NSLP.

On the basis of study results, it is estimated that there were 75,696 schools operated by 10,083 public unified NSLP school districts in SY 1996/97. Of the total number of schools, over three-quarters (76.1 percent) participated in both the NSLP and the SBP. Another 22.0 percent participated exclusively in the NSLP. In a small number of school districts taking part in the study, a portion of the districts' schools did not participate in either program. Nationally, it is estimated that 1.9 percent of all schools in this universe did not participate in the NSLP or the SBP.

Participation in the SBP is somewhat higher in elementary schools (79.1 percent) than in either of the other two grade categories, 73.7 percent in middle/secondary and 70.4 percent in the other category. Of all schools participating in the SBP, 53.8 percent qualify as severe need schools.<sup>1</sup>

**Table III-8: Number of Schools in Public Unified NSLP School Districts, by Grade Category and by Participation in School Meals Programs, SY 1996/97**

Participation in NSLP/SBP	Elementary		Middle/ Secondary		Other		Total	
	Total	%	Total	%	Total	%	Total	%
Participating in NSLP and SBP	32,542	79.1	17,578	73.7	7,515	70.4	57,635	76.1
Participating in NSLP only	8,528	20.7	5,954	24.9	2,143	20.1	16,625	22.0
Participating in SBP only	0	0.0	8	0.0	0	0.0	8	0.0
Not Participating in NSLP or SBP	82	0.2	326	1.4	1,020	9.6	1,428	1.9
<b>SBP severe-need<sup>1/</sup></b>	<b>19,191</b>	<b>46.6</b>	<b>8,226</b>	<b>34.5</b>	<b>3,608</b>	<b>33.8</b>	<b>31,025</b>	<b>41.0</b>
All schools	41,152	100.0	23,866	100.0	10,678	100.0	75,696	100.0

<sup>1/</sup>SBP severe-need is a subset of SBP.

Note: Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study*, 1998.

<sup>1/</sup> Severe need schools receive larger cash reimbursements on free and reduced-price breakfasts. All other reimbursements are unaffected. To be a severe need school, a school must document that its meal preparation costs exceed the regular reimbursements and that it served more than 40 percent of its NSLP lunches free or at a reduced-price in the second prior school year.

## 2. Number of Lunches and Breakfasts Served

Public unified NSLP school districts served nearly 3.9 billion lunches in SY 1996/97, as indicated in Table III-9.<sup>1</sup> Just over half (50.5 percent) of these lunches were provided at no charge while another 8.1 percent were provided at a reduced-price. The remaining 41.3 percent were full-price meals.

A somewhat larger share of all lunches served in larger districts are free or reduced-price compared to smaller districts. Nearly three-quarters of all lunches served in districts with an enrollment of 25,000 or more were free or reduced-price in SY 1996/97 compared to slightly less than half in school districts with an enrollment of less than 1,000. In addition, of the number of free and reduced-price meals served, the share that are free increases with district size, rising from 77.8 percent in the smallest district size category to 89.0 percent in districts with 25,000 or more students.

**Table III-9: Number of NSLP Lunches Served in Public Unified NSLP School Districts by Type of Meal and Size of School District, SY 1996/97**

School district enrollment	Number of full-price lunches	Number of reduced-price lunches	Number of free lunches	Total number of NSLP lunches
Less than 1,000	122,292,144	24,033,360	83,851,077	230,176,581
row percent	53.1	10.4	36.4	100.0
column percent	7.6	7.6	4.3	5.9
1,000-4,999	597,267,479	89,898,369	448,271,913	1,135,437,762
row percent	52.6	7.9	39.5	100.0
column percent	37.2	28.4	22.8	29.2
5,000-24,999	547,304,769	92,081,746	539,914,874	1,179,301,390
row percent	46.4	7.8	45.8	100.0
column percent	34.1	29.1	27.5	30.3
25,000 or more	339,638,102	110,533,193	893,170,338	1,343,341,633
row percent	25.3	8.2	66.5	100.0
column percent	21.1	34.9	45.4	34.5
All districts	1,606,502,495	316,546,669	1,965,208,202	3,888,257,366
row percent	41.3	8.1	50.5	100.0
column percent	100.0	100.0	100.0	100.0

Note: Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study*, 1998.

1/ This compares to USDA's estimate of 4.4 billion lunches served in SY 1996/97 for all participating schools, public and private, unified and nonunified, in all 50 states, the District of Columbia, and US possessions.

Comparison of these results with those of the 1984/85 study reveals two major differences. First, compared to the earlier period, a larger share of NSLP meals are now served in the largest districts. Of course, some of this is due to the continuing consolidation of smaller school districts as well as to the “graduation” of districts to larger size categories due to growth in enrollment. The differences are greatest for the two middle-size districts (1,000 to 4,999 and 5,000 to 24,999) which in combination went from accounting for 73.9 percent of all NSLP lunches in SY 1983/84 to 59.5 percent in SY 1996/97 while districts with 25,000 or more students went from 19.7 percent to 34.5 percent.

A second difference is the increased share of all lunches that are free and reduced-price in the more recent period. The earlier study found that, overall, free and reduced-price meals accounted for 45.2 percent of all meals in SY 1983/84. That contrasts with an estimate in this study of 58.6 percent in SY 1996/97. This shift toward free and reduced-price meals and away from full-price meals is common to all size classes of districts.

Public unified districts participating in the SBP served more than 1.1 billion breakfasts in SY 1996/97. Over four out of five (81.1 percent) were provided at no charge to the student and another 6.0 percent were reduced-price. Nationally, only 12.8 percent were charged full-price.

**Table III-10: Number of SBP Breakfasts Served in Public Unified NSLP School Districts by Type of Meal and Size of School District, SY 1996/97**

School district enrollment	Number of full-price breakfasts	Number of reduced price breakfast	Number of free breakfasts	Total number of SBP breakfasts	Number of severe need breakfasts
Less than 1,000	14,640,965	5,206,513	34,841,390	54,688,867	25,875,126
row percent	26.8	9.5	63.7	100.0	47.3
column percent	10.1	7.7	3.8	4.9	3.8
1,000-4,999	48,183,207	22,282,735	211,589,187	282,055,129	144,318,197
row percent	17.1	7.9	75.0	100.0	51.2
column percent	33.4	32.8	23.2	25.1	21.5
5,000-24,999	47,747,542	21,084,592	223,062,240	291,894,374	153,302,141
row percent	16.4	7.2	76.4	100.0	52.5
column percent	33.1	31.0	24.5	26.0	22.8
25,000 or more	33,701,867	19,422,426	442,318,170	495,442,463	349,027,238
row percent	8.8	3.9	89.8	100.0	70.4
column percent	23.4	28.6	40.5	44.1	51.9
All districts	144,273,580	67,996,266	911,810,987	1,124,080,833	672,522,701
row percent	12.8	6.0	81.1	100.0	59.8
column percent	100.0	100.0	100.0	100.0	100.0

Note: Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study*, 1998.

As with school lunches, the share of breakfasts that are free or reduced-price increases as the enrollment size of the district increases. In districts with an enrollment of 25,000 or more, 93.2 percent of all breakfasts served were free or reduced-price while in the smallest districts (less than 1,000 enrollment), 73.2 percent were free or reduced-price. A similar relationship holds between district size and the share of all breakfasts reimbursed at severe need rates. Among the largest districts, 70.4 percent of breakfasts were estimated to be severe need while among the smallest districts, the severe need share was 47.3 percent. Nationally, the number of severe need breakfasts served in SY 1996/97 was the equivalent of 68.6 percent of the number served free and reduced-price.

The SBP has grown dramatically since the earlier study. The estimated number of breakfasts served in public unified school districts has nearly tripled. The distribution of breakfasts among free, reduced-price, and full-price has not changed much nationally although, interestingly, the full-price share of breakfasts served in the smallest districts increased rather sharply, offset by a drop in the share that was served at no charge.

### **3. Meal Prices**

Lunch. The mean full-price elementary school lunch was \$1.21 in SY 1996/97 while the mean middle/secondary lunch was \$1.38. The median prices were \$1.25 and \$1.35, respectively. The mean reduced-price lunch was \$.36 for both elementary and middle/elementary students while the median level was \$.40 for both. As the zero entries in some price ranges in Table III-11 indicate, some school districts do not charge students who are eligible for reduced-price lunches. And, a smaller number of districts do not charge their students for lunch, even those students who are not eligible for free or reduced-price meals.

Differences in mean and median lunch prices among school districts of different sizes were found to be relatively small. School districts with enrollments of less than 1,000 charged the least for full-price lunches in both elementary and middle/secondary schools. The mean price of reduced-price lunches was lowest among school districts with the largest enrollment, though the magnitude of the difference was very small and median prices were uniform throughout all sizes. The uniformity of the upper bound on the range of reduced-price lunches is dictated by the Federal requirement that they not exceed \$.40.

Prices of school lunches have risen at a slightly faster rate than the Consumer Price Index (CPI) for food in the period since the earlier study was conducted in SY 1984/85. The mean price of full-price lunches rose 55.1 percent in elementary schools and 52.2 percent in middle/secondary schools, while the CPI for all food and beverages rose 48.9 percent and the CPI for food away-from-home grew by 46.5 percent between 1984 and 1996.

**Table III-11: Mean, Median, and Range of Student Lunch Prices, Full-Price and Reduced-Price, by Size of Public Unified School District, SY 1996/97**

School district enrollment	Full-price lunch			Reduced-price lunch		
	Mean	Median	Range	Mean	Median	Range
	-----dollars-----			-----dollars-----		
Less than 1,000						
Elementary	1.14	1.10	.60 - 1.75	0.39	0.40	.25 - .40
Middle/secondary	1.26	1.25	.60 - 2.50	0.39	0.40	.25 - .40
1,000 - 4,999						
Elementary	1.21	1.25	0.00 - 2.25	0.36	0.40	0.00 - .40
Middle/secondary	1.37	1.35	0.00 - 2.75	0.37	0.40	0.00 - .40
5,000 - 24,999						
Elementary	1.22	1.25	.60 - 1.75	0.37	0.40	0.00 - .40
Middle/secondary	1.40	1.45	.70 - 2.25	0.37	0.40	0.00 - .40
25,000 or more						
Elementary	1.21	1.25	0.00 - 1.60	0.35	0.40	0.00 - .40
Middle/secondary	1.39	1.40	0.00 - 1.94	0.35	0.40	0.00 - .40
All districts						
Elementary	1.21	1.25	0.00 - 2.25	0.36	0.40	0.00 - .40
Middle/secondary	1.38	1.35	0.00 - 2.75	0.36	0.40	0.00 - .40

Source: *School Food Purchase Study*, 1998.

Breakfast. The mean full-price breakfast among these school districts in SY 1996/97 was \$.59 in elementary schools and \$.63 in middle/secondary schools. The median prices were \$.65 and \$.70, respectively. As with lunch prices, the mean values for full-price breakfasts were lowest for the smallest school districts and rose with increasing size. However, the median prices for a full-price breakfast were nearly the same for the smallest school districts as for the largest. There was very little difference in the mean values for reduced-price breakfasts, regardless of district size, and no difference at all in the median values which is a constant \$.30 for all sizes. As with lunch prices, this uniformity results from program requirements in SY 1996/97 that set the reduced-price breakfast at no more than \$.30.

**Table III-12: Mean, Median, and Range of Student Breakfast Prices, Full-Price and Reduced-Price, by Size of Public Unified School District, SY 1996/97**

School district enrollment	Full-price breakfast			Reduced-price breakfast		
	Mean	Median	Range	Mean	Median	Range
	-----dollars-----			-----dollars-----		
Less than 1,000						
Elementary	0.44	0.60	0.00 - 1.00	0.24	0.30	0.00 - 0.30
Middle/secondary	0.44	0.70	0.00 - 1.25	0.24	0.30	0.00 - 0.30
1,000 - 4,999						
Elementary	0.59	0.65	0.00 - 1.25	0.26	0.30	0.00 - 0.30
Middle/secondary	0.61	0.65	0.00 - 1.40	0.26	0.30	0.00 - 0.30
5,000 - 24,999						
Elementary	0.61	0.70	0.00 - 1.15	0.23	0.30	0.00 - 0.30
Middle/secondary	0.67	0.75	0.00 - 1.19	0.23	0.30	0.00 - 0.30
25,000 or more						
Elementary	0.63	0.60	0.00 - 1.25	0.24	0.30	0.00 - 0.30
Middle/secondary	0.68	0.73	0.00 - 1.30	0.24	0.30	0.00 - 0.30
All districts						
Elementary	0.59	0.65	0.00 - 1.25	0.24	0.30	0.00 - 0.30
Middle/secondary	0.63	0.70	0.00 - 1.40	0.24	0.30	0.00 - 0.30

Source: *School Food Purchase Study, 1998.*

#### **4. The Role of a la Carte Food Sales**

In many schools, students are offered an opportunity to buy food items on an individual or a la carte basis. A la carte foods thereby become an alternative to the reimbursable meal. Whether or not foods are available to students on an a la carte basis, they are generally made available to adult staff members. Since most SFA records do not distinguish between student and adult a la carte sales, the sales estimates that appear in this section include both and should be interpreted accordingly.

As indicated in Table III-13, an estimated 69.3 percent of all public unified NSLP school districts offer foods a la carte in at least some of their schools.<sup>1</sup> Only about one-third (36.6 percent) of the smallest districts offer a la carte. However, the share in the next size class (1,000 to 4,999) rises

<sup>1/</sup> Although respondents were prompted to consider milk as an a la carte item, to the extent some respondents failed to do so these estimates are lower than the actual levels.

sharply to 84.1 percent and is even higher in the two largest size classes, reaching 97.6 percent in districts with 25,000 students or more.

A la carte foods are more frequently available in middle and high schools than in elementary schools, as can be seen in Table III-14. A la carte foods at lunch are offered in 74.6 of all middle/secondary schools but in only 47.7 percent of all elementary schools. As a result, the number of all schools offering a la carte items for lunch is a smaller share of the total than the share of school districts. A comparable relationship exists for a la carte foods offered at breakfast, though only about half as many schools offer a la carte foods at this meal.

For those school districts that offer foods a la carte, the revenue from these sales averaged \$181,456 per district in SY 1996/97. Total a la carte sales for all districts approached \$1.3 billion in SY 1996/97.

The smallest size class, districts with less than 1,000 students, average \$628 in a la carte sales per 1,000 students although this size category is the least likely to offer a la carte with only 36.6 percent of the districts offering a la carte. This compares to \$335 in a la carte sales per 1,000 students for the largest districts of more than 25,000 students. One reason for this might be the increased number of students in larger districts that receive their meals free or reduced whereas students in smaller districts who pay full-price for their meals have the option of choosing a reimbursable meal or buying a la carte.

Of the 41.8 million students attending public unified NSLP school districts in SY 1996/97, as many as nine out of every ten (89.7 percent) had access to a la carte sales (Table III-15).<sup>1</sup> In those districts with 1,000 or more students, 92 percent had access to a la carte sales. Only in the smallest districts, those with enrollments of less than 1,000, did less than half (42.6 percent) the students have access to a la carte sales.

---

<sup>1/</sup> Since all students within these districts might not have had access to a la carte sales, these percentages should be considered upper bounds.

**Table III-13: Use of A La Carte Sales Among Public Unified NSLP School Districts, by Size of District, SY 1996/97**

School district enrollment	Districts offering a la carte		A la carte sales, SY 1996/97		
	Number	Percent of total	Total	Mean per district	Sales per 1,000 students
			(\$000)	(\$)	(\$)
Less than 1,000	1,249	36.6	55,866	44,734	628
1,000 to 4,999	4,214	84.1	408,646	96,965	455
5,000 to 24,999	1,278	90.6	400,734	313,644	383
25,000 or more	247	97.6	402,680	1,632,811	335
All districts	6,988	69.3	1,267,926	181,456	392

Source: *School Food Purchase Study, 1998.*

**Table III-14: Percent of Public Unified NSLP Schools Offering A La Carte Foods at Lunch and Breakfast, by Size of District and Grade Category, SY 1996/97**

Grade category	All districts	Less than 1,000	1,000 to 4,999	5,000 to 24,999	25,000 or more
	-----percent of schools-----				
	<b>Lunch</b>				
Elementary	47.7	23.5	39.3	53.6	55.7
Middle/secondary	74.6	39.9	78.1	81.3	79.8
Other	33.3	9.2	33.0	45.5	48.1
Total	54.1	25.2	51.6	61.0	61.5
	<b>Breakfast</b>				
Elementary	20.3	6.6	13.5	23.2	27.7
Middle/secondary	45.6	23.4	37.7	60.0	54.0
Other	9.3	5.8	13.9	9.7	4.9
Total	26.7	12.7	21.8	32.7	32.4

Source: *School Food Purchase Study, 1998.*

**Table III-15: Number of Students in Public Unified NSLP School Districts With Access to A La Carte Sales, by Size of School District, SY 1996/97**

School district enrollment	Number of students with access to a la carte	Number of students without access to a la carte	Total number of students
Less than 1,000	892,920	1,201,673	2,094,593
row percent	42.6	57.4	100.0
column percent	2.4	27.9	5.0
1,000 to 4,999	10,297,959	1,727,016	12,024,975
row percent	85.6	14.4	100.0
column percent	27.5	40.1	28.8
5,000 to 24,999	12,256,892	1,035,966	13,292,858
row percent	92.2	7.8	100.0
column percent	32.7	24.1	31.8
25,000 or more	14,054,220	339,658	14,393,878
row percent	97.6	2.4	100.0
column percent	37.5	7.9	34.4
All districts	37,501,990	4,304,313	41,806,303
row percent	89.7	10.3	100.0
column percent	100.0	100.0	100.0

Source: *School Food Purchase Study*, 1998.

To help put a la carte sales in context, receipts from a la carte sales, as reported by the school district, were compared to our calculated estimate of receipts from the sale of reimbursable meals and Federal reimbursements and with the receipts, as reported by the district, from the sale of food through other programs. Receipts from the sale of reimbursable meals were estimated on the basis of the reported prices charged for full-price and reduced-price meals and the number of each of these meals served during the quarter in which the school district participated in the study. Federal reimbursements were estimated on the basis of the number of free, reduced-price, and full-price meals served and the standard reimbursement rates for SY 1996/97.<sup>1</sup> Receipts from

<sup>1/</sup> No adjustment was made for the additional 2 cents per meal reimbursement where 60 percent or more of lunches served in the second preceding school year were served free or at reduced prices nor was an adjustment made for severe need breakfasts.

other program sales and from a la carte sales were reported by participating school districts for the quarter of their participation in the study.

The estimated revenue from these sources for SY 1996/97 by size of district is displayed in Table III-16. Receipts from a la carte sales for all school districts combined accounted for only 13.6 percent of total receipts from these four main sources of SFA revenue. Federal reimbursements accounted for the largest share (55.9 percent), by far, followed by student meal receipts which accounted for another 24.3 percent. Other program sales were about half as important as a la carte sales, accounting for an estimated 6.2 percent of the total.

As a share of total receipts, a la carte receipts were highest for medium-size school districts, those with enrollments of 1,000 to 24,999. The relatively high incidence of full-price meals among the smallest school districts (less than 1,000 students) results in student meal receipts equal to one-third of total revenue while this source of revenue accounts for less than half this share (14.0 percent) among the largest districts where free and reduced-price meals are in the majority.

**Table III-16: Comparison of Sources of District Revenue in Public Unified NSLP School Districts  
by Size of District, SY 1996/97**

Sources of district revenue	<u>Less than 1,000</u>		<u>1,000 to 4,999</u>		<u>5,000 to 24,999</u>		<u>25,000 or more</u>		<u>All districts</u>	
	\$000	% of total	\$000	% of total	\$000	% of total	\$000	% of total	\$000	% of total
Student meal receipts	161,896	33.4	807,887	30.8	746,573	27.6	415,987	14.0	2,132,343	24.3
Reimbursements	252,410	52.0	1,267,455	48.4	1,380,027	51.0	2,008,654	67.6	4,908,546	55.9
Other program sales receipts	14,964	3.1	148,333	5.7	189,967	7.0	192,969	6.5	546,232	6.2
A la carte sales receipts	55,866	11.5	396,008	15.1	391,325	14.5	353,397	11.9	1,196,596	13.6
<b>Total</b>	<b>485,136</b>	<b>100.0</b>	<b>2,619,683</b>	<b>100.0</b>	<b>2,707,892</b>	<b>100.0</b>	<b>2,971,007</b>	<b>100.0</b>	<b>8,783,717</b>	<b>100.0</b>

Note: Districts that could not provide a la carte sales receipts or other program sales receipts were excluded from this analysis.

Source: *School Food Purchase Study*, 1998.

Respondents for those school districts that offered foods a la carte were asked to identify the ten top-selling (by dollar sales) a la carte food items for both elementary and middle/secondary schools. Foods were described in general terms, e.g. cookies, ice cream, pizza, etc. A total of 61 foods were identified. They are listed in Table III-17, together with the number of school districts that identified the food as one of its ten top-selling a la carte items, for elementary and middle/secondary schools.

These results should be interpreted with care. The information was difficult to collect since most SFAs do not maintain records on this basis. The responses were judgmental and should therefore be treated as approximations of the leading a la carte foods. As indicated in Table III-17, milk, fruit drinks, ice cream, and cookies were most frequently cited as leading a la carte sellers in elementary schools. Among middle/secondary schools, fruit drinks, pizza, snack chips, ice cream, cookies, and french fries topped the list in terms of the frequency with which foods were identified.

**Table III-17: Number of Public Unified NSLP School Districts Identifying Specified Foods as One of Ten Top Selling A La Carte Food Items, by Elementary and Middle/Secondary, SY 1996/97**

Food description	Middle/		Food description	Middle/	
	Elementary	secondary		Elementary	secondary
	number of school districts			number of school districts	
Milk	2,690	2,014	Meat snacks	103	39
Fruit drinks	2,583	4,953	Yogurt	93	337
Pizza	1,274	4,212	Pudding	137	81
French fries	733	3,284	Snack crackers	506	665
Soft drinks	32	609	Egg roll	n/a	152
Hamburgers	510	1,527	Granola bars	148	448
Cheeseburgers	42	594	Breadsticks/bread/rolls	98	687
Snack chips	1,299	3,719	Mashed potatoes	52	184
Burritos	55	973	Tea	44	532
Sandwiches	166	2,014	Corn dog	29	218
Ice cream	2,480	3,479	Milkshake	39	256
Hot dogs	110	473	String cheese	194	n/a
Cookies	2,019	3,328	Potato items	18	185
Pretzels	599	977	Baked potatoes	39	254
Snack cakes	816	2,337	Frozen fruit bars	23	13
Popcorn	163	11	Vegetables	n/a	576
Bagels	81	349	Hot chocolate	n/a	38
Soup	41	235	Cheese sticks	12	114
Fruit	386	880	Rice	n/a	76
Tacos	73	412	Cottage cheese	n/a	37
Nachos	218	1,111	Sunflower seeds	32	22
Water	251	1,336	Peanuts	18	n/a
Fruit roll-ups	1,348	635	Cereals	12	n/a
Candy	333	1,505	Fruit snacks/dried fruit	79	10
Donuts	159	548	Onion rings	20	187
Chicken nuggets	279	1,042	Desserts/baked goods	332	586
Chicken strips	16	282	Chicken fillet	48	64
Pickles	54	126	Miscellaneous pockets	n/a	239
Salad	65	688	Chicken sandwiches	81	807
Entrée items	456	1,063	Other	n/a	15

Source: *School Food Purchase Study*, 1998.

## 5. Programs Served other than NSLP and SBP

Many school food programs are used to prepare foods for purposes other than serving lunch and/or breakfast to enrolled students. Historically, SFAs have provided meals to school staff and have catered school events. In more recent years, they have extended their reach to include a variety of other food assistance programs, some unique to the local community and some FNS-sponsored.

School districts are not required to maintain separate records for foods acquired for these other purposes if the revenues generated by the sale of these foods meets or exceed the cost. Nonetheless, it is useful to know the general magnitude of these activities for purposes of making inferences with regard to foods used in preparing student meals. The measurements of food acquisition that are described later in this report include acquisitions for these uses as well as for school meals.

It is estimated that just over 80 percent of all public unified NSLP school districts had sales in addition to student meals in SY 1996/97. Nationally, the sales from these programs in SY 1996/97 is estimated at \$547 million.

Meal sales to adult staff in 80.7 percent of all districts was the most frequently noted source of other sales followed by 57.6 percent of all districts that provided food for school events. These were the two most prominent sources of other food program sales, regardless of school district size.

With increasing enrollment size, SFA involvement in other food programs increases. It is noteworthy that half or more of all districts with an enrollment of 25,000 or more were estimated to have provided meals through the Head Start, Child and Adult Care Feeding, and Summer Food Service Programs in SY 1996/97. This is also reflected in the somewhat greater share of total revenue accounted for by receipts from these programs, as noted earlier.

**Table III-18: Share of Public Unified NSLP School Districts Serving Other Programs, by Size of District and Type of Program, SY 1996/97**

Type of program	Less than 1,000	1,000 to 4,999	5,000 to 24,999	25,000 or more	All districts
	-----percent of all school districts-----				
Adult staff	74.3	84.0	83.5	84.2	80.7
Head Start	5.8	36.7	33.0	58.5	26.3
Elderly feeding	0.0	3.1	6.2	11.1	2.7
Child and Adult Care feeding	0.0	7.1	16.8	50.6	7.2
Day care	3.0	7.4	23.8	20.2	8.5
Summer Food Service Program	14.6	21.4	40.9	54.2	22.7
Other schools	2.1	10.4	24.1	29.2	10.0
Disaster feeding	0.0	11.3	19.1	26.1	9.0
School events	33.5	69.7	67.5	88.1	57.6
Public Catering	2.5	24.5	29.6	24.1	17.8
Other	0.0	3.4	12.8	7.5	3.6

Source: *School Food Purchase Study*, 1998.

## 6. Food Service Management Companies

School districts have increasingly turned to food service management companies (FSMCs) to run their food programs in recent years. The General Accounting Office estimated that about 8 percent of all SFAs participating in the NSLP in SY 1994/95 used FSMCs, up from around 4 percent in SY 1987/88.<sup>1</sup> An earlier study conducted for FNS found that approximately 5.6 percent of all school districts participating in the NSLP in SY 1990/91 were using FSMCs.<sup>2</sup>

1/ General Accounting Office, School Lunch Program: Role and Impacts of Private Food Service Companies, August 1996.

2/ Price Waterhouse, Study of Food Service Management Companies in School Nutrition Programs, USDA, FNS, OAF, June 1994.

The results of this survey are consistent with these earlier findings, indicating that 9.7 percent of all public unified school districts participating in the NSLP were using FSMCs in SY 1996/97. This suggests that FSMCs are continuing to make inroads into the school food market. A slightly smaller share of national enrollment (9.2 percent) is represented by FSMCs, compared to the share of districts where they operate.

It appears from the distribution of FSMCs by district size shown in Table III-19 that these operations have concentrated among mid-size school districts, those in the 1,000 to 24,999 size range. This is consistent with findings of the study conducted for FNS cited above. A comparison of the mean number of years these districts have been under food service management companies suggests that FSMCs have not been serving the largest districts quite as long and that it has been even more recently that they have begun managing among the smallest districts.

**Table III-19: Food Service Management Companies Serving  
Public Unified NSLP School Districts, by Size of District, SY 1996/97**

Item	All districts	Less than 1,000	1,000 to 4,999	5,000 to 24,999	25,000 or more
Number of districts with food service management company	975	209	582	166	18
Share of all districts	9.7	6.1	11.6	11.8	7.1
Average number of years under food service management company	9.5	4.0	10.3	14.0	8
Total enrollment of food service management company districts	3,850,327	159,140	1,356,446	1,190,166	1,144,575
Share of total national enrollment	9.2	7.6	11.3	9.0	8.0
Average enrollment of food service management company districts	3,949	761	2,331	7,170	63,588

Source: *School Food Purchase Study, 1998.*

As indicated by the estimate of mean district enrollment, FSMCs are operating in school districts of widely different size. The mean enrollment ranged from 761 in the smallest size class to 64,093 in the largest. Of the 28 FSMC-operated SFAs in the sample, only one is known to have split managerial responsibility within the district, with some schools FSMC-run and some schools managed by the district's food service director. In this particular case, the division of responsibility was viewed as temporary in that the district was moving toward an entirely FSMC-run program.

A comparison of FSMC and non-FSMC districts indicates that a slightly higher share of FSMC operations are in districts with less than 25 percent of their students from households below the poverty level as well as in districts with more than 75 percent of their students from poor households (Table III-20).

**Table III-20: Comparison of Public Unified NSLP School Districts  
Under FSMC Operation and Not Under FSMC Operation,  
by District Income and Urbanicity, SY 1996/97**

Item	Operated by FSMCs		Not operated by FSMCs	
	Number of districts	Percent	Number of districts	Percent
<b>Share of students in poor households</b>				
Less than 25 percent	693	71	5,545	61
25 to 75 percent	253	26	3,465	38
Greater than 75 percent	<u>29</u>	<u>3</u>	<u>97</u>	<u>1</u>
Total	975	100	9,108	100
<b>Degree of urbanicity</b>				
Unclassified	19	2.0	33	0.4
Large central city	71	7.2	56	0.6
Mid-size central city	14	1.5	364	4.0
Urban fringe of large city	172	17.7	682	7.5
Urban fringe of mid-size city	58	5.9	540	5.9
Large town	52	5.4	169	1.9
Small town	416	42.7	3,138	34.5
Rural	<u>172</u>	<u>17.6</u>	<u>4,125</u>	<u>45.3</u>
Total	975	100.0	9,108	100.0
<b>A la carte sales per enrolled student</b>				
	\$47		\$34	

Source: School Food Purchase Study, 1998.

## **7. Menu Planning Systems**

A key element of the reform of the school meals program that got underway in 1994 under the banner of the School Meals Initiative (SMI) was the required adoption of one of four available menu planning approaches. Regardless of which approach or combination of approaches is used by an SFA, foods served over a one week menu cycle are required to meet updated nutritional requirements that satisfy the Dietary Guidelines for Americans developed jointly by the USDA and the Department of Health and Human Services.

Two of the optional approaches, Nutrient Standard Menu Planning (NuMenus) and Assisted Nutrient Standard Menu Planning (Assisted NuMenus), are computerized systems that in addition to their flexibility make it possible to focus on the nutritional content of the weekly menu rather than the nutritional content of individual foods. The Food-Based Menu Planning and Traditional Meal Patterns systems focus on the food components of the menu. The latter approach most closely approximates the system that was in use prior to the adoption of the new regulations.

In addition to granting SFAs additional flexibility in the implementation of these options, legislation approved in 1996 authorized SFA's to use "any reasonable approach" in accordance with Department Guidelines to meeting the requirements of the Dietary Guidelines. Thus, some SFAs are following procedures other than the prescribed approaches described above.

School Year 1996/97 was the first year in which the new menu planning requirements were in effect. However, States were allowed to issue waivers that allowed school districts to delay implementation for up to two years. As a result, and because USDA encouraged SFAs to phase-in the new approaches, some school districts were using more than one system in SY 1996/97.

As shown in Table III-21, the vast majority of school districts (81.6 percent) were using either the food-based or traditional approaches to menu planning in SY 1996/97. While some of these districts were also experimenting with other approaches, including the computerized systems, most were not. Only 3.0 percent of all districts were using a combination of approaches. Nearly one-fifth (19.6 percent) of all SFAs were using the NuMenu or Assisted NuMenu approaches in SY 1996/97.

The use of alternative menu planning systems at the school level (Table III-22) corresponds closely with use at the district level. Nearly four of every five schools (79.6 percent) were using either the food-based or traditional approaches in SY 1996/97, while 19.1 percent of all schools

were using one of the computerized approaches. The rate of use of NuMenus and Assisted NuMenus is somewhat greater among elementary schools (21.6 percent) than among middle/secondary (17.0 percent) or schools falling in the "other" grade category (13.2 percent).

**Table III-21: Number of Public Unified NSLP School Districts by Type of Menu Planning System, SY 1996/97**

Menu planning system	Assisted					Total
	Nu Menu	Nu Menu	Food-based	Traditional	Other	
	-----number of school districts-----					
Nu Menu	<b>1,434</b>	0	138	94	0	1,666
Assisted Nu Menu	0	<b>278</b>	0	32	0	310
Food-based	138	0	<b>4,697</b>	21	0	4,856
Traditional	94	32	21	<b>3,203</b>	14	3,364
Other	0	0	0	14	<b>171</b>	185
<b>Total</b>	1,666	310	4,856	3,364	185	10,381

Note: Entries on the diagonal indicate the number of school districts that are using one menu planning system throughout the district; all other entries indicate the number of school districts using the indicated combinations. (To the extent school districts use more than one system, they are represented more than once in this matrix. The total number of entries (10,381) exceeds the total number of districts (10,083) by the extent of this double-counting.)

Source: *School Food Purchase Study*, 1998.

**Table III-22: Number of Schools in Public Unified NSLP School Districts by Type of Menu Planning System and Grade Category, SY 1996/97**

Menu planning system	Elementary	Middle/ Secondary	Other	Total
	-----number of schools-----			
Nu Menu	8,049	3,572	989	12,610
row percent	63.8	28.3	7.8	100.0
column percent	19.6	15.2	10.2	17.0
Assisted Nu Menu	823	423	290	1,537
row percent	53.6	27.5	18.9	100.0
column percent	2.0	1.8	3.0	2.1
Food-based	17,925	10,818	4,844	33,587
row percent	53.4	32.2	14.4	100.0
column percent	43.6	46.0	50.2	45.2
Traditional	13,898	8,212	3,439	25,549
row percent	54.4	32.1	13.5	100.0
column percent	33.8	34.9	35.6	34.4
Other	374	507	96	977
row percent	38.3	51.9	9.8	100.0
column percent	0.9	2.2	1.0	1.3
Total	41,070	23,532	9,658	74,260
row percent	55.3	31.7	13.0	100.0
column percent	100.0	100.0	100.0	100.0

Note: Only schools that participate in the NSLP are shown. Percentages might not add to 100.0 due to rounding.

Source: *School Food Purchase Study, 1998.*

## **8. Meal Preparation Facilities**

Study respondents were asked to identify the number of kitchens they operated using the following system of classification:

- Central Kitchens. Meals are prepared for serving at receiving or satellite schools. No student meals are served on-site at a central kitchen.
- Base Kitchen. At this type of kitchen, meals are prepared for serving on-site **and** for shipment to other locations (including multiple locations within the same school).
- Receiving or Satellite Kitchens. These kitchens obtain partially or fully prepared meals from central kitchens or an outside vendor, but other than re-heating or refrigeration, no food preparation occurs at a satellite kitchen.
- Combination Kitchens. Some food is prepared for on-site consumption and some food is received fully or partially prepared from a central or base kitchen.
- On-site Kitchens. From these kitchens, all meals served are prepared at the facility in which the kitchen is located. No meals are shipped to other locations.
- Other. This kitchen type is described by the respondent.

Public unified NSLP school districts operated an estimated 72,150 kitchens of various types in SY 1996/97. This falls short of the estimated number of schools in this universe by about 4.7 percent.

Many school districts operate more than one type of kitchen within their systems. Not surprisingly, larger school districts are more likely to do this than smaller districts. On average, districts in the largest enrollment category operated three types of kitchens in SY 1996/97 while districts in the next smallest size class averaged just over two kitchen types while most of the remaining districts operated only one type.

On-site kitchens are the most prevalent type, particularly among smaller districts where they were found in 90.0 percent of all districts and accounted for 81.5 percent of the total number of kitchens. While base kitchens are found in all but the smallest districts, central kitchens play a more prominent role among the largest districts. Of the largest districts, 32.0 percent operate central kitchens and 78.2 percent operate satellite kitchens, many of which are presumably served by their associated central kitchens.

**Table III-23: Number of Public Unified NSLP School District Kitchens by Type of Kitchen and Size of School District, SY 1996/97**

School district enrollment	Central kitchens		Base kitchens		Satellite kitchens		Comb. kitchens		On-site kitchens		Other types		All kitchens	
	# of districts	# of kitchens	# of districts	# of kitchens	# of districts	# of kitchens	# of districts	# of kitchens	# of districts	# of kitchens	# of districts	# of kitchens	# of districts	# of kitchens
Less than 1,000	0	0	413	413	218	363	285	285	3,071	4,681	0	0	3,411	5,742
row percent	0.0	0.0	12.1	7.2	6.4	6.3	8.4	5.0	90.0	81.5	0.0	0.0	100.0	100.0
column percent	0.0	0.0	9.6	5.3	6.6	2.1	12.3	3.4	39.0	12.2	0.0	0.0	33.8	8.0
1,000 - 4,999	89	89	2,911	3,640	2,215	6,040	1,455	3,144	3,525	12,502	67	86	5,009	25,500
row percent	1.8	0.4	58.1	14.3	44.2	23.7	29.0	12.3	70.4	49.0	1.3	0.3	100.0	100.0
column percent	31.4	29.5	67.7	46.8	67.2	35.4	62.5	37.3	44.8	32.5	48.8	55.2	49.7	35.3
5,000 - 24,999	115	124	837	2,263	664	4,089	468	2,725	1,083	11,592	44	44	1,410	20,837
row percent	8.1	0.6	59.4	10.9	47.1	19.6	33.2	13.1	76.8	55.6	3.2	0.2	100.0	100.0
column percent	40.2	41.0	19.5	29.1	20.2	24.0	20.1	32.3	13.8	30.2	32.7	28.6	14.0	28.9
25,000 or more	81	89	142	1,461	198	6,565	118	2,282	186	9,649	25	25	253	20,071
row percent	32.0	0.4	56.0	7.3	78.2	32.7	46.8	11.4	73.5	48.1	10.0	0.1	100.0	100.0
column percent	28.4	29.5	3.3	18.8	6.0	38.5	5.1	27.0	2.4	25.1	18.5	16.2	2.5	27.8
All districts	285	303	4,302	7,775	3,295	17,058	2,326	8,436	7,865	38,423	136	155	10,083	72,150
row percent	2.8	0.4	42.7	10.8	32.7	23.6	23.1	11.7	78.0	53.3	1.4	0.2	100.0	100.0
column percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: If districts use more than one kitchen type, they are counted with each kitchen type. Number of districts under all kitchens will be less than the total for the row.

Source: *School Food Purchase Study*, 1998.

## **9. Miscellaneous Program Features**

**SFAs differentiate their feeding programs in many different ways. A wide array of food service options are employed. Some of the program features that are in current use are listed in Table III-24. It will be noted that the percentages displayed here are for schools and not school districts since many of these features are made available for some schools within a given district but not for others.**

Of the features listed, *offer versus serve* was found to be the most widely used with an estimated 85.1 percent of all schools using it. And, though a higher share of schools in the very largest school districts provided the option, 73.0 percent of all schools in the smallest districts did too.

For some of these program features, the share of schools that offered the feature rose sharply with increased district size. This includes the practice of offering more than one entrée and offering foods on an a la carte basis, whether for lunch or breakfast. For other features, however, the relationship went in the opposite direction. This is most evident for schools featuring an *open campus*. The share of schools with an open campus increases from only 3.4 percent among the largest districts to 24.8 percent among the smallest.

The share of schools operating vending machines and using electronic debit cards was also found to be highest among schools in the smallest districts. Respondents were not asked to indicate under whose control vending machines were operated within the school district. Since electronic debit cards are primarily used to track the status of paying customers, the much higher incidence of free and reduced-price meals among the largest school districts probably explains the smaller share of these schools using this technology.

The breakdown of food service options by grade category is displayed in Table III-25. Not surprisingly, most of these options are available with greater frequency among middle/secondary schools than among elementary schools.

**Table III-24: Food Service Options Offered by Public Unified NSLP School Districts, by Size of District, SY 1996/97**

Food service option	All districts	Less than 1,000	1,000 to 4,999	5,000 to 24,999	25,000 or more
		-----percent of schools-----			
A la carte breakfast	26.7	12.7	21.8	32.7	32.4
A la carte lunch	54.1	25.2	51.6	61.0	61.5
More than one entrée	56.3	25.3	53.6	64.0	63.8
Offer versus serve	85.1	73.0	80.1	87.5	93.9
Open campus	10.0	24.8	12.3	7.9	3.4
Vending machines	19.6	23.0	21.4	22.0	13.3
Snack bars	12.8	11.7	14.2	15.6	8.5
Electronic debit cards	13.0	19.5	13.9	15.9	6.3
Student stores	8.6	4.2	7.6	13.4	6.8

Source: *School Food Purchase Study*, 1998.

**Table III-25: Food Service Options Offered by Public Unified NSLP School Districts, by Grade Category, SY 1996/97**

Food service option	All schools	Elementary	Middle/secondary	Other
		-----percent of schools-----		
A la carte breakfast	26.7	20.3	45.6	9.3
A la carte lunch	54.1	47.7	74.6	33.3
More than one entrée	56.3	54.2	70.5	32.8
Offer versus serve	85.1	84.4	93.4	69.0
Open campus	10.0	4.7	19.9	7.9
Vending machines	19.6	5.6	43.2	20.7
Snack bars	12.8	4.9	30.9	2.9
Electronic debit cards	13.0	13.2	16.3	5.1
Student stores	8.6	4.1	19.3	2.3

Source: *School Food Purchase Study*, 1998.

**10. Participation in Reimbursable Lunch Programs**

Participation rates serve as an indicator of the extent to which eligible students are taking part in the NSLP. Since 1970, overall participation rates have generally ranged between 55 and 60 percent. Calculated on a slightly different basis than used here, USDA data imply a participation rate in SY 1996/97 of 57.1 percent. For this study, participation rates were calculated by dividing the number of lunches served in SY 1995/96 by the number of students eligible for that type of lunch, adjusted by the overall rate of attendance for the district. The rate of participation for full-price lunches was calculated by dividing the total number of full-price lunches by total enrollment less the number of students certified eligible for free and reduced-price meals, again adjusted by the rate of attendance.<sup>1</sup>

Participation rates for free, reduced-price, and full-price lunches, by size of district, are displayed in Table III-26. As past studies have found, participation rates are highest for free lunches and in smaller districts and lowest for full-price lunches and in the largest districts.<sup>2</sup> Across all districts and meal types, public unified school districts are estimated to have achieved a participation rate of 56.6 percent in SY 1996/97. Among districts of different sizes, the widest disparity in rate of participation is found within the full-price category. In the smallest districts, participation in full-price lunches averages 59.1 percent compared to only 32.8 percent among the largest districts. As indicated earlier, a la carte foods are substantially more available in schools of larger districts though these schools are also less likely to have an open campus, vending machines, or snack bars.

**Table III-26: Mean Rates of Participation in the Reimbursable Lunch Programs of Public Unified NSLP School Districts, by Meal Type and Size of School District, SY 1996/97**

School district enrollment	Free lunches	Reduced-price lunches	Full-price lunches	All reimbursable lunches
	-----percent of certified eligible students-----			
Less than 1,000	81.4	77.6	59.1	65.2
1,000 to 4,999	78.2	71.1	47.5	56.8
5,000 to 24,999	77.0	67.9	45.5	55.3
25,000 or more	76.2	59.5	32.8	52.4
All districts	77.9	69.1	45.9	56.6

Source: *School Food Purchase Study*, 1998.

Not all students eligible for free or reduced-price meals become formally approved to receive them or certified. The subset of eligible students, those that are certified, is therefore the more appropriate participation universe. However, this information was not available to the study.

USDA, FNS, *Child Nutrition Program Operations Study: Third Year Report*, January 1993, pp. 28-40.

#### **IV. MARKET AND POLICY SETTING**

Food utilization is affected by many influences, some short-term in effect and some longer-term. While the principal interest of this study is in the more permanent trends in school food procurement, short-term influences are inevitably part of the picture. Since the supply (and price) of individual foods can be highly variable as a result of the many uncontrollable factors that affect agricultural production, measures of food use at any one point in time offer an imperfect indication of longer-term trends and rates of utilization. While some foods are more susceptible to pronounced swings in availability than others (e.g. the effects of a freeze in Florida on the availability and price of orange juice), the relative prices of nearly all foods are in a continual state of change as a result of changing market conditions.

To some extent, instability in food prices has been lessened in recent years by changes in the food system. Two changes are particularly noteworthy. On the supply side, foods are increasingly acquired in a global marketplace. This is especially true of highly seasonal foods, such as fresh fruits and vegetables, that are particularly vulnerable to supply interruptions and sharp swings in price, though nearly all foods (even water) are now traded internationally. Globalization of the marketplace has therefore had the effect of evening-out supply, geographically and seasonally, and stabilizing prices.

Another change, this one on the use side, has had a similar effect. Food products in general, and those purchased by institutional users such as public schools in particular are much more highly processed than in the past. As a result, the portion of value added at the producer level (where much of the instability in price originates) accounts for a smaller share of the price of the acquired food. And since prices of the other cost components – primarily labor and to a lesser extent capital – are less volatile, this too has had the effect of dampening price variability at the user level.

In addition to market conditions, another factor that can obscure longer-term trends are those associated with public policy actions. School food programs are particularly susceptible to the effects of policy since they are directly dependent on decisions made each year by the US Department of Agriculture in purchasing foods for donation under the Commodity Distribution Program. In addition, during SY 1996/97, participants in the NSLP/SBP were affected by significant changes in overall program requirements.

The remainder of this Chapter is devoted to an examination of these influences, beginning with a brief review of the food market in SY 1996/97.

## **A. Market Conditions**

### **1. The Supply/Demand Situation in SY 1996/97**

Producer prices for all finished consumer foods rose 3.2 percent during SY 1996/97. Among the major food categories, prices of fruit in all forms (fresh, canned, and frozen) moved higher while prices of fresh vegetables dropped from the unusually high levels of the year before. Potato prices were sharply lower in 1996/97, down 25 percent from the year before as production soared to a record high level.

Livestock product prices generally moved higher during this period. The largest price advances were registered by pork (+15.1 percent) and processed eggs (+15.8 percent), though fluid milk prices rose substantially too (+7.8 percent). In September 1996, the price of fluid grade milk at the farm gate reached a record high. Prices of manufactured dairy products followed, though the sharply higher prices were short-lived. The only livestock product that experienced lower prices during the period was turkey, with prices for the 12-month period down 4.5 percent.

### **2. Comparison to the Supply/Demand Situation in SY 1984/85**

The overall supply/demand situation in 1984/85, as reflected in wholesale prices, was not materially different from that experienced in 1996/97. The index for all finished consumer foods rose more slowly in SY 1984/85, increasing by 1.8 percent from the year before.

As can be seen in the table below, prices of citrus fruits and juices experienced an even sharper rise in 1984/85 than in the period of this study. However, prices of other fruits were relatively stable. Fresh vegetables were in abundant supply in 1984/85, as they were in 1996/97.

Among livestock products, supplies of both beef and broilers were abundant during the period of the earlier study. A Milk Diversion Program that provided incentives to dairy farmers to reduce the size of their dairy herds was in operation during this period and was adding to the supply of beef, particularly lower grade beef used in hamburger. The wholesale price of beef fell 1.6 percent during SY 1984/85 while the price of broilers dropped 6.8 percent. Prices of processed and fresh eggs both fell sharply. The only major product in this category that experienced much price strength due to limited supply was turkey, with an increase in wholesale price of 10.7 percent. In contrast to the situation in 1996/97, the price of dairy products rose nominally in 1984/85.

**Table IV-1: Comparison of Changes in Selected Components of the  
Producer Price Index, SYs 1984/85 and 1996/97**

Foods	Change between SYs 1984/85 and 1996/97	Change from previous year	
		SY 1984/85	SY 1996/97
-----percent-----			
All finished consumer foods	+28.3	+1.8	+3.2
Fruits			
Fresh citrus	+6.5	+16.8	+11.2
Other fresh fruit and berries	-2.0	-0.1	+28.8
Canned fruits and juices	+26.9	+4.3	+3.4
Frozen fruits, melons, and berries	+21.2	-0.3	+11.2
Frozen fruit juices and ades	-3.4	+18.0	-0.5
Dried and dehydrated fruits	+40.6	-10.7	+1.4
Vegetables			
Fresh vegetables (except potatoes)	+16.1	-14.7	-12.3
Dry vegetables	-3.2	-3.2	+11.5
Canned vegetables and juices	+19.4	-1.8	+1.6
Frozen vegetables	-1.4	+3.5	+1.1
Cereals and bakery products			
Bakery products	+55.1	+4.9	+3.5
Other cereal products	+46.5	+2.5	-5.4
Dairy products			
Fluid milk	+35.3	+2.0	+7.8
Cheese	+21.3	-0.1	+3.0
Ice cream and frozen desserts	+28.9	+3.2	+5.6
Meat and poultry			
Boneless beef (including hamburger)	-19.1	-1.6	+4.7
Pork	+40.8	+3.6	+15.1
Other meats (including frankfurters and canned meats)	+18.6	+1.9	+4.6
Broilers	+14.4	-6.8	+4.6
Turkey	-13.6	+10.7	-4.5
Seafood			
Frozen package fish and seafood	+95.8	-6.2	-0.8
Canned and cured seafood	+18.0	-1.6	+0.6
Fats and oils			
Shortening and cooking oil	+3.6	+6.5	-2.0
Eggs			
Processed eggs	+44.4	-28.3	+15.8
Fresh eggs	+7.1	-25.9	+4.0
Other			
Canned specialties (including canned beans and soup)	+49.4	+4.0	+2.4
Frozen specialties (including frozen pies and dinners)	+27.7	+4.7	+1.8
Meat sauces	+27.7	+4.2	+1.6
Other processed foods (including snack foods, salad dressing dressings, dry mix preps.)	+30.1	+8.4	+2.6

Source: Department of Labor, Bureau of Labor Statistics.

The producer price index for all finished consumer foods in SY 1996/97 was 28.3 percent above the level in SY 1984/85. Among the major food categories, producer price indexes in SY 1996/97 exceeded their SY 1984/85 levels by more than the average amount for: cereals and bakery products, pork, frozen fish and seafood, fluid milk, processed eggs, and canned specialty foods. Since these foods had become more expensive relative to other major food categories, some negative impact on rates of utilization due to price might have resulted.

Prices of fruits, vegetables, beef, and poultry were up less than the average of all foods in SY 1996/97, compared to SY 1984/85. An opposite effect could therefore have occurred regarding these foods. That is, their lower prices relative to other foods might have contributed to higher rates of use than would otherwise have occurred.

## **B. The Policy Setting**

As noted above, at least two policy measures in SY 1996/97 potentially affected school food procurement. One of these measures, the Commodity Donation Program, is an on-going program that has a direct and clearly defined effect on the types and quantities of food acquired by SFAs. Since this program was in place at the time of the earlier study too, its impact on school food procurement was considered then too. The other element of the policy setting in SY 1996/97 that potentially affected procurement practices was the School Meals Initiative (SMI) and the collective actions that were being taken to implement it. This was the first school year in which school districts participating in the NSLP were required, unless granted a waiver by their State Agency, to have adopted one of four alternative approaches to menu planning and to have served meals that met the Dietary Guidelines for Americans. We examine actions taken through the Commodity Donation Program first, followed by a brief discussion of possible implications of the implementation of the SMI.

### **1. The Commodity Donation Program, SY 1996/97**

The Commodity Donation Program plays a significant role in school feeding programs. In 1984/85, foods donated under this program accounted for approximately 30 percent of the value of total school food acquisitions.<sup>1</sup> Funding for the program is down from the levels of the 1980s, though it continues to play an important role.

---

1. This estimate is based on donated foods valued at commercial prices.

The commodities distributed through the Commodity Donation Program are divided into two major categories: (1) entitlement commodities and (2) bonus commodities. Entitlement commodities are made available to SFAs on the basis of the number of reimbursable lunches they serve. All participating school districts are *entitled* to these foods. Bonus commodities are made available to participating school districts on the basis of availability and in quantities that districts can effectively use without waste. Bonus commodities have traditionally been foods that were in a state of major over-supply. Prior to the 1990s, government-owned dairy products acquired under the price support program often accounted for a large share of the bonus commodities.

Trends in the overall size of commodity donations made through school food programs are shown in Table IV-2. While the overall (current) dollar value of the program is somewhat lower than it was for most of the 1980s, the bonus component is sharply lower, having fallen to only \$19.0 million in SY 1996/97.

**Table IV-2: Commodity Donations Through  
School Food Programs, FY 1980 – FY 1997**

Fiscal year	Entitlement	Bonus	Total
	-----million dollars-----		
1980	765.5	139.0	904.5
1981	578.9	316.3	895.2
1982	426.2	330.8	757.0
1983	426.8	374.1	800.9
1984	440.5	386.9	827.4
1985	456.0	345.2	801.3
1986	445.7	376.2	821.9
1987	448.5	439.6	888.2
1988	466.3	347.4	813.7
1989	471.4	292.5	763.9
1990	465.9	153.8	619.7
1991	590.1	109.1	699.3
1992	583.4	123.9	707.2
1993	579.8	90.7	670.4
1994	629.2	96.1	725.3
1995	611.8	81.8	693.6
1996	647.2	45.8	693.0
1997	591.1	28.8	619.9
SY 1996/97	623.2	19.0	642.2

Sources: USDA, FNS, *Annual Historical Review, Fiscal Year 1995*, June 1997 and unpublished updates from the FNS National Data Bank.

Since foods distributed through the Commodity Donation Program are generally those that are available in the most abundant supply in the market, commodity donations tend to reinforce the behavior that would be expected in response to lower prices. That is, when supplies are large and prices low, there is an economic incentive for SFAs to substitute these same lower-priced foods for other relatively higher-priced foods, when it is feasible to do so. However, these circumstances also lead to greater purchases by USDA for purpose of donation. In this way, USDA's actions tend to reinforce the expected market reaction to lower prices.

The principal reason for taking a close look at the level and mix of foods donated by USDA in SY 1996/97 is to determine their possible influence on study findings relative to the procurement of individual foods. As indicated above, two commodities that were under price pressure in 1996/97 were potatoes and turkey. Not surprisingly, both of these commodities were donated in significant volume that year. Of all commodities donated, turkey accounted for 9.7 percent of the total value of donations and potatoes for 2.8 percent of total value. Collectively, they accounted for 14.1 percent of the total number of pounds of donated commodities.

As in most years, beef products accounted for the largest single share of commodity donations in SY 1996/97, whether measured in terms of dollar value or pounds. Beef, mostly in the form of frozen ground beef, accounted for 17.3 percent of the total quantity of commodity donations (including bonus commodities) and 24.9 percent of total dollars. While most fruits were in relatively short supply during the year, apples were an exception with a fall 1996 crop comparable to the year before. Thus, USDA donated a relatively large volume of apple products, including over 11 million pounds of fresh apples.

In SY 1996/97, the USDA was in the third year of a pilot project under which the Department of Defense (DOD) makes available its system for buying fresh produce for military installations to school districts in certain states. Eleven states were participating in the project at the time of this study. Orders are placed with DOD field offices, either directly by the participating school districts or indirectly through their State Distributing Agencies. School districts can assign a portion of their entitlement funds for this purpose. Participating states are also authorized to devote funds apportioned to them under Sections 4 and 11 of the National School Lunch Act, as amended, for this purpose.

## **2. Comparison of Commodity Donations, SYs 1984/85 and 1996/97**

As noted above, funding for the Commodity Donation Program has been declining in recent years. This is reflected in overall donations in SY 1996/97 that were 23 percent lower in dollar value and 22 percent lower in weight than those provided schools in 1984/85. Given that public school enrollment has risen 16.7 percent and the number of NSLP lunches served has risen by 13.3 percent over this period, in a relative sense the per unit level of assistance has fallen even more. Relative to the number of reimbursable meals served, the quantity of commodity donations was down 31 percent between the two periods.

The quantity of individual commodities delivered to child nutrition programs in the two years is compared in Table IV-3. Beyond the reduced volume of donations in SY 1996/97, there are several other features of the comparison worth noting, including the following.

- A much broader array of products is represented in SY 1996/97 than in the former period, despite the reduced level of funding. At the most detailed level in which they are reported for administrative purposes, 166 separate food items were distributed in SY 1996/97.<sup>1</sup> It is estimated that no more than half this number of food items were distributed in 1984/85. There are several reasons for the increased number of donated food items. In recent years, the USDA has made a concerted effort to improve the variety, quality, and nutritional content of its donated commodities. In May 1994, the Department established a Commodity Improvement Council and in October 1995 published a task force report<sup>2</sup> identifying a number of potential improvements in the commodity donation program. These and other activities have led to several changes including the addition of several reduced-fat foods and foods processed under the State Option Contract (SOC) Program, in addition to the availability of fresh produce items in certain states through procurement by the Department of Defense.

---

1/ This number underestimates the actual number of separate food items since it combines all fresh produce purchases by the Department of Defense into a single line item. It is estimated that the DOD has purchased over 60 different fresh fruit and vegetable products for participating school districts.

2/ US Department of Agriculture, *Improving USDA Commodities*, 1995 Tri-Agency Commodity Specification Review Report, October 1995.

**Table IV-3: Comparison of Donated Commodities Delivered  
to Child Nutrition Programs, SY 1984/85 and SY 1996/97**

Commodity	SY 1984/85		SY 1996/97	
	lbs. (1,000)	lbs. (1,000)/ meals (mil.)	lbs. (1,000)	lbs. (1,000)/ meals (mil.)
<b>Grain and grain products</b>				
Flour (including bulgar and rolled wheat)	181,735	46.7	78,464	17.8
Pasta – spaghetti	7,518	1.9	4,647	1.1
macaroni	7,006	1.8	3,163	0.7
other pasta	–		2,756	0.6
Rice	22,035	5.7	15,753	3.6
Rolled oats	5,431	1.4	1,487	0.3
Cornmeal/grits	6,633	1.7	2,367	0.5
<b>Legumes</b>				
Soybean oil	40,026	10.3	35,297	8.0
Soybean oil shortening	20,581	5.3	7,249	1.6
Salad dressing	–		76	0.0
Peanut butter	11,401	2.9	10,501	2.4
Peanuts/peanut granules	3,534	0.9	873	0.2
Dry edible beans	4,058	1.0	1,529	0.3
Canned dry beans	12,490	3.2	9,525	2.2
Vegetarian beans	25,642	6.6	10,124	2.3
<b>Nuts</b>				
Almonds	2,250	0.6	–	
Walnuts	1,486	0.4	–	
<b>Honey</b>				
	6,483	1.7	–	
<b>Fruit</b>				
Fresh – pears	5,414	1.4	3,973	0.9
apples	7,632	2.0	11,073	2.5
grapefruit	–		905	0.2
oranges	–		4,565	1.0
Canned – applesauce	46,065	11.8	23,362	5.3
peaches	25,520	6.6	16,417	3.7
mixed fruit	–		9,336	2.1
pears	30,376	7.8	22,311	5.1
cherries	–		3,156	0.7
purple plums	–		18	0.0
pineapple	1	0.0	13,635	3.1
apple slices	–		10,808	2.5

**Table IV-3: Comparison of Donated Commodities Delivered  
to Child Nutrition Programs, SY 1984/85 and SY 1996/97 (continued)**

Commodity	SY 1984/85		SY 1996/97	
	lbs. (1,000)	lbs. (1,000)/ meals (mil.)	lbs. (1,000)	lbs. (1,000)/ meals (mil.)
Frozen – peaches	–		8,196	1.9
tart cherries	12,914	3.3	8,671	2.0
apple slices	–		2,227	0.5
strawberries	–		8,905	2.0
blueberries	5,036	1.3	–	
Dried – figs (nuggets/paste/whole)	330	0.1	198	0.0
dry pitted prunes	2,371	0.6	984	0.2
prune puree	–		1,868	0.4
raisins	8,399	2.2	–	
date pieces	–		702	0.2
Orange juice (canned & froz. conc.)	–		5,465	1.2
<b>Vegetables</b>				
Fresh – misc. produce (DOD)	–		18,577	4.2
potatoes	–		4,555	1.0
Canned – green beans	22,290	5.7	–	
green peas	–		2,747	0.6
tomato paste	35,891	9.2	5,173	1.2
canned tomatoes	24,652	6.3	8,368	1.9
tomato sauce	–		4,778	1.1
carrots	–		3,167	0.7
spaghetti sauce	–		6,984	1.6
salsa	–		7,306	1.7
corn	23,988	6.2	8,432	1.9
sweet potatoes	10,608	2.7	5,026	1.1
Frozen – french fried potatoes	–		13,890	3.2
potato rounds	11,787	3.0	23,480	5.3
potato wedges	–		18,518	4.2
sweet potatoes	–		590	0.1
corn	3,894	1.0	10,480	2.4
carrots	–		3,457	0.8
green beans	1,038	0.3	–	
mixed vegetables	18,106	4.7		
green peas	–		3,209	0.7

**Table IV-3: Comparison of Donated Commodities Delivered  
to Child Nutrition Programs, SY 1984/85 and SY 1996/97 (continued)**

Commodity	SY 1984/85		SY 1996/97	
	lbs. (1,000)	lbs. (1,000)/ meals (mil.)	lbs. (1,000)	lbs. (1,000)/ meals (mil.)
<b>Meat and Poultry</b>				
Frozen ground beef	155,488	40.0	153,798	34.9
Miscellaneous beef products	4,428	1.1	6,069	1.4
Frozen pork	–		16,988	3.9
Canned pork	7,449	1.9	–	
Pork sausage	–		3,365	0.8
Frozen ham	–		15,345	3.5
Chicken – frozen cut-up	71,378	18.3	30,153	6.8
frozen whole	–		38,908	8.8
bulk chilled	4,932	1.3	–	
other forms	15,357	3.9	13,420	3.0
Eggs – whole frozen	–		8,455	1.9
dry mix	707	0.2	1,278	0.3
Turkey – frozen whole	12,127	3.1	9,308	2.1
frozen ground	–		35,588	8.1
frozen roasts	11,066	2.8	14,535	3.3
chilled bulk	1,656	0.4	–	
other forms	–		10,905	2.5
<b>Seafood</b>				
Canned tuna	5,145	1.3	–	
Canned salmon	2,249	0.6	–	
Frozen salmon	–		2,743	0.6
<b>Dairy Products</b>				
Cheese – cheddar	29,321	7.5	11,861	2.7
processed	75,829	19.5	35,972	8.2
mozzarella	30,384	7.8	23,903	5.4
Nonfat dry milk	24,499	6.3	4,141	0.9
Butter/butter oil	75,912	19.5	–	
<b>Total</b>	<b>1,182,548</b>	<b>304.0</b>	<b>926,064</b>	<b>210.1</b>

Note: Dash indicates that the commodity was not available that year.

Sources: *School Food Purchase Study: Agricultural Commodity Markets and School Food Acquisitions, 1984-85*, February 1986 and FDD, FNS records for SY 1994/95 and SY 1996/97.

- Fruits and vegetables (including potatoes) accounted for a larger share of total volume in the latter period (in combination, 32.9 percent versus 23.3 percent). This is due in very substantial measure to the DOD procurement program.
- The share of total volume accounted for by dairy products fell from 20.7 percent to 8.2 percent as no butter was reported to be donated in SY 1996/97 and the quantity of cheese was sharply lower as well. This is due to a combination of the exhaustion of government-held dairy stocks and the relatively high prices of dairy products in late 1996.

### **3. Implementation of the School Meals Initiative**

In late 1993, the USDA launched the School Meals Initiative for Healthy Children, a major reform of the school lunch program. The principal objective of the reform, an activity that is still underway, is to improve the nutritional content of school meals. Past results of USDA research have indicated that school meals, on balance, were not meeting key elements of the Dietary Guidelines, a set of dietary standards developed by the USDA and the Department of Health and Human Services. The Healthy Meals for Healthy Americans Act of 1994 (P. L. 103-448) mandated that each school's meals comply with the Dietary Guidelines by SY 1996/97, though states were granted authority to waive a school's compliance until SY 1997/98. The Healthy Meals for Healthy Children Act of 1996 (P. L. 104-149) granted schools additional flexibility in menu planning by authorizing them to use the SY 1994/95 meal pattern or "any reasonable approach" to meeting the requirements of the Dietary Guidelines.

The latter measure was enacted just over one month prior to the start of data collection for this study. Thus, while changes in program requirements, including the adoption of new menu planning techniques, had been under consideration for over two years, final regulations in support of the 1996 Act were still under development at the time this study got underway.

The impact of SMI on the results of this study can only be surmised in general terms. Many schools were already taking steps to improve the nutritional content of their meals at the time the SMI was begun. Thus, changes were already underway in some school districts. As indicated in Chapter III, by SY 1996/97, 19.6 percent of all SFAs had adopted one of the new, computer assisted menu planning systems (NuMenus or Assisted NuMenus). Thus, a significant number of SFAs were at least looking for ways to reduce the levels of fat, saturated fat, and sodium and to increase the level of carbohydrates. SFAs taking part in the Nutrient Standard Menu Planning Demonstration reported increased use of fresh fruits and vegetables, increased use of lower-fat products, and the addition of and/or increased portion sizes of foods high in carbohydrates.<sup>1</sup> Thus, at the time of this study many school districts were in a state of transition as they gave increased emphasis to the nutritional content of their meals.

---

<sup>1</sup> USDA, FCS, *Evaluation of the Nutrient Standard Menu Planning Demonstration: Findings from the Formative Evaluation*, September 1996.

#### **4. Other Policy Changes Since 1984/85**

In addition to the policy changes described above, there have been two other significant changes affecting the commodity distribution component of the NSLP. One is the series of changes that has taken place in the Milk Price Support Program, beginning in 1981 and extending through the 1996 Farm Bill.

By gradually reducing the level of support from \$13.10/cwt in 1981 to \$10.05/cwt in 1998, as well as making other changes in the size and distribution of program benefits, the incentive for over-producing milk has been substantially lowered. As a result, takeovers of manufactured dairy products by the USDA's Commodity Credit Corporation have all but disappeared, except for nonfat dry milk during periods of very low price. Furthermore, under terms of the 1996 Farm Bill, the milk price support program will be terminated at the end of calendar year 1999, ending government takeovers of manufactured dairy products altogether. Since government-acquired stocks of manufactured dairy products (primarily butter and cheese) have made up a significant share of commodity donations over the past 15 years, this change in policy has had and will continue to have a major effect on the composition of commodity donations. This is evident from the comparison of donations in SY 1984/85 and SY 1996/97 shown in Table IV-3. This change in dairy policy is also largely responsible for the sharp drop in the value of bonus commodities over the last 10 years.

Another policy change mandated by Congress is a requirement under the Healthy Meals for Healthy Americans Act of 1994 that at least 12 percent of total school lunch entitlement support (cash and entitlement commodities) be provided in the form of entitlement commodities each year. In FY 1985, entitlement commodities accounted for 13.3 percent of total USDA school food entitlement support. However, as cash reimbursements have risen in response to the growth in participation by children approved for free meals, the entitlement commodity share has fallen. In SY 1996/97, it had fallen to about 12 percent of total entitlement. As long as the proportion of free meals remains at or above the 1996 level, USDA reports that it will be necessary in most years<sup>1</sup> to increase the per meal commodity support more rapidly than the inflation adjustment would otherwise require.

Thus, while the move toward a more market-oriented dairy policy has resulted in a reduced level of overall donations and a reduced share for dairy products, the 12 percent minimum requirement has had the effect of establishing a floor under the total value of donated products distributed through school meals.

---

<sup>1/</sup> Whether the 12 percent threshold is met also depends on the rounding rules used to establish entitlement commodity reimbursement rates.