### Appendix A

#### Children Tables

Appendix A contains detailed statistical tables on the characteristics of children and their families. Highlights from these tables are reported in Chapter 2 of this report. Note that all results are weighted except the N's, which provide the unweighted sample size.

Exhibit A.1 AGE AND RACE/ETHNICITY OF CHILDREN

		Centers			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers		
Proportion of children that are:	N=246	N = 391	N = 320	N = 711		
Under Age 1	9%	0%	1 %	1 %		
Age 1-2	32%	0%	10%	7%		
Age 3-5	42%	99%	66%	75%		
Age 6-12	17%	1 %	23 %	17%		
Proportion of children that are:						
Hispanic/Latino	6%	11%	5%	7%		
Black	8%	44%	30%	34 %		
White	83 %	37%	50%	47%		
Asian or Pacific Islander	1 %	0%	1 %	1 %		
Native American	0%	2 %	0%	1%		
Other	2%	5%	13%	11%		

Source: Household Survey.

Exhibit A.2 CHILD CARE ARRANGEMENTS FOR CHILDREN

	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Children of all ages	N=236	N = 390	N = 317	N = 707
Hours/day in care:				
Less than 5	21%	43%	27%	32%
5 - 7	15%	44 %	13%	22%
8 or more	64 %	13 %	59%	46%
Mean hours/day in care	7.4	5.3	6.9	6.4
Median	8.0	5.0	8.0	7.0
Mean age of children in care:	3.4	4.3	4.6	4.5

Source: Household Survey.

Exhibit A.2a CHILD CARE ARRANGEMENTS FOR CHILDREN BY AGE OF CHILD

	Family Day	Head Start	Centers Child Care		
	Care Homes	Centers	Centers	All Centers	
Children under age 1	N = 13	N = 0	N = 7	N = 7	
Hours/day in care:					
Less than 5	0%				
5 - 7	14%				
8 or more	86%				
Mean hours/day in care	8.5				
Median	9.0				
Children ages 1-2	N = 78	N = 0	N=53	N = 53	
Hours/day in care:					
Less than 5	3%		3 %	3 %	
5 - 7	17%		17%	17%	
8 or more	81%		80%	80%	
Mean hours/day in care	8.5		8.1	8.1	
Median	9.0		8.0	8.0	
Children ages 3-5	N = 108	N = 386	N = 227	N = 613	
Hours/day in care:					
Less than 5	14%	43 %	10%	23%	
5 - 7	17%	43 %	16%	27%	
8 or more	69%	13%	74%	50%	
Mean hours/day in care	7.8	5.3	7.9	6.9	
Median	8.0	5.0	8.0	8.0	
Children ages 6-12	N=37	N=4	N = 30	N = 34	
Hours/day in care:					
Less than 5	88%		89%	88%	
5 - 7	9%		2%	4%	
8 or more	3%		8%	8%	
Mean hours/day in care	3.2		3.4	3.5	
Median	3.0		3.0	3.0	

Source: Household Survey.

Exhibit A.3 MEALS AND SNACKS RECEIVED BY ALL CHILDREN IN CARE

Family Day Care Homes	In Care	At Home	Neither
	N=230	N=230	N=230
Breakfast	63%	33%	3%
Lunch	84 %	16%	0%
Supper	1 %	95%	4 %
Snacks	86%	90%	1 %
Morning Snack	32%	N/A	N/A
Afternoon Snack	78%	N/A	N/A
Evening Snack	1 %	N/A	N/A
lead Start Centers	In Care	At Home	Neither
	N=406	N = 406	N=406
Breakfast	75%	21%	4%
Lunch	98%	1 %	1%
Supper	0%	97%	3%
Snacks	57%	93%	3%
Morning Snack	10%	N/A	N/A
Afternoon Snack	47%	N/A	N/A
Evening Snack	1 %	N/A	N/A
Child Care Centers	In Care	At Home	Neither
	N=313	N=313	N=313
Breakfast	49%	40%	12%
Lunch	75%	21%	4 %
Supper	3%	97%	0%
Snacks	91%	90%	1 %
Morning Snack	30%	N/A	N/A
Afternoon Snack	78%	N/A	N/A
Evening Snack	3%	N/A	N/A

Exhibit A.3 (continued)

ll Centers	In Care	At Home	Neither
	N=719	N=719	N=719
Breakfast	56%	34%	9%
Lunch	81%	15%	3%
Supper	2%	97%	1 %
Snacks	81%	91%	1 %
Morning Snack	24%	N/A	N/A
Afternoon Snack	69%	N/A	N/A
Evening Snack	2 %	N/A	N/A

Exhibit A.3a MEALS AND SNACKS RECEIVED BY CHILDREN AGES 1 TO 2

Family Day Care Homes	In Care	At Home	Neither
	N=81	N=81	N=81
Breakfast	72%	24 %	3%
Lunch	98%	1 %	1 %
Supper	0%	96%	4 %
Snacks	87%	97%	0%
Morning Snack	39%	N/A	N/A
Afternoon Snack	76%	N/A	N/A
Evening Snack	1%	N/A	N/A
Head Start Centers	In Care	At Home	Neither
	N=0	N=0	N=0
Breakfast	N/A	N/A	N/A
Lunch	N/A	N/A	N/A
Supper	N/A	N/A	N/A
Snacks	N/A	N/A	N/A
Morning Snack	N/A	N/A	N/A
Afternoon Snack	N/A	N/A	N/A
Evening Snack	N/A	N/A	N/A
Child Care Centers	In Care	At Home	Neither
	N=49	N=49	N=49
Breakfast	76%	11%	13%
Lunch	98%	2 %	0%
Supper	0%	98%	2%
Snacks	95 %	90%	0%
Morning Snack	16%	N/A	N/A
Afternoon Snack	95 %	N/A	N/A
Evening Snack	N/A	N/A	N/A

Exhibit A.3a (continued)

ll Centers	In Care	At Home	Neither
	N=49	N=49	N=49
Breakfast	76%	11%	13%
Lunch	98%	2%	0%
Supper	0%	98%	2 %
Snacks	95%	90%	0%
Morning Snack	16%	N/A	N/A
Afternoon Snack	95%	N/A	N/A
Evening Snack	N/A	N/A	N/A

Exhibit A.3b MEALS AND SNACKS RECEIVED BY CHILDREN AGES 3 TO 5

Family Day Care Homes	In Care	At Home	Neither
•	N=110	N=110	N=110
Breakfast	65%	32%	3%
Lunch	96%	4%	0%
Supper	1 %	95%	5 %
Snacks	92 %	91%	0%
Morning Snack	38%	N/A	N/A
Afternoon Snack	85%	N/A	N/A
Evening Snack	0%	N/A	N/A
Head Start Centers	In Care	At Home	Neither
	N=402	N=402	N=402
Breakfast	75%	21%	4%
Lunch	98%	1%	1 %
Supper	0%	97%	3%
Snacks	57%	93 %	3%
Morning Snack	11%	N/A	N/A
Afternoon Snack	47%	N/A	N/A
Evening Snack	1%	N/A	N/A
Child Care Centers	In Care	At Home	Neither
	N=235	N=235	N=235
Breakfast	58%	32 %	10%
Lunch	91%	8%	1 %
Supper	0%	99%	0%
Snacks	88%	95%	1 %
Morning Snack	39%	N/A	N/A
Afternoon Snack	74%	N/A	N/A
Evening Snack	0%	N/A	N/A

Exhibit A.3b (continued)

Il Centers	In Care	At Home	Neither
	N=637	N=637	N=637
Breakfast	64%	28%	8%
Lunch	94%	5%	1 %
Supper	0%	98%	1 %
Snacks	77 %	94%	2%
Morning Snack	28%	N/A	N/A
Afternoon Snack	64 %	N/A	N/A
Evening Snack	1 %	N/A	N/A

Exhibit A.3c MEALS AND SNACKS RECEIVED BY CHILDREN AGES 6 TO 12

Family Day Care Homes	In Care	At Home <sup>1</sup>	Neither
	N=39	N=39	N=39
Breakfast	42%	54%	4%
Lunch	26%	74%	0%
Supper	4 %	96%	0%
Snacks	70%	75%	4%
Morning Snack	1 %	N/A	N/A
Afternoon Snack	68%	N/A	N/A
Evening Snack	2%	N/A	N/A
lead Start Centers	In Care	At Home <sup>1</sup>	Neither
	N=4	N=4	N=4
Breakfast	N/A	N/A	N/A
Lunch	N/A	N/A	N/A
Supper	N/A	N/A	N/A
Snacks	N/A	N/A	N/A
Morning Snack	N/A	N/A	N/A
Afternoon Snack	N/A	N/A	N/A
Evening Snack	N/A	N/A	N/A
Child Care Centers	In Care	At Home <sup>1</sup>	Neither
	N=29	N=29	N=29
Breakfast	3%	80%	16%
Lunch	9%	74%	17%
Supper	13%	87%	0%
Snacks	99%	72%	0%
Morning Snack	6%	N/A	N/A
Afternoon Snack	85%	N/A	N/A
Evening Snack	13%	N/A	N/A

Exhibit A.3c (continued)

ll Centers	In Care	At Home <sup>t</sup>	Neither
	N=33	N=33	N=33
Breakfast	4%	80%	16%
Lunch	10%	73%	17%
Supper	13%	87%	0%
Snacks	98%	73%	0%
Morning Snack	6%	N/A	N/A
Afternoon Snack	84 %	N/A	N/A
Evening Snack	13%	N/A	N/A

<sup>&#</sup>x27;Includes meals received in school.

Exhibit A.3d MEALS AND SNACKS RECEIVED BY CHILDREN IN CARE 8 OR MORE HOURS PER DAY

Family Day Care Homes	In Care	At Home	Neither
	N=152	N=152	N = 152
Breakfast	80%	15%	4%
Lunch	100%	0%	0%
Supper	1 %	95%	5 %
Snacks	89%	91%	0%
Morning Snack	36%	N/A	N/A
Afternoon Snack	86%	N/A	N/A
Evening Snack	0%	N/A	N/A
lead Start Centers	In Care	At Home	Neither
	N=29	N=29	N = 29
Breakfast	99%	1 %	0%
Lunch	100%	0%	0%
Supper	0%	82 %	18%
Snacks	89%	91%	0%
Morning Snack	2%	N/A	N/A
Afternoon Snack	89%	N/A	N/A
Evening Snack	4%	N/A	N/A
Child Care Centers	In Care	At Home	Neither
	N=212	N=212	N=212
Breakfast	69%	18%	12%
Lunch	95 %	5%	0%
Supper	0%	99%	0%
Snacks	95%	93%	1 %
Morning Snack	33%	N/A	N/A
Afternoon Snack	90%	N/A	N/A
Evening Snack	0%	N/A	N/A

Exhibit A.3d (continued)

ll Centers	In Care	At Home	Neither
	N=241	N=241	N=241
Breakfast	72%	17%	11%
Lunch	95%	5%	0%
Supper	0%	98%	2 %
Snacks	94%	93%	1 %
Morning Snack	30%	N/A	N/A
Afternoon Snack	90%	N/A	N/A
Evening Snack	1 %	N/A	N/A

### Exhibit A.3e MEALS AND SNACKS RECEIVED BY CHILDREN IN CARE LESS THAN 8 HOURS PER DAY

Day Care Homes	In Care	At Home	Neither
	N=78	N=78	N=78
Breakfast	38%	60%	2%
Lunch	60%	39%	1%
Supper	1 %	97%	2%
Snacks	81%	89 %	2%
Morning Snack	25 %	N/A	N/A
Afternoon Snack	67%	N/A	N/A
Evening Snack	2%	N/A	N/A
ead Start Centers	In Care	At Home	Neither
	N=377	N=377	N = 377
Breakfast	71%	24%	4%
Lunch	98%	1%	1%
Supper	0%	99%	1%
Snacks	52%	93%	3%
Morning Snack	12%	N/A	N/A
Afternoon Snack	41%	N/A	N/A
Evening Snack	1%	N/A	N/A
nild Care Centers	In Care	At Home	Neither
	N=101	N=101	N = 101
Breakfast	20%	69%	11%
Lunch	48%	42%	10%
Supper	7%	93%	0%
Snacks	85 %	85 %	0%
Morning Snack	25%	N/A	N/A
Afternoon Snack	61 %	N/A	N/A
Evening Snack	6%	N/A	N/A

Exhibit A.4a

COMBINATIONS OF MEALS AND SNACKS RECEIVED BY
CHILDREN AGES 1 TO 2

	Family Day Care Homes	Child Care Centers
	N=97	N = 81
Lunch only	4%	3%
Afternoon snack only	1 %	1 %
Lunch and afternoon snack	4 %	14%
Morning snack and lunch	8%	0%
Breakfast and lunch	12 %	6%
Breakfast and afternoon snack	0%	0%
Breakfast, lunch, and afternoon snack	38%	58%
Breakfast, morning snack, and lunch	2%	2%
Morning snack, lunch, and afternoon snack	9%	8%
Breakfast, morning snack, lunch, and afternoon snack	19%	9%
Other	2%	0%

Note: Infants are excluded from this table because they do not eat regular meals. Head Start centers are excluded from this table because there was only one child in the 1- to 2-year age group in our on-site survey.

Exhibit A.4 PATTERNS OF MEALS AND SNACKS CONSUMED BY CHILDREN OF ALL AGES

	Family Day Care Homes	Head Start Centers	Centers Child Care Centers	All Centers
	N=285	N = 624	N=443	N = 1067
Lunch only	5%	6%	3%	4%
Afternoon snack only	11%	0%	20%	15%
Breakfast only	2%	1%	1 %	1 %
Lunch and afternoon snack	8%	16%	11%	12%
Morning snack and lunch	4%	6%	3%	4 %
Breakfast and lunch	8%	35%	6%	14%
Breakfast and afternoon snack	3%	0%	1 %	1 %
Breakfast, lunch, and afternoon snack	31%	30%	29%	30%
Breakfast, morning snack, and lunch	3%	2%	1 %	2%
Morning snack, lunch and afternoon snack	8%	0%	8%	6%
Breakfast, morning snack, lunch, and afternoon snack	14%	1 %	7%	5%
Other	3%	2%	10%	8%

Exhibit A.4a COMBINATIONS OF MEALS AND SNACKS RECEIVED BY **CHILDREN AGES 1 TO 2** 

	Family Day Care Homes	Child Care Centers
	N=97	N = 81
Lunch only	4%	3%
Afternoon snack only	1 %	1%
Lunch and afternoon snack	4%	14%
Morning snack and lunch	8%	0%
Breakfast and lunch	12%	6%
Breakfast and afternoon snack	0%	0%
Breakfast, lunch, and afternoon snack	38%	58%
Breakfast, morning snack, and lunch	2%	2%
Morning snack, lunch, and afternoon snack	9%	8%
Breakfast, morning snack, lunch, and afternoon snack	19%	9%
Other	2%	0%

Note: Infants are excluded from this table because they do not eat regular meals. Head Start centers are excluded from this table because there was only one child in the 1- to 2-year age group in our on-site survey.

Exhibit A.4b COMBINATIONS OF MEALS AND SNACKS RECEIVED BY **CHILDREN AGES 3 TO 5** 

	Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
	N=134	N=619	N=317	N = 936
Lunch only	3%	4 %	3%	4%
Afternoon snack only	3%	0%	2%	2 %
Breakfast only	0%	1 %	1 %	1 %
Lunch and afternoon snack	14%	16%	13%	14%
Morning snack and lunch	2%	7%	10%	8 %
Breakfast and lunch	5%	35%	7%	18%
Breakfast and afternoon snack	2%	0%	2%	1 %
Breakfast, lunch, and afternoon snack	35%	32%	35%	34%
Breakfast, morning snack, and lunch	4%	2%	0%	1%
Morning snack, lunch, and afternoon snack	12%	0%	10%	6%
Breakfast, morning snack, lunch, and afternoon snack	17%	1 %	11%	7%
Other	1 %	1%	6%	4 %

Exhibit A.4c COMBINATIONS OF MEALS AND SNACKS RECEIVED BY **CHILDREN AGES 6 TO 12** 

		Cent	<b>ers</b>
	Family Day Care Homes	Child Care Centers	All Centers
	N = 54	N=44	N=48
Lunch only	7%	0%	0%
Afternoon snack only	44%	84%	83%
Breakfast only	9%	0%	0%
Lunch and afternoon snack	2%	1 %	1 %
Morning snack and lunch	0%	1 %	1%
Breakfast and lunch	7%	1 %	1%
Breakfast and afternoon snack	9%	1 %	1 %
Breakfast, lunch, and afternoon snack	11%	1 %	1 %
Morning snack, lunch, and afternoon snack	0%	4%	4%
Breakfast, morning snack, lunch, and afternoon snack	3%	0%	0%
Other	9%	8%	8%

Note: Head Start centers were excluded from this exhibit because there were so few children of this age group. The All Centers column incorporates the few Head Start children that were included.

Exhibit A.4d COMBINATIONS OF MEALS AND SNACKS RECEIVED BY CHILDREN OF ALL AGES WHO ARE IN CARE 8 OR MORE HOURS PER DAY

	Family Day Care Homes	Head Start Centers	Centers Child Care Centers	All Centers
	N=189	N=29	N=274	N = 303
Lunch only	1 %	0%	1%	1 %
Afternoon snack only	0%	0%	2%	2%
Breakfast only	0%	0%	1 %	1 %
Lunch and afternoon snack	6%	1 %	7%	6%
Morning snack and lunch	1 %	0%	4%	3%
Breakfast and lunch	10%	7%	3%	3%
Breakfast and afternoon snack	1 %	0%	2%	2%
Breakfast, lunch, and afternoon snack	46%	85%	54%	56%
Breakfast, morning snack, and lunch	3%	0%	0%	0%
Morning snack, lunch, and afternoon snack	8%	0%	11%	10%
Breakfast, morning snack, lunch, and afternoon snack	21%	2%	15%	14%
Other	3%	4%	2%	2%

Exhibit A.4e COMBINATIONS OF MEALS AND SNACKS RECEIVED BY CHILDREN OF ALL AGES WHO ARE IN CARE LESS THAN 8 HOURS PER DAY

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
	N=96	N = 595	N = 169	N = 764
Lunch only	9%	5 %	4%	5%
Afternoon snack only	28%	1 %	40%	23 %
Breakfast only	5%	2%	1%	1 %
Lunch and afternoon snack	11%	17%	13%	15%
Morning snack and lunch	9%	7%	10%	9%
Breakfast and lunch	4%	38%	8%	21%
Breakfast and afternoon snack	5%	0%	0%	0%
Breakfast, lunch, and afternoon snack	8%	27%	6%	15%
Breakfast, morning snack, and lunch	2%	2%	1 %	1 %
Morning snack, lunch, and afternoon snack	10%	0%	6%	3%
Breakfast, morning snack, lunch, and afternoon snack	5%	1 %	1 %	1 %
Other	4%	1 %	10%	6%

Exhibit A.5 INCOME, HOUSEHOLD SIZE, AND POVERTY STATUS **OF FAMILIES** 

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Proportion of participating				
families whose annual income is:	N = 360	N = 876	N = 611	N = 1487
\$15,000 or less	9%	68%	30%	41%
\$15,001-\$30,000	18%	25%	31%	29%
Over \$30,000	73%	7%	39%	30%
Mean Income	\$40,854	\$13,018	\$28,708	\$24,156
Median Income	\$40,484	\$10,433	\$24,022	\$18,412
Proportion of participating families for which household size is:	N=383	N=917	N=645	N = 1562
2	7%	9%	11%	10%
3	36%	23%	30%	28%
4	36%	26%	33%	31%
5	16%	23%	17%	19%
6 or more	5%	18%	9%	11%
Mean Household Size	3.8	4.4	3.9	4.0
Median Household Size	4.0	4.0	4.0	4.0
Proportion of participating families whose income is:	N=360	N = 874	N=610	N = 1484
130% of poverty or less	11%	81%	39%	51%
131-185% of poverty	10%	10%	14%	13%
Over 185% of poverty	78%	8%	47%	36%
Mean Poverty Status	295%	85%	201%	168%
Median Poverty Status	286%	71%	180%	124%

Source: Household Survey and Nonresponse Survey.

Exhibit A.6 PROPORTION OF CHILDREN IN FAMILIES THAT RECEIVE BENEFITS FROM OTHER FEDERAL PROGRAMS

	Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Proportion of children whose families receive':	N=384	N = 919	N=647	N=1566
Food Stamps	9%	57%	23 %	33%
WIC benefits for:				
Any family member	12%	44 %	19%	26%
Target child <sup>2</sup>	92%	68%	74%	71%
Other family members only <sup>2</sup>	8%	32%	26%	29%
Proportion of children whose families receive <sup>3</sup> :	N=246	N=391	N = 320	N=711
AFDC	6%	30%	10%	16%
Housing subsidies	3%	19%	17%	18%
Other assistance	9%	25%	13%	16%

Source: Household Survey and Nonresponse Survey.

<sup>&</sup>lt;sup>1</sup>Participation in Food Stamps and WIC is based on responses to the Household Survey and the Nonresponse Survey (total N = 1950).

<sup>&</sup>lt;sup>2</sup>Percentage is relative to families who receive WIC benefits for any family member.

<sup>&</sup>lt;sup>3</sup>Participation in AFDC, housing subsidies and other assistance is based on response to the Household Survey only (total N = 957).

#### Appendix B

#### **Provider Tables**

Appendix B contains detailed statistical tables on the characteristics of the following three providers: family day care homes, Head Start centers, and child care centers. Highlights from these tables are reported in Chapter 3 of this report. Note that all results are weighted except the N's, which provide the unweighted sample size.

Exhibit B.1a

# PROGRAM SIZE: FAMILY DAY CARE HOMES (Own Children Excluded)

	Percent of Providers
Enrollment	N = 532
3 or fewer children	10%
4 to 6	38%
7 to 9	23 %
10 to 12	18%
13 or more	11%
Mean enrollment	8.0
By years of operation:	
1 to 2 years	7.4
3 to 5 years	7.1
6 to 10 years	8.2
Over 10 years	9.9
Median enrollment	7.0
Enrollment Less Than 30 Hours/Week	N = 502
No children	29%
Less than 25%	13%
25% to 49%	27%
50% to 99%	25%
All children	5%
Mean percent of children part-time	33%
Mean enrollment as % of capacity	87%
Daily Attendance	N = 501
3 or fewer	12%
4 to 6	48%
7 to 9	21%
10 to 12	15%
13 or more	3%
Mean number of children	6.6
Median number of children	6.0
Mean Absentee Rate	12.9%

Source: Family Day Care Home Survey.

Note: The providers' own children have been excluded from the measures of enrollment, attendance, and capacity.

Exhibit B.1b

# PROGRAM SIZE: FAMILY DAY CARE HOMES (Own Children Included)

	Percent of Providers
Enrollment	N=532
3 or fewer children	8%
4 to 6	37%
7 to 9	22%
10 to 12	22 %
13 or more	12%
Mean enrollment	8.3
By years of operation:	
1 to 2 years	8.3
3 to 5 years	7.5
6 to 10 years	8.6
Over 10 years	10.0
Median enrollment	7.0
Enrollment Less Than 30 Hours/Week	N = 502
No children	29%
Less than 25%	13%
25% to 49%	27%
50% to 99%	25%
All children	5 %
Mean percent of children part-time	33 %
Mean Enrollment As % of Capacity	87%
Daily Attendance	N = 501
3 or fewer	9%
4 to 6	48%
7 to 9	23%
10 to 12	18%
13 or more	3 %
Mean number of children	7.0
Median number of children	6.0
Mean Absentee Rate	12.9%

Source: Family Day Care Home Survey.

Note: The providers' own children have been included in the measures of enrollment, attendance, and capacity.

Exhibit B.2

PROGRAM SIZE: CENTERS

	Head Start Centers	Child Care Centers	All Centers
Enrollment	N = 896	N = 599	N = 1495
25 or fewer	34%	12%	20%
26 to 50	28%	33%	31%
51 to 75	16%	22%	20%
76 to 100	7%	15%	12%
101 to 150	9%	13%	11%
151 to 200	4%	4 %	4%
Over 200	3%	2%	3%
Mean enrollment	59.7	69.7	66.2
By years of operation:			
1 to 2 years	42.1	51.0	47.1
3 to 5 years	44.7	56.4	51.4
6 to 10 years	56.0	66.8	64.8
Over 10 years	64.7	81.0	75.2
Median enrollment	36.0	58.0	50.0
Enrollment Less Than 30 Hours/Week	N=820	N = 565	N=1385
No children	32 %	26%	28%
Less than 25%	4%	24%	17%
25% to 49%	2%	18%	13%
50% to 99%	6%	12%	10%
All children	56%	20%	33%
Mean % of Children Part-Time	61%	37%	46%

Exhibit B.2 (continued)

	Head Start Centers	Child Care Centers	All Centers
Mean Enrollment As %			
of Capacity	93%	85%	88%
Daily Attendance	N = 785	N = 572	N = 1357
25 or fewer	38%	21%	27%
26 to 50	30%	34 %	33%
51 to 75	14%	23 %	20%
76 to 100	7%	11%	9%
101 to 150	6%	9%	8%
151 to 200	3%	1 %	2%
Over 200	2%	1 %	1 %
Mean number of children	52.8	56.5	55.2
Median number of children	32.0	46.0	40.0
Mean Absentee Rate	11%	18%	15%

Sources: Sponsored Center Survey, Independent Center Survey.

Exhibit B.3

OPERATING AND SERVICE CHARACTERISTICS OF HOMES AND CENTERS

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Hours of Operation per Day	N = 524	N = 892	N = 599	N = 1491
Fewer than 4	0%	3%	5%	4%
4 to 8	4 %	62 %	18%	33%
9	9%	16%	3%	7%
10	23 %	10%	13%	12%
11	38%	5%	29%	20%
12	17%	2%	29%	19%
13 or more	9%	2%	4%	3 %
Mean number of hours	10.7	7.6	9.9	9.1
Median	10.7	8.0	11.0	10.0
Days of Operation per Week	N = 510	N = 871	N = 583	N = 1454
4 or fewer	2 %	31%	6%	15%
5	88%	67%	91%	83%
6	4%	0%	1 %	0%
7	6%	1 %	2%	2%
Years of Operation	N = 515	N = 769	N = 539	N = 1308
1 to 2	13%	11%	7%	9%
3 to 5	36%	26%	19%	22 %
6 or more	51%	63%	73%	70%
Mean years of operation	7.4	13.9	14.7	14.4
Median	6.0	12.0	10.0	11.0

Exhibit B.3 (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Legal Status (Centers Only)		N = 844	N = 564	N = 1408
Public agency		56%	39%	45%
Private agency		44 %	61%	55%
		N = 375	N = 346	N = 721
For profit		1 %	15%	11%
Not for profit		99%	85%	89%
Serve Children	N=532	N = 891	N = 598	N = 1489
Under age 1	43%	2%	33%	22%
1 to 3 years	92%	59%	77%	71%
4 to 6 years	83%	100%	92%	95%
Over 6 years old	54%	2 %	50%	33%

Sources: Family Day Care Home Survey, Sponsored Center Survey, Independent Center Survey.

Exhibit B.4

ELIGIBILITY FOR FREE OR REDUCED-PRICE MEALS

	Centers			
	Head Start Centers	Child Care Centers	All Centers	
Proportion of centers in which the				
percent of enrollment eligible				
for free or reduced meals is:	N = 775	N = 518	N = 1293	
Less than 25%	1 %	18%	12%	
25 to 49%	1 %	14%	9%	
50 to 74%	4 %	17%	12%	
75 to 90%	9%	13%	12%	
Over 90%	86%	37%	55%	
Mean	95%	65%	<b>76</b> %	
Median	100%	75%	94%	
Mean percent of enrollment eligible for free or reduced-price meals by years of operation:				
1 to 2 years	94%	64 %	78%	
3 to 5 years	96%	59%	75%	
6 to 10 years	97%	58%	66%	
Over 10 years	96%	70%	79%	
Mean percent of enrollment eligible for				
free meals	91%	56%	69%	
Mean percent of enrollment eligible for reduced price meals	4%	9%	7%	
Percent of centers with vending machines				
available to children	0%	4 %	3%	

Sources: Sponsored Center Survey, Independent Center Survey.

Exhibit B.5

KEY CHARACTERISTICS OF CENTERS BY YEARS OF OPERATION

	Head Start Centers	Child Care Centers	All Centers
Centers in Operation 1 to 2 Years	N=83	N=41	N = 124
Mean enrollment	42.1	51.0	47.1
Mean percent of capacity	94 %	81%	87%
Mean percent part-time	64 %	57%	60%
Mean hours of operation	6.7	8.7	7.8
Centers in Operation 3 to 5 Years	N=167	N = 109	N = 276
Mean enrollment	44.7	56.4	51.4
Mean percent of capacity	93%	83 %	87%
Mean percent part-time	62 %	47%	53%
Mean hours of operation	7.5	9.5	8.6
Centers in Operation 6 to 10 Years	N = 89	N = 127	N=216
Mean enrollment	56.8	66.8	64.9
Mean percent of capacity	94%	83%	85%
Mean percent part-time	61%	36%	41%
Mean hours of operation	7.5	10.1	9.6
Centers in Operation Over 10 Years	N=429	N = 262	N=691
Mean enrollment	64.8	81.0	75.2
Mean percent of capacity	92%	86%	89%
Mean percent part-time	59%	30%	40%
Mean hours of operation	7.5	10.3	9.3

Sources: Sponsored Center Survey, Independent Center Survey.

Exhibit B.6 MEAL SERVICE CHARACTERISTICS OF **HOMES AND CENTERS** 

			Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers		
	N = 532	N = 896	N=599	N = 1495		
Proportion Serving:						
Breakfast	81%	86%	75%	79%		
Morning snack	50%	15%	37%	29%		
Lunch	88%	95%	78%	84%		
Afternoon snack	86%	63 %	88%	79%		
Supper	28%	1 %	7%	5%		
Evening snack	8%	2%	4 %	3 %		
roportion Serving:						
Breakfast, lunch, and afternoon snack	31%	52%	40%	44%		
Morning snack, lunch, and afternoon snack	4%	3%	6%	5%		
Breakfast, morning snack, lunch, and afternoon						
snack	29%	6%	21%	16%		
Breakfast and lunch	0%	26%	2%	11%		
Breakfast, morning snack, lunch, afternoon snack,						
and supper	12%	0%	1 %	0%		
Snacks only	0%	0%	12%	8 %		
Other combinations	24%	12%	18%	16%		

Exhibit B.6 (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Proportion Serving <sup>1</sup> :				
Family style	N/A	87 %	59%	69%
Cafeteria style	N/A	13%	25 %	21%
Restaurant style	N/A	9%	33%	25 %
Proportion of FDCHs Where:				
Provider serves children	66%	N/A	N/A	N/A
Children serve themselves	1	N/A	N/A	N/A
Both	33	N/A	N/A	N/A
Proportion Serving Meals				
Prepared Off-Site:	5%	45 %	31%	36%

Sources: Family Day Care Home Survey, Sponsored Center Survey, Independent Center Survey.

<sup>&</sup>lt;sup>1</sup>FDCHs were not asked about the style of meal service.

Exhibit B.7
MENU PLANNING IN HOMES AND CENTERS

MENO	ANNING IN HON		Cen	ters		
	Family Day Care Homes	Head Start Centers	Chil Ce	d Care nters	All Cer	
	Care			N = 542	N =	1395
	N=517	N = 853		10%	12	%
Ienu Planner:	4%	16%		10 %		
Sponsoring agency	• /	a m		13%		9%
Director/home care	94%	3%		29%		1%
provider	0%	8%		24%	1	9%
Center cook	0%	119		7%		6%
School district	0%	35		9%		23%
Vendor/caterer	0%	45		4%		4%
Dietitian/nutritionist	-0%		%	2%		3%
Teacher	0%	_ 4	1%			• 01
Food service manager			2%	0%		1%
Parents/food service	0%		2 % 5%	0%		2%
committee	0%-		0%	0%	)	0%
Nutrition coordinator	2%		070			.05
Other			006	N=59	99	N = 1495
	N=53	2 N	=896	68		69%
Use Menu Cycle:	32%	)	70%			
(percent yes)				N = 3	398	N = 1031
_	N=1	91 <sup>1</sup>	N = 633		3%	2%
Length of Menu Cycle:	13		1%	1	2%	9%
One week	20	%	3%	5	50%	49%
2 to 3 weeks	47	1%	47%	. 2	24%	27%
4 to 5 weeks	- 10	5%	33%		10%	12%
6 or more weeks		4%	16%		4.1	4-3-
Other	1	3.4	4.6		4.0	4.0
Mean length (wee	eks)	4.0	4.0			
Median						

Exhibit B.7 (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Last Major Change in Menu Cycle:	N=162	N = 540	N = 345	N = 885
In last 6 months	69%	50%	58%	55%
6 months to 1 year ago	21%	31%	29%	30%
1 to 5 years ago	9%	16%	11%	13%
More than 5 years ago	1%	3%	3%	3%

Exhibit B.8

CHARACTERISTICS OF FORMAL TRAINING IN HOMES AND CENTERS

	Centers					
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers		
Nutrition training (all providers): Any training in past year:	N=532 79%	N=896 88%	N=599 76%	N = 1495 $80%$		
Any training in past year.	1970	00 /6	70 70	80 70		
Number of formal training						
sessions in past year <sup>1</sup> :	N = 421	N = 799	N = 464	N = 1263		
0	5 %	0%	3 %	2 %		
1 to 2	65%	34%	49%	43%		
3 to 4	21%	31%	30%	30%		
5 or more	9%	34%	16%	23%		
Mean	2.4	4.4	3.1	3.6		
Median	2.0	3.5	2.0	3.0		
Mean length of training						
sessions (in hours) <sup>2</sup>	3.4	4.2	3.7	3.9		
Median length of training						
sessions (in hours) <sup>2</sup>	2.0	2.0	2.0	2.0		
Percent of food preparers						
required to attend <sup>3</sup>	84 %	95 %	90%	92 %		
Methods of training <sup>3</sup> :						
Group training	77%	96%	84 %	88%		
Individual training/orientation	31%	48%	44 %	45%		
Newsletter/written material for						
self-study	65%	38%	42%	41%		
Videotapes for self-study	12%	16%	14%	15%		
Other methods	7%	6%	2%	4 %		
Who conducted the training <sup>3</sup> :	N = 421	N = 799	N = 464	N = 1263		
Sponsor staff⁴	11%	73%	36%	50%		
Center staff <sup>5</sup>	0%	36%	48%	44%		
State staff	25%	25 %	40%	34%		
Guest speaker	45%	51%	32%	39%		
Other	3%	18%	13%	15%		

<sup>&</sup>lt;sup>1</sup> If training = yes. Refused, Don't Know, Missing omitted from calculation.

<sup>&</sup>lt;sup>2</sup> Refused, Don't Know, Missing omitted from calculation.

<sup>&</sup>lt;sup>3</sup> If training = yes. Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>4</sup> Independent centers not given this option and treated as "no."

<sup>&</sup>lt;sup>5</sup> Family day care homes not given this option.

Exhibit B.9

TOPICS COVERED IN FORMAL TRAINING SESSIONS IN FDCHs AND CENTERS

		Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers	
Nutrition Training Topics (any training=yes) <sup>1</sup> :	N=421	N=799	N=464	N = 1263	
Nutrition Topics					
Menu planning	58%	69%	59%	62%	
Types and amounts of food to serve	61%	78%	64%	69%	
Nutrient content of foods	62%	60%	50%	53 %	
Dietary Guidelines for Americans	38%	46%	32%	37%	
Nutrition education for children	57.%	70%	46%	54 %	
Nutrition education for food preparers	48%	63%	43%	50%	
Meal preparation techniques	48%	59%	46%	50%	
Mean Number of Nutrition Topics	4.7	5.1	4.5	4.7	
Administrative Topics <sup>1</sup>					
Meal counts	40%	70%	55%	60%	
Food production records	34 %	66%	53%	57%	
Food safety/sanitation	57%	83%	68%	73%	
Food purchasing	34%	60%	44 %	50%	
Food storage	42%	74%	57%	63%	
Family-style serving	23%	65 %	33%	44 %	
Filing claims <sup>2</sup>	N/A	24%	30%	27%	
Free and reduced price meal applications <sup>2</sup>	N/A	33%	35%	34%	

<sup>&</sup>lt;sup>1</sup>Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>2</sup>Family day care homes not given the options of filing claims or free and reduced-price meal applications.

Exhibit B.9 (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Mean number of administrative topics excluding claims and applications	2.9	4.8	4.1	4.3
Mean number of administrative topics including claims and applications <sup>2</sup>	N/A	5.4	4.9	5.1
Mean number of nutrition and administrative topics <sup>3</sup>	7.6	9.8	8.5	9.0

<sup>&</sup>lt;sup>2</sup>Family day care homes not given the options of filing claims or free and reduced-price meal applications.

<sup>&</sup>lt;sup>3</sup>Excludes filing claims, meal applications, and other topics.

Exhibit B.10a CACFP MONITORING OF SPONSORED HOMES AND CENTERS

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Percent sponsored:	100%	98%	55%	70%
	N = 532	N = 883	N = 313	N = 1196
Same sponsor as in June 1994				
(sponsored providers) <sup>1</sup> :	91%	95%	90%	93%
Proportion of sites ever visited by				
sponsors (sponsored providers) <sup>1</sup> :	98%	94%	88%	91%
Number of sponsor visits per year				
(visited providers):	N=518	N = 827	N=273	N = 1100
1	4 %	6%	10%	8%
2	7%	7%	11%	9%
3	29%	19%	14%	16%
4 to 6	48%	10%	13%	11%
7 to 12	8%	22%	19%	21%
13 to 24	2%	9%	7%	8%
25 to 52	1 %	19%	14%	17%
More than 52	0%	7%	12%	9%
Mean	5.3	25.6	30.6	28.1
Median	4.0	12.0	10.0	12.0
Average length of sponsor visits in				
minutes (visited providers):	N = 502	N = 784	N = 266	N = 1050
15 minutes or less	7%	2%	5%	3 %
16 to 30	42%	13%	24%	19%
31 to 45	17%	5%	7%	6%
46 to 60	28%	24%	27%	25%
61 to 120	5%	26%	19%	23%
121 to 180 minutes	0%	12%	5%	8%
Over 180 minutes	0%	17%	13%	15%
Mean	94.5	147.7	124.7	136.3
Median	38.0	90.0	60.0	60.0

'Refused, Don't Know, Missing treated as "no."

Exhibit B.10a (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Yearly total length of sponsor				
visits in hours (visited providers):	N = 502	N = 784	N=266	N = 1050
1 or less	15%	6%	7%	6%
1 to 2	34%	6%	12%	9%
2 to 3	21%	9%	10%	10%
3 to 5	15%	4%	10%	7 %
5 to 10	7%	16%	15%	15%
10 to 20	4%	14%	12%	13%
20 to 50	2%	19%	12%	16%
Over 50	2 %	27%	21%	24%
Mean	7.0	54.5	71.0	62.7
Median	2.2	17.5	8.0	12.0
	N = 518	N = 830	N=273	N = 1103
Percent of providers sometimes receiving surprise visits (visited	52%	70%	58%	64%
providers) <sup>1</sup> :	32 70	70 70	36 70	0.70
Reasons for surprise visits (surprise visits = yes) <sup>1</sup> :	N = 274	N = 579	N = 166	N = 745
Provide training for staff <sup>2</sup>	N/A	44%	35%	40%
Check up on the provider	79%	86%	82 %	84 %
Respond to a family complaint	3%	18%	14%	16%
Respond to a complaint from the state	3%	9%	8%	9%
Sponsor doesn't like to follow a schedule	5%	14%	21%	17%
Unknown	14%	10%	15%	12%

Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>2</sup> Family day care homes not given this option.

Exhibit B.10b CACFP MONITORING OF SPONSORED HOME AND CENTER PROVIDERS WITH MORE THAN 52 VISITS PER YEAR EXCLUDED

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Percent sponsored:	100%	98%	53%	69%
	N = 530	N = 824	N=282	N = 1106
Same sponsor as in June 1994				
(sponsored providers) <sup>1</sup> :	91%	95%	89%	92%
Proportion of sites ever visited by sponsors (sponsored providers) <sup>1</sup> :	98%	93%	86%	90%
Number of sponsor visits per year				
(visited providers):	N = 516	N = 768	N=242	N = 1010
1	4%	7%	11%	9%
2	7%	8%	13%	10%
3	29%	20%	16%	18%
4 to 6	48%	11%	14%	12%
7 to 12	8%	24%	22%	23%
13 to 24	2%	10%	8%	9%
25 to 52	1 %	21%	16%	18%
Mean	5.1	16.9	13.7	15.4
Median	4.0	12.0	4.0	8.0
Average length of sponsor visits in				
hours (visited providers):	N = 500	N = 728	N=235	N = 963
15 minutes or less	7%	2%	5%	3 %
16 to 30	43%	13%	25%	19%
31 to 45	17%	5%	7%	6%
46 to 60	28%	24%	29%	27%
61 to 120	5%	26%	18%	22%
121 to 180	0%	12%	5%	9%
Over 180 minutes	0%	17%	12%	15%
Mean	94.5	150.2	120.9	136.1
Median	38.0	90.0	60.0	90.0

Refused, Don't Know, Missing treated as "no."

Exhibit B.10b (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Yearly total length of sponsor				
visits in hours:	N = 500	N = 728	N=235	N = 963
(visited providers)				
1 or less	15%	6%	8%	7%
1 to 2	34 %	6%	14%	10%
2 to 3	21%	10%	12%	11%
3 to 5	15%	4%	11%	7%
5 to 10	7%	17%	17%	17%
10 to 20	4%	15%	14%	14%
20 to 50	2%	20%	14%	17%
Over 50	2%	22%	11%	17%
Mean	6.8	40.0	19.7	30.2
Median	2.2	12.0	6.0	9.0
	N = 516	N = 771	N = 242	N = 1013
Percent of providers sometimes receiving surprise visits (visited				
providers) <sup>1</sup> :	52%	69%	58%	64 %
Reasons for surprise visits	N. 054	N 520	NI 1 <i>47</i>	N=676
(surprise visits = yes) <sup>1</sup> :	N=274	N = 529	N = 147	-
Provide training for staff <sup>2</sup>	N/A	43%	37%	41%
Check up on the provider	79%	85%	81%	83%
Respond to a family complaint	3%	18%	12%	15%
Respond to a complaint from the state	3%	8%	8%	8%
Sponsor doesn't like to follow a	p	1.4.01	170	1 <i>5 0</i> 7
schedule	5%	14%	17%	15%
Unknown	14%	10%	14%	12%

Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>2</sup>Family day care homes not given this option.

Exhibit B.11
TOPICS OF A TYPICAL CACFP MONITORING VISIT BY SPONSORS

	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Topics discussed (visited providers) <sup>1</sup> :	N=518	N=830	N=273	N=1103
Nutrition Topics				
Menu planning	83%	50%	59%	54%
Types and amounts of food to serve	84%	73%	67%	70%
Nutrient content of foods	68%	45%	46%	45%
Dietary Guidelines for Americans	32%	23%	24%	23%
Nutrition education for children	62%	72%	50%	61%
Nutrition education for food preparers	52%	44%	40%	42%
Mean number of nutrition topics	3.8	3.1	2.9	3.0
Administrative Topics				
Meal counts	84%	77%	81%	79%
Food production records	61%	61%	65%	63%
Food safety/sanitation	68%	84%	72%	78%
Food purchasing	32%	47%	48%	48%
Food storage	43%	72%	61%	66%
Filing claims <sup>2</sup>	N/A	20%	32%	26%
Free and reduced price meal applications <sup>2</sup>	N/A	28%	46%	37%

<sup>&</sup>lt;sup>1</sup>Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>2</sup>Family day care homes not given the options of filing claims or free and reduced-price meal applications.

Exhibit B.11 (continued)

		Centers		
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Mean number of administrative topics excluding claims and applications	2.9	3.4	3.3	3.3
Mean number of administrative topics including claims and applications <sup>2</sup>	N/A	3.9	4.1	4.0
Mean number of nutrition and administrative topics <sup>3</sup>	6.7	6.5	6.1	6.3

Sources: Family Day Care Home Survey, Sponsored Center Survey, Independent Center Survey. <sup>2</sup>Family Day Care Homes not given the options of filing claims or free and reduced-price meal applications. <sup>3</sup>Excludes "filing claims," "meal applications," and "other."

Exhibit B.12a TOPICS COVERED IN FORMAL TRAINING SESSIONS OR MONITORING VISITS OF FDCHs AND CENTERS

	Centers				
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers	
Topics covered (all providers) <sup>1</sup>	N = 532	N = 896	N = 599	N=1495	
NUTRITION TOPICS					
Menu Planning	90%	78%	67%	71%	
training sessions only	9%	32%	38%	36%	
monitoring visits only	32%	9%	8%	9%	
both training and visits	49%	37%	20%	26%	
Types and Amounts of Food to Serve	90%	89%	71%	78%	
training sessions only	8%	22%	39%	33%	
monitoring visits only	29%	12%	8%	9%	
both training and visits	53%	56%	25 %	36%	
Nutrient Content of Foods	84 %	71%	56%	61%	
training sessions only	17%	30%	34%	32%	
monitoring visits only	22%	11%	7%	8%	
both training and visits	45 %	31%	16%	21%	
Dietary Guidelines for Americans	51%	52%	35%	41%	
training sessions only	20%	31%	23 %	26%	
monitoring visits only	13%	6%	3%	4 %	
both training and visits	18%	15%	8%	11%	
Nutrition Education for Children	78%	85%	54%	65%	
training sessions only	18%	18%	30%	26%	
monitoring visits only	21%	14%	8%	10%	
both training and visits	39%	52%	16%	29%	

<sup>&#</sup>x27;Refused, Don't Know, Missing treated as "no."

Exhibit B.12a (continued)

	Centers				
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers	
Nutrition Education for Food Preparers	69%	69%	47%	55%	
training sessions only	18%	28%	28%	28%	
monitoring visits only	21%	6%	5%	5%	
both training and visits	30%	35%	15%	22%	
Meal Preparation Techniques <sup>2</sup>	48%	59%	46%	50%	
training sessions only	48%	59%	46%	50%	
monitoring visits only	N/A	N/A	N/A	N/A	
both training and visits	N/A	N/A	N/A	N/A	
ADMINISTRATIVE TOPICS					
Meal Counts	86%	86%	70%	76%	
training sessions only	4%	16%	31%	26%	
monitoring visits only	47%	16%	15%	16%	
both training and visits	35%	54%	24%	35%	
Food Production Records	67%	76%	61%	66%	
training sessions only	7%	19%	29%	26%	
monitoring visits only	32%	10%	8%	9%	
both training and visits	27%	47%	24%	32%	
Food Safety/Sanitation	82%	93%	74%	81%	
training sessions only	16%	16%	39%	31%	
monitoring visits only	25%	10%	6%	8%	
both training and visits	41%	67%	29%	42%	
Food Purchasing	48%	67%	49%	55%	
training sessions only	17%	24%	26%	25%	
monitoring visits only	14%	7%	5%	6%	
both training and visits	17%	36%	19%	25%	

<sup>&</sup>lt;sup>2</sup>This option not given for sponsor visits.

Exhibit B.12a (continued)

			Centers	
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Food Storage	59%	86%	63%	71%
training sessions only	17%	20%	34%	29%
monitoring visits only	17%	12%	6%	8%
both training and visits	25 %	54%	24%	34 %
Family-Style Serving <sup>2</sup>	23%	65%	33%	44%
training sessions only	23%	65%	33%	44 %
monitoring visits only	N/A	N/A	N/A	N/A
both training and visits	N/A	N/A	N/A	N/A
Filing Claims <sup>3</sup>	N/A	32%	38%	36%
training sessions only	N/A	13%	22%	19%
monitoring visits only	N/A	8%	8%	8%
both training and visits	N/A	11%	7%	8%
Free and Reduced-Price Meal				
Applications <sup>3</sup>	N/A	42 %	45%	44 %
training sessions only	N/A	17%	22 %	20 %
monitoring visits only	N/A	10%	10%	10%
both training and visits	N/A	16%	12%	14%

<sup>&</sup>lt;sup>2</sup>This option not given for sponsor visits.

<sup>&</sup>lt;sup>3</sup>Family day care homes not given this option.

Exhibit B.12b TOPICS COVERED IN FORMAL TRAINING SESSIONS OR MONITORING VISITS: SPONSORED AND INDEPENDENT CHILD CARE CENTERS

	Sponsored Centers	Independent Centers	Sponsored plus Independent
Topics covered (all providers)	N=273	N=326	N=599
NUTRITION TOPICS			
Menu Planning	77 %	58%	67%
training sessions only	18%	58%	38%
monitoring visits only	17%	N/A	8%
both training and visits	42%	N/A	20%
Types and Amounts of Food to Serve	84%	60%	71%
training sessions only	17%	60%	39%
monitoring visits only	16%	N/A	8%
both training and visits	51%	N/A	25 %
Nutrient Content of Foods	67%	46%	56%
training sessions only	21%	46%	34%
monitoring visits only	14%	N/A	7%
both training and visits	32%	N/A	16%
Dietary Guidelines for Americans	44%	27%	35%
training sessions only	20%	27%	23%
monitoring visits only	7%	N/A	3 %
both training and visits	17%	N/A	8%
Nutrition Education for Children	66%	43%	54%
training sessions only	16%	43%	30%
monitoring visits only	17%	N/A	8%
both training and visits	33%	N/A	16%

<sup>&</sup>lt;sup>1</sup>Refused, Don't Know, Missing treated as "no."

Exhibit B.12b (continued)

	Spansored Centers	Independent Centers	Sponsored plus Independent
Nutrition Education for Food Preparers	61%	35%	47%
training sessions only	21%	35%	28%
monitoring visits only	10%	N/A	5%
both training and visits	30%	N/A	15%
Meal Preparation Techniques <sup>2</sup>	54%	38%	46%
training sessions only	54%	38%	46%
monitoring visits only	N/A	N/A	N/A
both training and visits	N/A	N/A	N/A
ADMINISTRATIVE TOPICS			
Meal Counts	90%	51%	70%
training sessions only	10%	51%	31%
monitoring visits only	32 %	N/A	15%
both training and visits	49%	N/A	24%
Food Production Records	74%	48%	61%
training sessions only	9%	48%	29%
monitoring visits only	16%	N/A	8%
both training and visits	48%	N/A	24%
Food Safety/Sanitation	87%	62 %	74%
training sessions only	15%	62 %	39%
monitoring visits only	13%	N/A	6%
both training and visits	59%	N/A	29%
Food Purchasing	62 %	37%	49%
training sessions only	13%	37%	26%
monitoring visits only	10%	N/A	5%
both training and visits	38%	N/A	19%

<sup>&</sup>lt;sup>2</sup>This option not given for sponsor visits.

Exhibit B.12b (continued)

	Sponsored Centers	Independent Centers	Sponsored plus Independent
Food Storage	78%	49%	63%
training sessions only	17%	49%	34%
monitoring visits only	12%	N/A	6%
both training and visits	49%	N/A	24%
Family-Style Serving <sup>2</sup>	41%	24%	33%
training sessions only	41%	24%	33%
monitoring visits only	N/A	N/A	N/A
both training and visits	N/A	N/A	N/A
Filing Claims	41%	35%	38%
training sessions only	9%	35%	22 %
monitoring visits only	18%	N/A	8%
both training and visits	15%	N/A	7 %
Free and Reduced-Price Meal Applications	55%	35%	45%
training sessions only	9%	35%	22%
monitoring visits only	21%	N/A	10%
both training and visits	26%	N/A	12%

Sources: Sponsored Center Survey, Independent Center Survey.

<sup>&</sup>lt;sup>2</sup>This option not given for sponsor visits.

Exhibit B.12c

TOTAL NUMBER OF TOPICS COVERED IN FORMAL TRAINING SESSIONS AND SPONSOR OR MONITORING VISITS OF FDCHs AND CENTERS

		Centers				Centers		
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers				
All Providers	N=532	N = 896	N=599	N = 1495				
Number of Nutrition Topics								
0	1%	3%	18%	13%				
1	3%	3%	6%	5 %				
2	6%	7%	8 %	8 %				
3	10%	11%	14%	12%				
4	13%	10%	11%	11%				
5	17%	15%	10%	12%				
6	25%	16%	14%	15%				
7	26%	34%	20%	25%				
Mean	5.1	5.0	3.8	4.2				
Median	6.0	6.0	4.0	5.0				
Number of Administrative Topics <sup>1</sup>								
0	1%	3%	16%	11%				
1	9%	2%	5%	4 %				
2	17%	4%	6%	5 %				
3	19%	6%	10%	9%				
4	18%	11%	10%	10%				
5	22%	20%	13%	16%				
6	14%	23%	12%	16%				
7	N/A	17%	15%	16%				
8	N/A	15%	12%	13%				
Mean	3.7	5.5	4.3	4.7				
Median	4.0	6.0	5.0	5.0				

Sources: Family Day Care Home Survey, Sponsored Center Survey, Independent Center Survey. <sup>1</sup>Family day care homes have a maximum of six topics; centers have a maximum of eight.

Exhibit B.12d

TOTAL NUMBER OF TOPICS COVERED IN FORMAL TRAINING SESSIONS
OR MONITORING VISITS:
SPONSORED AND INDEPENDENT CHILD CARE CENTERS

	Sponsored Centers	Independent Centers	Sponsored plus Independen
All Providers	N=273	N=326	N = 599
Number of Nutrition Topics			
0	7%	29%	18%
1	6%	6 %	6%
2	6%	11%	8%
3	17%	10%	14%
4	11%	10%	11%
5	12%	9%	10%
6	15%	12 %	14%
7	27%	13%	20 %
Mean	4.5	3.1	3.8
Median	5.0	3.0	4.0
Number of Administrative Topics			
0	1 %	31%	16%
1	6%	4 %	5%
2	5%	6%	6%
3	9%	11%	10%
4	11%	9%	10%
5	17 %	10%	13%
6	19%	6%	12%
7	17%	14%	15%
8	15 %	9%	12%
Mean	5.3	3.4	4.3
Median	6.0	3.0	5.0

Sources: Sponsored Center Survey, Independent Center Survey.

Exhibit B.13
FUNDING SOURCES FOR HOMES AND CENTERS

		Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	Ali Centers	
Providers with exclusively	N=532	N=896	N=599	N = 1495	
unsubsidized children	56%	0%	11%	7%	
Providers with exclusively subsidized children	9%	96%	18%	46%	
Providers with both subsidized and unsubsidized children	35%	4%	71%	47%	
	N=429	N = 39	N = 409	N = 448	
Mean unsubsidized hourly fee for full time care (some children not subsidized = yes) <sup>2</sup>	\$1.90	\$2.22	\$1.98	\$1.98	
Providers that charge separately for	N. 522	N 007	N. 500	N. 1405	
meals (all providers) <sup>1,3</sup>	$   \begin{array}{c}     N = 532 \\     0\%   \end{array} $	$ N = 896 \\ 2\% $	N = 599 4 %	N = 1495 $3%$	
Sources of government funding (some					
children subsidized=yes) <sup>1</sup>	N = 175	N=896	N = 449	N = 1345	
Federal <sup>4</sup>	14%	100%	45%	69%	
State	68%	26%	77 %	55%	
Other <sup>5</sup>	13%	1 %	7%	4 %	

Refused, Don't Know, Missing treated as "no."

<sup>&</sup>lt;sup>2</sup>Refused, Don't Know, Missing omitted from calculation.

<sup>&</sup>lt;sup>3</sup>Meal charges are not presented because of small sample sizes.

<sup>&</sup>lt;sup>4</sup>All Head Start centers receive federal subsidies.

<sup>&</sup>lt;sup>5</sup>Primarily local government funding.

Exhibit B.14 ROLE OF FAMILY DAY CARE BUSINESS RELATIVE TO HOUSEHOLD INCOME FOR FAMILY PROVIDERS

	Family Day Care Homes
Percent of Household Income That	
Comes from Family Day Care	
Business	N=356
Less than 25%	26%
25% to 50%	52 %
51% to 75%	15 %
76% to 100%	8%
Mean	55 %
Median	43 %
Percent of Family Day Care Income	
from Sponsor for Food Served	N=336
Less than 25%	79%
25% to 50%	17%
51% to 75%	1 %
76% to 100%	3%
Mean	20%
Median	14%
Household Income	N = 470
Mean	\$32,526
Median	\$30,905
Household Size	N = 532
Mean	6.2
Median	4.0
Household Income as a Percent of Poverty Level	N=452
130% of poverty or less	25%
131% to 185% of poverty	13%
Over 185% of poverty	62%
Mean	228%
Median	224%

Source: Family Day Care Home Survey.

Exhibit B.15 PARTICIPATION IN CACFP BY CENTERS CLAIMS FOR FREE OR REDUCED-PRICE MEALS

	Head Start Centers	Child Care Centers	All Centers
Mean Number of Serving Days Last Month	N=773 17	N = 531 $20$	N=1304 19
Last Month's Percent of Free, Reduced-Price, and Full-Price Meals by Type of Meal			
Claimed: Percent Free			
	N = 659	N = 345	N = 1004
Breakfast	92 %	64 %	75%
	N = 701	N = 366	N = 1067
Lunch	93%	64 %	76%
	N=28	N=43	N = 71
Supper	33%	67%	61%
•	N = 510	N=417	N = 927
Snack	93%	61%	71%
Claimed: Percent Reduced			
	N = 643	N = 336	N = 979
Breakfast	5%	11%	8%
	N = 684	N=356	N = 1040
Lunch	5%	11%	8%
	N=28	N=42	N = 70
Supper	45%	19%	24%
	N = 496	N = 408	N=904
Snack	4%	10%	9%

Exhibit B.15 (continued)

	Head Start Centers	Child Care Centers	All Centers
Claimed: Percent Full Price			
	N = 642	N=332	N = 974
Breakfast	4%	26%	17%
	N = 683	N = 353	N = 1036
Lunch	2%	26%	16%
	N=28	N = 40	N = 68
Supper	22%	15%	16%
	N = 497	N = 402	N = 899
Snack	3%	30%	22%

Sources: Sponsored Center Survey, Independent Center Survey.

Exhibit B.16

QUALITATIVE FEEDBACK ON CACFP BY HOMES AND CENTERS

	Centers			
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
How Important Is CACFP in Meeting				
the Nutritional Needs of Children?	N=496	N=824	N = 561	N = 1385
very important	84%	97%	89%	92 %
somewhat important	14%	2%	8%	6%
not very important	1 %	0%	3 %	2 %
not at all important	0%	0%	0%	0%
Level of Burden on Staff	N=485	N = 762	N = 542	N = 1304
Application renewal process				
1 not at all burdensome	67%	37%	29%	32%
2 not very burdensome	22%	30%	29%	29%
3 somewhat burdensome	9%	24%	33%	30%
4 very burdensome	2%	9%	8%	9%
mean	1.4	2.1	2.2	2.2
median	1.0	2.0	2.0	2.0
Monthly accounting requirements				
1 not at all burdensome	44%	30%	24%	26%
2 not very burdensome	30%	34%	34%	34 %
3 somewhat burdensome	23%	27%	33%	31%
4 very burdensome	3%	9%	9%	9%
mean	1.9	2.1	2.3	2.2
median	2.0	2.0	2.0	2.0

Exhibit B.16 (continued)

		Centers		
	Family Day Care Homes	Head Start Centers	Child Care Centers	All Centers
Meal pattern requirements				
1 not at all burdensome	52%	52%	42%	45%
2 not very burdensome	29%	35%	39%	37%
3 somewhat burdensome	17%	12%	16%	15%
4 very burdensome	3%	1 %	3 %	3%
mean	1.7	1.6	1.8	1.7
median	1.0	1.0	2.0	2.0
Are CACFP Meal Pattern Requirements Appropriate?	N = 482	N=812	N = 545	N = 135
percent yes	98%	98%	95%	96%
How Satisfactory Is the CACFP	N=492	N=701	N=501	N = 120
very satisfactory	53%	41%	44%	43%
somewhat satisfactory	41%	47%	44 % 47 %	47%
not very satisfactory	5%	10%	8%	8%
not at all satisfactory	3 % 1 %	2%	1%	2%

### Appendix C

## Sponsor Tables

Appendix C contains detailed statistical tables on the characteristics of the three sponsor types: family day care homes, Head Start centers, and child care centers. Highlights from these tables are reported in Chapter 4 of this report. Note that all results are weighted except the N's, which provide the unweighted sample size.

Exhibit C.1a

NUMBER AND TYPES OF FAMILY DAY CARE HOMES SPONSORED
BY CACFP SPONSORS

	FDCH Sponsors
Number of Sites Sponsored:	N = 146
1-20	13%
21–50	36%
51–100	15%
101–200	20%
201–500	9%
Over 500	6%
Mean	156
Median	54
Sponsor Any Other Program:	
No	55 %
Yes	45%
Other Programs Sponsored:	N = 46
Family day care homes	N/A
Head Start centers	36%
Child care centers	84 %
Outside school-hours care	12 %
Home-based Head Start	21%
Other	15%

Exhibit C.1b

NUMBER AND TYPES OF CENTERS
SPONSORED BY CACFP SPONSORS

	Head Start Sponsors	Child Care Sponsors	All Centers Sponsors
Number of Sites Sponsored:	N = 283	N = 105	N = 388
1-2	12 %	60%	34%
3–5	24 %	26%	29%
6–10	35 %	9%	16%
11-20	23 %	4%	17%
21–40	5%	1 %	4 %
Over 40	1 %	0%	1 %
Mean	9.0	3.7	6.9
Median	7.0	2.0	4.0
Sponsor Any Other Program:			
No	41%	35%	44 %
Yes	59%	65%	56%1
Other Programs Sponsored:	N = 175	N = 79	$N = 227^1$
Family day care homes	21%	31%	31%
Head Start centers	N/A	33%	N/A
Child care centers	45 %	N/A	N/A
Outside school hours care	22 %	67%	59%
Home-based Head Start	60%	10%	29%
Other	18%	19%	21%

<sup>1</sup>For the All Centers column, the other programs sponsored excludes Head Start centers and child care centers.

Exhibit C.2

CHARACTERISTICS OF SPONSORING AGENCIES

	FDCH Sponsors	Head Start Sponsors	Child Care Sponsors	All Centers Spansors
Description of Agency:	N=142	N=278	N=101	N = 379
School district	10%	8%	10%	10%
Public social service agency	18%	18%	9%	12%
Private social service agency	37%	25%	24%	25%
College or university	4%	1 %	6%	4%
Charitable foundation	4%	1 %	7%	5%
Religious organization	3%	0%	7%	5%
Child care chain (for-profit)	0%	0%	7%	4%
Other nonprofit entity	24%	32%	27%	29%
Other	2%	14%	2%	6%
Participation in Other USDA Programs:	N = 141	N = 265	N = 95	N = 360
National School Lunch Program	10%	3%	8%	7%
School Breakfast Program	10%	4%	7%	6%
Summer Food Service Program	15%	19%	28%	25%
Special Milk Program	0%	1 %	0%	0%
Food Donations Program	7%	41%	25%	30%
Nutrition Education and Training	61%	61%	58%	59%
Expanded Food Nutrition Education Program	10%	22%	7%	13%
Other	9%	8%	7%	8%
Proportion of Revenue from CACFP	N = 144	N = 279	N = 104	N = 383
Less than 25%	30%	100%	92%	95%
26% to 50%	15%	0%	8%	5%
51% to 75%	13%	0%	0%	0%
76% to 100%	42%	0%	0%	0%
Mean	53.2	12.7	14.9	14.2
Median	53.8	12.0	15.5	15.0

Exhibit C.3

FREQUENCY AND AVERAGE LENGTH OF MONITORING VISITS BY SPONSORS

	FDCH Sponsors	Head Start Sponsors	Child Care Sponsors <sup>1</sup>	All Centers Sponsors
Number of Monitoring Visits per Year:	N=143	N=262	N=88	N=349
1	0%	5%	4%	4%
2	1 %	6%	6%	6%
3	66%	41%	35%	37%
4–6	12%	8%	23%	18%
7–12	6%	24%	16%	19%
13–24	5%	7%	3%	5%
25–52	9%	9%	12%	11%
Over 52 visits	0%	0%	0%	0%
Mean	10.3	11.0	11.2	11.1
Median	3.0	3.0	4.0	4.0
Average Length of Monitoring Visit in Minutes:				
15 minutes or less	3%	1 %	2%	2%
16 to 30	23%	11%	18%	15%
31 to 45	23%	6%	12%	10%
46 to 60	35%	35%	40%	38%
61 to 120	16%	26%	20%	22 %
121 to 180	0%	10%	5%	7%
Over 180 minutes	0%	11%	4%	6%
Mean	54	102	74	84
Median	52	60	60	60

<sup>&</sup>lt;sup>1</sup>Excludes sponsors that visit centers more than 52 times per year. Such sponsors tend to be co-located with the centers.

Exhibit C.3 (continued)

	FDCH Sponsors	Head Start Sponsors	Child Care Sponsors <sup>1</sup>	All Centers Sponsors
Yearly Total Length of Sponsor Visits in Hours:	N = 142	N = 261	N = 88	N = 349
1 or less	4%	4%	6%	5%
1-2	29%	6%	13%	10%
2-3	37%	20%	22%	21%
3–5	10%	7%	14%	12%
5–10	3%	19%	12%	15%
10–20	6%	20%	19%	19%
20-50	2%	17%	8%	11%
Over 50 hours	10%	7%	6%	6%
Mean	14.2	16.3	11.0	13.0
Median	3.0	7.5	4.0	6.0

Excludes sponsors that visit centers more than 52 times per year. Such sponsors tend to be co-located with the centers.

#### Exhibit C.4a

## PROGRAM AREAS RANKED BY CACFP MONITORS ACCORDING TO TIME SPENT REVIEWING SPONSORS OF FAMILY DAY CARE HOMES

Program Areas	Average Score
	N=146
Types and amounts of food to serve	2.8
Meal counts	2.4
Menu planning	2.2
Food production records	1.8
Filing claims	1.2
Nutrition education for food preparers	0.8
Food purchasing	0.7
Nutrient content of foods	0.7
Food safety/sanitation	0.7
Nutrition education for children	0.6
Dietary Guidelines for Americans	0.4
Free and reduced-price meal applications	0.2
Other	0.2
Food storage	0.1

Note: Each sponsor ranked the top five program areas according to the amount of time they spent on those topics during their monitoring visits. The score gives 5 points to the topic with the most time and 1 point to the topic with the least time among the five listed. The score was then weighted, summed across sponsors, and finally divided by the number of sponsors of that mode.

#### Exhibit C.4b

# PROGRAM AREAS RANKED BY CACFP MONITORS ACCORDING TO TIME SPENT REVIEWING SPONSORS OF HEAD START CENTERS

Program Areas	Average Score
	N=281
Meal counts	2.1
Food production records	2.0
Free and reduced-price meal applications	1.9
Menu planning	1.8
Food safety/sanitation	1.3
Types and amounts of food to serve	1.3
Filing claims	1.2
Food purchasing	1.0
Nutrition education for children	0.7
Nutrient content of foods	0.5
Nutrition education for food preparers	0.5
Food storage	0.3
Dietary Guidelines for Americans	0.1
Other	0.1

Note: Each sponsor ranked the top five program areas according to the amount of time they spent on those topics during their monitoring visits. The score gives 5 points to the topic with the most time and 1 point to the topic with the least time among the five listed. The score was then weighted, summed across sponsors, and finally divided by the number of sponsors of that mode.

#### Exhibit C.4c

# PROGRAM AREAS RANKED BY CACFP MONITORS ACCORDING TO TIME SPENT REVIEWING SPONSORS OF CHILD CARE CENTERS

Program Areas	Average Score
	N = 103
Meal counts	2.2
Food production records	1.8
Free and reduced-price meal applications	1.8
Types and amounts of food to serve	1.7
Menu planning	1.7
Food safety/sanitation	1.6
Filing claims	1.2
Nutrient content of foods	0.8
Food purchasing	0.8
Food storage	0.5
Nutrition education for children	0.3
Nutrition education for food preparers	0.3
Other	0.1
Dietary Guidelines for Americans	0.0

Note: Each sponsor ranked the top five program areas according to the amount of time they spent on those topics during their monitoring visits. The score gives 5 points to the topic with the most time and 1 point to the topic with the least time among the five listed. The score was then weighted, summed across sponsors, and finally divided by the number of sponsors of that mode.

Exhibit C.5 IN-SERVICE TRAINING PROVIDED BY CACFP SPONSORS

	FDCH Sponsors	Head Start Sponsors	Child Care Sponsors	All Centers Sponsors
Percent of sponsors providing in-service				
training to (all sponsors) <sup>1</sup> :	N = 147	N = 284	N = 105	N = 389
Administrative staff	N/A	67%	67%	67%
Family day care providers	82%	N/A	N/A	N/A
Center staff	0%	96%	77%	83%
Food preparers/menu planners food purchasers	N/A	81%	78%	79%
In-service training topics (sponsors providing training):	N = 143	N = 281	N = 102	N = 383
Nutrition Topics				
Menu planning	98%	66%	63%	64 %
Types and amounts of food to serve	94%	83%	78%	79%
Nutrient content of foods	82%	58%	46%	50%
Dietary Guidelines for Americans	66%	40%	33%	35%
Nutrition education for children	76%	58%	42%	48%
Nutrition education for food preparers	71%	61%	45%	51%
Meal preparation techniques	71%	57%	45%	49%
Mean number of nutrition topics	5.6	4.2	3.5	3.8
Administrative Topics				
Meal counting procedures	89%	68%	62 %	64 %
Food production records	50%	69%	59%	62 %
Food safety/sanitation	89%	84 %	80%	81%
Food purchasing	59%	58%	50%	53%
Food storage	66 %	68%	51%	57%
Family-style serving	66%	63%	42 %	49%
Filing CACFP claims	72 %	21%	34 %	29%
Free and reduced-price meal applications	61%	38%	42 %	40%
Mean number of administrative topics	5.5	4.7	4.2	4.4

Refused, Don't Know, Missing treated as "no."

### Appendix D

### Study Design

Appendix D presents a nontechnical summary of the study design for the Early Childhood and Child Care Study. A discussion of the procedures that were used to identify, select, and recruit study participants is presented in Appendix F, which also discusses survey implementation and response rates.

A multistage cluster sample design was used in this study to take advantage of the nested hierarchy of the populations of interest. The hierarchical structure is as follows: each State administers the CACFP through sponsors; sponsors<sup>1</sup> in turn administer the program through child care providers; child care providers, which may include family day care homes, child care centers, and Head Start centers, care for children; and finally, participating children are served CACFP-reimbursable meals and snacks by providers. Consequently, the sample was processed in four stages:

- Stage 1: Selection of States;
- Stage 2: Selection of sponsors;
- Stage 3: Selection of child care providers; and
- Stage 4: Selection of children and families.

An overview of the sample design structure for the Early Childhood and Child Care Study is shown in Exhibit D.1. Each stage of sample selection is discussed in the following sections.

<sup>&</sup>lt;sup>1</sup>For the purposes of this study, independent child care centers are considered sponsors.

# **STAGE 1: SELECTION OF STATES**

The study was conducted in a nationally representative sample of 20 States. The sampling frame comprised the 48 contiguous States and the District of Columbia. Alaska and Hawaii were excluded because they account for a very small percentage of providers and participating children and the cost of collecting on-site data in these States was prohibitive.

The sample of States was selected with probability proportional to the number of CACFP meals served at homes and centers in each State. That is, States serving relatively large numbers of meals had a greater probability of being included in the sample than States serving relatively small numbers of meals. To avoid the increase in sampling variances that would result from leaving the inclusion of large States to chance, eight States with relatively large numbers of meals served were included in the sample with certainty. These large States had programs that were at least 2.5 times as large as the national average. Other States were grouped into 12 strata of approximately equal size according to region, the relative importance of homes versus centers, the relative importance of Head Start, and the ratio of reimbursements to meals served. One State was then selected from each stratum with probability proportional to the measure of size. This resulted in a sample that included States from each of the seven FCS regions (Exhibit D.2).

	Exhibit D.2					
States Included in Study Sample by FCS Region						
FCS Region States						
Mid-Atlantic	Maryland					
Midwest	Michigan, Minnesota, Ohio, Illinois, Indiana					
Mountain Plains	Kansas, Iowa, Missouri					
Northeast	Massachusetts, Maine, New York					
Southeast	Georgia, Mississippi, Tennessee, North Carolina					
Southwest	Southwest Texas, New Mexico					
Western	California, Washington					

Note: States in bold were included in the sample with certainty.

### STAGE 2: SELECTION OF SPONSORS

A second-stage sample of sponsoring agencies was selected from the sample of 20 States. Sponsoring agencies were stratified by type of provider agency (homes, Head Start centers, and child care centers), and within each stratum, sponsors were selected with probability proportional to size (i.e., agencies that sponsor relatively large numbers of providers had greater probability of selection than sponsoring agencies with fewer providers).<sup>2</sup> As with States, the largest sponsors were selected with certainty in order to reduce the sampling variance.

An initial sample of 180 family day care sponsors, 419 Head Start center sponsors, and 596 child care center sponsors was drawn. Since State agencies do not distinguish between independent (i.e., self-sponsoring) child care centers (ICCCs) and sponsoring organizations that sponsor more than one center, the ICCCs were treated as sponsors for purposes of sampling at the sponsor level. The sample of 596 sponsors of child care centers included 431 ICCCs and 165 "true" sponsors. All of the sampled sponsors (including the ICCCs) were included in the Study of Sponsors and Providers.

# STAGE 3: SELECTION OF CHILD CARE PROVIDERS

A third-stage sample of child care providers was selected from within each of the sampled sponsoring agencies. These providers were selected with probability proportional to size. That is, providers receiving relatively high monthly reimbursements for meals served in the CACFP had a greater probability of selection than providers receiving lower monthly meal reimbursements. A total sample of 872 homes, 1,063 Head Start centers, and 758 child care centers (including 376 ICCCs) was selected at this stage, and all were included in the Study of Sponsors and Providers.

<sup>&</sup>lt;sup>2</sup>Practical considerations led to the use of the number of providers (within each stratum) as the measure of size. It was easier for States to provide counts of each type of provider for each sponsoring agency than other potential measures of size such as the number of meals or reimbursements by type of provider.

### STAGE 4: SELECTION OF CHILDREN AND FAMILIES

The fourth and final stage of sampling involves the selection of children (and their families) to be included in the Study of Children and Families. The sample of children was selected from a subsample of the providers included in the third-stage sample. Geographic clustering was used in the selection of this subsample of providers in order to reduce data collection costs associated with site visits to observe children. To accomplish this, providers were aligned by ZIP code and then a sample of providers was selected using probability proportional to size. A total of 239 homes, 169 Head Start centers, and 166 child care centers was selected for the Study of Children and Families.

## Family Day Care Homes

The selection of a sample of children from homes was straightforward. Because the number of children enrolled in homes is usually quite low, we attempted to include all children from the sample of homes. However, in cases where more than 10 children were enrolled in a home, we selected a random sample of 10 children for inclusion in the study.

### Child Care Centers and Head Start Centers

Because child care centers and Head Start centers are much larger than homes, the process of sampling children in centers was somewhat more complicated. Most centers divide the children into age-specific groups (classes), with infants almost always cared for separately in child care centers. Consequently, the need to observe in-care food consumption made it impractical to select a random sample of children from across the centers as the sampled children might end up in different rooms during meal times. (Infants are almost always fed in a separate room.) To deal with this situation, an intermediate stage of sampling was used in centers—an "age-specific" group. If infants were cared for at a center, one infant was sampled and a sample of five children from one other age group were selected. If there were no infants, six children were selected from a single age group. The sample included a total of 576 children in homes, 1,188 children in Head Start centers, and 904 children in child care centers.

# Appendix E

# Weighting Methodology

Sampling for the Early Childhood and Child Care Study followed a multistage, multiphase design. Consequently, weights were developed for multiple sampling units, resulting in six distinct weights for data analysis. This appendix identifies the weights required for tabulating data and explains how those weights were developed.

The weights are named with the variable W and subscripts are used to denote the sample to which they apply. For example,  $W_{\text{sponsor}}$  is the weight that corresponds to the Sponsor Survey. We use Q to denote a sampling probability and add a subscript to denote where that probability applies. For example,  $Q_j$  denotes probability of selection for the  $j^{\text{th}}$  State, and  $Q_{i|j}$  denotes the conditional probability of selection for the  $i^{\text{th}}$  sponsor in the  $j^{\text{th}}$  State, given that the  $j^{\text{th}}$  State was selected for the sample. These sampling probabilities were adjusted for nonresponse and other factors. The adjusted sampling probabilities are denoted by P with subscripts that match their Q counterparts. This and additional notation used in this appendix are summarized below.

- W denotes a sampling weight. A subscript is added to indicate the survey to which that weight applies. For example,  $W_{\text{sponsor}}$  is the weight for the Sponsor Survey.
- Q denotes the conditional sampling probability. Subscripts indicate the sampling stage at which the probability applies. For example,  $Q_{i/hj}$  denotes the conditional probability of selection for the  $i^{th}$  provider given that the sample was of the  $h^{th}$  provider type and was drawn from the  $i^{th}$  State.
- P denotes the conditional sampling probability after applying an adjustment for nonrespondents and other special sampling issues. Subscripts conform to conventions established with O.
- h Subscript that denotes the type of sponsor (family day care home sponsor, Head Start center sponsor, or child care center sponsor).
- i Subscript that denotes the  $i^{th}$  sponsor given the sponsor type (h) and State (j).
- j Subscript that denotes the  $j^{th}$  State.
- k Subscript that denotes the  $k^{th}$  program in the full provider sample given the State (j), sponsor type (h), and specific sponsor (i).

- Subscript that denotes the  $m^{th}$  program in the on-site provider sample given the State (j), sponsor type (h), sponsor (i), and selection into the full program sample (k). Programs selected for on-site observations were a subset of all programs in the full provider sample.
- Subscript that denotes the child selected for study given the State (j), sponsor type (h), sponsor (i), and selection into the on-site provider sample.

Preparing each of the weights described in this appendix required a development cycle. The first step was to assign a weight that was the inverse of the sampling probability: 1/Q. The second step was to adjust the sampling probability for various special conditions. For example, Massachusetts was used for the pretest, and this required adjusting the sampling probability somewhat. The third step was to make nonresponse adjustments to these sampling probabilities. Generally, this was done by stratifying respondents and nonrespondents into reasonably homogenous cells and then inflating the inverse of the conditional sampling probabilities for respondents within each cell to account for missing observations from nonrespondents within that same cell. As a final step, when the resulting weight was unreasonably large, we truncated the inflation factor and used a proportional spreading procedure so that the weights yielded the number in the population. The resulting adjusted version of Q was P, and the final weight was based on P.

### **SPONSOR WEIGHTS**

States were the primary sampling units. Eight States were selected with certainty and another twelve States were selected with probability proportional to size. Call the probability of selection  $Q_j$ . There were no nonrespondents among the States, so there was no need for nonresponse adjustments to  $Q_j$ ; hence  $P_j = Q_j$ .

Within States, sponsors were stratified by type of provider sponsored (FDCHs, child care centers, and Head Start centers), and sponsors were then selected with probability proportional to size. Call this conditional probability of selection  $Q_{i|hj}$ , where h designates the type of sponsor and j designates the State. The sampling probability  $Q_{i|hj}$  has to be adjusted for

nonrespondents. To explain this adjustment, let  $Q_{i|hj}$  represent the original, unadjusted conditional sampling probability. We stratified the sponsors by type of sponsor and then by State groups and number of providers to form cells. Let  $\Sigma_R Q_{i|hj}$  represent the sum of the sampling probabilities for all respondents within a cell, let  $\Sigma_N Q_{i|hj}$  represent the sum of the sampling probabilities for all nonrespondents within that same cell, and define  $A_{i|hj} = \Sigma_R Q_{i|hj}/(\Sigma_R Q_{i|hj} + \Sigma_N Q_{i|hj})$ . Then  $P_{i|hj} = Q_{i|hj} A_{i|hj}$ .

Each sampled sponsor was asked to complete a Sponsor Survey. Tabulation of data from the Sponsor Survey requires the weight  $W_{\text{sponsor}} = 1/(P_{i|hj}P_j)$ . When selecting the sponsor sample, independent child care centers (ICCCs) were treated as sponsors. This choice was necessitated because the State lists of sponsors did not distinguish between "true" sponsors and ICCCs, but in fact ICCCs are child care providers, not sponsors. For them,  $W_{\text{sponsor}} = 0$ , or equivalently, the ICCCs are excluded from any tabulations at the sponsor level. These ICCCs do enter the provider sample, where they are assigned appropriate weights for purposes of tabulation.

## PROVIDER AND MENU WEIGHTS

From the sponsor sample, we next sampled child care providers (the full provider sample) and asked them to answer a Provider Survey. Tabulation of the Provider Survey requires the weight  $W_{\text{provider}}$ . Providers were also asked to complete a Menu Survey and a Food Preparer Interview. To adjust for differences in the nonresponse patterns for the Provider Survey, the Menu Survey, and the Food Preparer Interview, we developed one additional weight:  $W_{\text{menu}}$ . This weight is intended for use with both the Menu Survey and the Food Preparer Interview.

The provider and menu weights would be identical except that their response patterns differed somewhat and, consequently, so did the nonresponse-adjusted final weights. Given this similarity, we only discuss the provider weights. The provider sample was drawn from sample sponsors only. The conditional probability of selection for a provider was larger for small sponsors and smaller for large ones, assuring that providers from small sponsors would not be underrepresented in the sample. Let  $Q_{k|hij}$  represent the conditional probability of selection for

the  $k^{th}$  provider given the State, sponsor, and sponsor type.  $P_{k|hij}$  reflects the adjustment for nonrespondents. Except for ICCCs, nonresponse adjustments were done by stratifying the sample by type of sponsor, then by whether they were public or private (with or without a corporate affiliate in the latter case), by type of sponsoring organization (school district, public social service agency, etc.), by percentage of revenue from CACFP reimbursement, and by whether or not they planned menus. The stratification varied somewhat by type of provider. Because nonresponding ICCCs had no corresponding sponsor, the nonresponse adjustments for ICCCs were based exclusively on State groupings with no more than two States per group. Then  $W_{provider} = 1/(P_{k|hij} P_{i|hi} P_j)$ .

### WEIGHTS FOR ON-SITE OBSERVATIONS

A subset of the full provider sample was selected for the on-site observations (the on-site provider sample). From that subset, we selected children and observed their meal consumption, interviewed their parents about their meal consumption while not in child care, and interviewed their parents to obtain household characteristics. Selection into the on-site provider group resulted in three additional surveys and three new weights. The weight  $W_{\text{meals}}$  is suitable for tabulating data about on-site meal consumption, the weight  $W_{\text{recall}}$  is used for tabulating data from the recall interviews, and the weight  $W_{\text{household}}$  applies to household interviews.

While children in FDCHs are usually fed together, children in centers tend to be fed in small groups whose composition is homogenous with respect to age. To allow the observers at centers to watch the food consumption of the sampled children, we first chose a group of noninfant children and then selected six children from that group. (If the center served infants, we instead selected one infant and five children from the chosen non-infant group.) In FDCHs, we simply selected six non-infant children (if the number of eligible children was as many as six), or five non-infants and one infant (if any eligible infants were enrolled). Children ineligible to be sampled included infants who were exclusively breastfed, children who were not enrolled for both of the scheduled observation days, and siblings of sample members. The first two groups were deemed outside of scope. The siblings were represented by other children enrolled with the same provider, i.e., by increasing the child weights of the other children in the same group proportionally.

Let  $P_{m|hijk}$  represent the adjusted probability that the  $m^{th}$  program was selected for on-site observation given that the  $k^{th}$  program of the  $t^{th}$  sponsor of sponsor type h in the  $f^{th}$  State was selected for the provider survey, and let  $P_{c|hijkm}$  represent the adjusted probability that a child was selected given that a provider appeared in the on-site provider sample. Then the weight is  $W = 1/(P_{c|hijkm} P_{m|hijk} P_{k|hij} P_{i|hj} P_j)$ . As stated earlier, there are distinct versions of W for meal observations, recalls, and families.

Several nonresponse adjustments are required. The probability that a provider is selected into the sample, conditional on its sponsor's selection, is  $Q_{m|hijk} Q_{k|hij}$ . The nonresponse adjustment procedure is identical to that used earlier to adjust  $Q_{k|hij}$ . However here the respondents and nonrespondents are only those programs that were selected for the on-site sample, and the stratification was less complicated than for the nonresponse adjustment to the full provider sample because of the smaller number of on-site providers. The nonresponse adjustment corresponding to  $Q_{c|hijkm}$  looks quite different from the nonresponse adjustment for other selection probabilities. Instead of stratifying the data into cells based on sponsor characteristics, we conducted all nonresponse adjustments within a provider. Call the intended sample size of non-infants  $N_1$ , and the observed sample size  $N_0$ . When  $N_0$  was less than  $N_1$ , we adjusted the preadjusted sampling probability  $Q_{c|hijkm}$  to get  $P_{c|hijkm} = Q_{c|hijkm} N_0/N_1$ . (In one instance, none of the sampled children were present to be observed—that is,  $N_0$  was equal to zero. In this case, the provider was collapsed with a similar provider and the nonresponse adjustment was repeated.) A similar, but somewhat simpler procedure, was used for infant children.

The analysis of meals consumed in care is intended to describe *children in care on a typical* day—not all children enrolled in care. Hence, children who were selected into the sample but absent on one or both observation days were not nonrespondents for purposes of constructing the corresponding weights  $(W_{meals})$ , but rather outside of scope. Because no attempt was made to contact the parents of children who were absent on both days, however, these families were deemed nonrepondents in constructing the household weights  $(W_{household})$ .

# Appendix F

# Study Implementation

### **SUMMARY**

Meeting the research objectives of the Early Childhood and Child Care Study required the use of a variety of data collection instruments, to obtain information from several categories of respondents, and the direct observation of children's meals. The study design incorporated two interrelated studies—a Study of Sponsors and Providers and a Study of Children and Families. Exhibit F.1 links the data collection strategy to each of the study objectives. This appendix provides a detailed description of survey instrumentation, study implementation (including the recruiting of study participants), and data collection activities. Finally, it shows the disposition of the study sample.

At the outset it is important to present an overview of the response rates for the various components of the study. While the response rates for the Study of Sponsors and Providers were good, the response rates for the Study of Children and Families were relatively low.

# Sponsors and Providers

Sponsoring agencies were asked to complete a self-administered mail survey. Response rates for this survey ranged from 83 percent for family day care sponsors to 72 percent for Head Start sponsors and 71 percent for child care center sponsors.

Providers were asked to complete two self-administered mail surveys. In addition, an attempt was made to conduct a telephone interview with the individual with primary responsibility for food preparation (food preparer). Among family day care homes, 91 percent completed at least one of the three surveys. Similarly, 97 percent of Head Start centers and 92 percent of child care centers completed at least one of the three surveys. Response rates for each of the three surveys always exceeded 80 percent.

Exhibit F.1

Data Collection Strategy by Study Objective

Objective	Data Collection Strategy
Study of Sponsors and Providers	
Describe CACFP program characteristics.	• Mail survey of sponsors.
	• Mail survey of providers.
Examine the nutrient content of meals offered in participating homes and centers.	<ul> <li>Mail survey of providers to collect descriptions of meals offered for a five-day period.</li> </ul>
Assess the nutrition knowledge and food service practices of providers.	<ul> <li>Telephone/in-person interview of food preparers to assess nutrition knowledge and obtain information on menu planning, food purchasing, and food preparation practices.</li> </ul>
Study of Children and Families	
Describe the characteristics of participating children and their families.	<ul> <li>Telephone interview with parents to collect demographic information.</li> </ul>
Determine the contribution of CACFP meals and snacks consumed to participating children's nutrient intake while in care and over 24 hours.	<ul> <li>On-site observation of meals and snacks consumed in child care.</li> </ul>
	<ul> <li>Telephone interviews with parents regarding foods and beverages consumed while child was not in care.</li> </ul>

As discussed below, response rates for the parent interviews conducted to obtain information on children's intake while not in care were unacceptably low, raising the issue of potential nonresponse bias. For this reason, data on children's out-of-care consumption, and therefore nutrient intake over 24 hours, have not been analyzed.

## Children and Families

In this component of the study, a sample of children at participating child care sites was to be observed on two separate days during a target week. Parents were scheduled to be interviewed on the day following each observation to provide information on what the child ate when not in child care on the observation day (Dietary Recall Interview). During one of the interviews with parents, a Household Survey was to be administered to obtain information on household characteristics.

The Study of Children and Families proved to be problematic. The primary problem was reaching parents prior to the target week in order to gain their cooperation, obtain permission to observe their children, and schedule the post-observation interviews. Although we were able to contact and schedule observations for 80 percent of the sample of children in homes, we were only able to schedule observations for 58 percent of the sample of children in Head Start centers and 62 percent of the sample of children in child care centers. The difficulty in contacting parents during the recruiting phase effectively capped the overall response rates for the Study of Children and Families.

Absenteeism was also a serious problem in all three child care settings. Some children scheduled to be observed were not in care on one or both observation days. In homes, 91 percent of the children scheduled for observations were observed on one of the scheduled days; only 67 percent, however, were observed on both scheduled days. In Head Start centers the figures were 95 percent and 72 percent, respectively, and in child care centers, 90 percent and 73 percent, respectively. Overall response rates for the child observations (i.e., the proportion of eligible children that were observed at least once) were 72 percent for homes, 55 percent for Head Start centers, and 56 percent for child care centers. Note that since the analysis of meals consumed in care is intended to describe *children in care on a typical day*—not all children enrolled in care—children who were selected into the sample but absent on one or both observation days were not nonrespondents for purposes of constructing the corresponding weights  $(W_{meals})$ , but rather outside of scope.

Finally, there was a problem reaching parents to conduct the post-observation interviews. Nonresponse to the post-observation interviews further reduced overall response rates for the Dietary Recall Interviews to 58 percent for homes, 36 percent for Head Start centers, and 39 percent for child care centers. These response rates were deemed to be unacceptably low, so the information obtained in the Dietary Recall Interviews has not been used in this study.

## INSTRUMENTATION

The study employed three self-administered surveys, three interviews, and an observation protocol. Each is briefly described below.

# Sponsor Survey

The self-administered Sponsor Survey collected descriptive information on the characteristics of the sponsoring agency, such as agency type (e.g., government entity versus community agency), size, and structure; number and type of programs sponsored; and nutrition education and training programs offered to the staff.

## Provider Survey

The Provider Survey had three versions: one for homes, another for sponsored centers, and a third for independent centers. The surveys collected information on provider characteristics (i.e., the number and ages of children served); weeks, days, and hours of operation; meals provided (i.e., breakfast, lunch, or dinner; and morning, afternoon, and/or evening snacks); funding sources; and nutrition education. Center instruments included questions on the types of child care or early childhood programs offered. The Provider Survey was generally selfadministered. However, in some cases, a field observer conducted the survey if the provider had been unable to complete it prior to the observation visit.

<sup>&</sup>lt;sup>1</sup>While family day care providers must be sponsored in order to participate in the CACFP, child care centers may participate either under the aegis of a sponsoring agency or as independent centers.

# Menu Survey

The Menu Survey collected information on meals offered to children in care over a five-day period. This information included the name and description of all foods and beverages offered and the age groups to whom each item was offered. If recipes were readily available, providers were asked to include information on the ingredients used and the preparation techniques followed. The Menu Survey was self-administered. In some cases, providers in the on-site sample were assisted in completing the Menu Survey by field observers.

# Food Preparer Interview

Information on the nutrition knowledge, food preparation, and purchasing practices of providers was collected through the Food Preparer Interview. The interview addressed issues such as the food preparer's knowledge of nutrition, including awareness of strategies for implementing the *Dietary Guidelines for Americans;* menu planning; food purchasing; and meal preparation. Most Food Preparer Interviews were conducted by telephone. However, food preparers in the on-site sample were interviewed in person during the site visit.

## Meal Observation

To gather information on foods *consumed* by children in the child care setting, meal observations were conducted on two separate days during the target week (i.e., the week covered in the Menu Survey). Prior to meal service, field observers weighed representative samples of each food to be served. During meal time, observers estimated the amount of food each child received and the amount of food left over using visual estimation techniques.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>Information on food intake of sampled infants was collected through a vehicle that combined elements of both the child observations and the Menu Survey. The person responsible for feeding the infant recorded the kind and amount of foods and beverages consumed. Detailed descriptions of foods (and ingredients) were gathered by the field observer.

# Dietary Recall Interview

To gather information on children's food consumption outside of care, Dietary Recall Interviews were conducted with parents. Parents were asked to describe foods and beverages consumed by the child while not in child care, during the specific 24-hour period which included the child care meal observation.<sup>3</sup> Interviews were conducted by telephone within two days of the observation day.

## Household Interview

Information on characteristics of families of children participating in the CACFP was collected through the Household Interview. This instrument gathered data such as age of the child, race and ethnicity of the child and the family, family participation in other Federal assistance programs, and household size and income. The interview was conducted by telephone, usually in tandem with one of the Dietary Recall Interviews.

## STUDY IMPLEMENTATION

The study was conducted in a nationally representative sample of 20 States. These States were selected with probability proportional to size, based on the size of the CACFP in each state in Fiscal Year 1994. Food and Consumer Service Regional Offices and State agencies were contacted in January 1994 to assemble the information needed to select the samples of sponsors and providers. Actual data collection activities began in January 1995 and continued through This section describes the procedures used in recruiting sampled sponsors, providers, and households, as well as the administration of survey instruments.

## Recruiting Study Participants

To construct the samples of sponsors and providers, the State agency responsible for the administration of the CACFP in each of the 20 sampled States was asked to furnish lists of agencies sponsoring each of the three types of CACFP providers: family day care, Head Start

<sup>&</sup>lt;sup>3</sup>For children age 10 and older, the Dietary Recall Interview was conducted with the child rather than the parent.

centers, and child care centers. A sample of sponsors was selected from each of these lists.<sup>4</sup> State agencies were then provided with the lists of selected sponsors in their State and requested to furnish a list of providers associated with each sponsor, including the dollar value of each provider's October 1993 claim for reimbursement. The claim information was requested as a measure of program size. Only 2 of the 20 States were able to furnish provider-level information. In the other 18 States, sponsors were contacted directly for provider data. Most sponsors were able to supply the information; however, some were not able to furnish it. Some sponsors did not maintain the information requested, others did not have it in an easily retrievable form.

The recruiting phase of the study required gaining the cooperation of sponsors, providers, and households. Recruiting activities for each are described in the following three sections.

Sponsors. Recruiting activities began with a series of sponsor contacts in the summer of 1994:

- A sponsor mailing including:
  - an individually signed letter on study stationery;
  - a brief overview of the study;
  - a toll-free telephone number for inquiries; and
  - a request for a list of sponsored providers in States where the administering agency was unable to furnish lists of providers.
- A telephone followup to:
  - ensure receipt of materials;
  - encourage sponsors to support the study;
  - respond to questions about the study; and
  - prompt sponsors to return provider lists.

<sup>\*</sup>Independent child care centers were included on the lists of center sponsors, as State agencies do not distinguish between independent centers and sponsoring organizations.

Following receipt of the provider lists, a sample of providers was selected for the Study of Sponsors and Providers and a subsample of these providers was selected for the Study of Children and Families. Sponsors were notified of this selection and asked to help secure the cooperation of sampled providers. In particular, sponsors were asked to contact sampled providers before we contacted them.

**Providers.** Provider recruiting was conducted on a rolling basis. Each provider was assigned its own "target week" during which it was to complete the Menu Survey. Each provider had the following contacts:

- Approximately six weeks before the scheduled target week, a mailing with:
  - an overview of the study and a cover letter;
  - target-week information;
  - a Menu Survey; and
  - a Provider Survey.
- Two weeks after the mailing, a first followup telephone call to:
  - confirm receipt of materials;
  - ensure understanding of survey questions and requirements;
  - identify appropriate respondents for each survey instrument;
  - confirm the target week or, when necessary, negotiate a new target week: and
  - to assess the likelihood of the provider's completing the survey without further prompting.
- One week prior to the target week, a second telephone call to:
  - reassess the provider's willingness and ability to complete the Provider Survey and Menu Survey during the target week; and
  - to schedule an appointment to complete the Food Preparer Interview during the target week.

For the subsample of providers included in the Study of Children and Families, the recruiting phase was somewhat more complex. Providers were asked to furnish information about families and children and to allow observers to visit on two nonconsecutive days during the target week (Monday and Thursday or Tuesday and Friday). In addition to these activities, Head Start centers and child care centers were asked to supply the names and ages of each group of children at the center. This information was then used to select a sample of children for observation.

Households. Gaining parent cooperation was the final step in recruiting. Household recruiting included the following activities:

- Providers were asked to distribute a brochure explaining the study to parents in the selected group and, in the case of family day care, to all parents. The brochure included an implied consent form (i.e., parents were asked to return the form if they did *not* want their names and telephone numbers released).
- Providers were asked to forward parent names and telephone numbers.
- Parents were subsequently contacted by telephone and asked to participate in the study. It was explained to parents that participation included:
  - allowing their child to be observed at mealtime on two separate days;
  - recording foods consumed by the child while not in care on the two observation days;
  - completing two Dietary Recall Interviews, one following each observation day; and
  - completing the Household Interview.

Once parents of sampled children had agreed to participate in the study, the site was scheduled for on-site visits. The original data collection plan called for scheduling the target week, receiving names of parents, and scheduling interviews during the planned week. However, receiving the parent lists in time to schedule interviews prior to the target week proved to be problematic. Delays by the provider in returning the parent information often required changing the target week to a later date. Consequently, we altered our procedures so that the target weeks were not assigned until after the parent lists were received. This alternate plan provided more

time for scheduling parent interviews prior to the target week. Despite this, we were still unable to reach many parents prior to the target week.

#### Data Collection Activities

Data for the Study of Sponsors and Providers were collected by mail surveys, telephone interviews, and in-person interviews. Information for the Study of Children and Families was gathered through on-site visits and telephone interviews.

The Study of Sponsors and Providers. Sponsor Surveys were mailed to sampled sponsors in January 1995. In addition to the survey, the mailing included an introductory letter and study overview; information about the toll-free help number; and a business reply envelope for return of the survey. Sponsors whose surveys were not returned on schedule were contacted by telephone at biweekly intervals and asked to return the survey. A few surveys were ultimately conducted by telephone.

As indicated above, each provider in the sample was assigned a target week for completing the Menu Survey. The target weeks were spread out over a four-month period, January 1995 through May 1995. The Menu and Provider surveys were mailed to providers several weeks prior to the target week. A brochure, *Guidelines for Describing Foods*, accompanied the Menu Survey. This brochure detailed the information to be provided about each food offered. In the 1988 Study of the Child Care Food Program, illiteracy proved to be an obstacle to completion of survey instruments, particularly for the family day care provider population. For this study, a linguist reviewed and revised the Menu Survey and the Provider Survey to meet the needs of adults with low literacy skills.

To ensure completion of the surveys and to provide assistance as needed, a series of provider contacts were made. A target-week call was made during the target week to:

- prompt the provider to complete the Menu Survey;
- assist the provider, if necessary, in completing the Menu Survey;

- conduct the Food Preparer Interview; and
- to remind the provider to return the materials at the end of the week.

A post-target-week call was made to prompt providers who had not returned surveys.

Additional reminder telephone calls were made at biweekly intervals until all survey materials were received. When providers had misplaced business reply envelopes, they were instructed to return materials by Federal Express, charged to Abt Associates Inc. An incentive of \$25.00 for return of a completed Menu Survey was offered to nonresponding providers. This incentive was offered in recognition of the significant time commitment required for completion of the survey. As a gesture of good will, responding providers working under the same sponsor as the nonresponding providers were also sent incentive payments.

The Study of Children and Families. Each provider in this component of the study was visited by a field observer on two separate days during the target week, Monday and Thursday or Tuesday and Friday.<sup>5</sup> During each of these visits, the field observer weighed reference portions of all foods offered and estimated the amounts of food taken and left over by sampled children. Children were observed for all meals and snacks they consumed. To facilitate observations, group size was limited to six children. To avoid reactive influences on food consumption, centers were asked to have sampled children sit together during meals and snack times for several days prior to the first observation.

While on-site, the field observer provided technical assistance as needed, to help the provider complete the Menu Survey. He/she also interviewed the food preparer and, if the Provider Survey had not been completed, interviewed the center director or FDCH provider.

<sup>&</sup>lt;sup>5</sup>As in the Study of Sponsors and Providers, the subsample of providers included in this component were assigned a target week between January 1995 and June 1995. Providers were asked to complete the Menu Survey and the Provider Survey during the target week.

To gather information on food consumed while children were not in child care, two Dietary Recall Interviews were conducted with parents.<sup>6</sup> The Household Interview was conducted in tandem with one of the Dietary Recall Interviews. Prior to the Dietary Recall Interviews, parents were sent a packet of materials to assist them in the interview. These materials included a log in which to record the child's food intake as well as a 2-dimensional food model chart to use in estimating amounts of food consumed.

The Dietary Recall Interviews were scheduled to be conducted the evening following the day of observation (e.g., on Tuesday evening for a Monday observation). Repeat attempts were made to conduct the Dietary Recall Interview with parents who were not available at the scheduled time. However, interviews were not attempted if two days had elapsed since the day of observation because of concern about deterioration in respondents' abilities to recall information.

A number of parents did not have access to telephones and were therefore unable to participate in the Dietary Recall Interview and the Household Interview. To address this situation, field observers visited providers and intercepted parents as they were dropping off or picking up their children. The parents were offered a \$10 incentive to call us at our toll-free number to complete the telephone interviews.

### DISPOSITION OF THE STUDY SAMPLE

The Early Childhood and Child Care Study included numerous survey instruments that collected data from a variety of respondents. Providers were responsible for completing several different instruments, children in the Study of Children and Families were to be observed on two separate days, and two Dietary Recall Interviews were to be conducted with parents of observed children. Because there were multiple occasions for sample members to "complete" a study instrument or protocol, it is necessary to consider response rates separately for each instrument. Response rates for each of the various study instruments are described in the following sections.

<sup>&</sup>lt;sup>6</sup>For children age 10 and older, the Dietary Recall Interviews were conducted with the child rather than the parent.

The discussion is framed in terms of the hierarchical nature of the sample (i.e., the sample of providers is nested within the sponsor sample, and the sample of children is nested within the provider sample) and the three types of providers (family day care homes, Head Start centers, and child care centers) included in the study.

It is important to point out that, at each level of the sampling frame (sponsors, providers, and children), some sampled units were found to be ineligible for inclusion in the study. Reasons for ineligibility included:

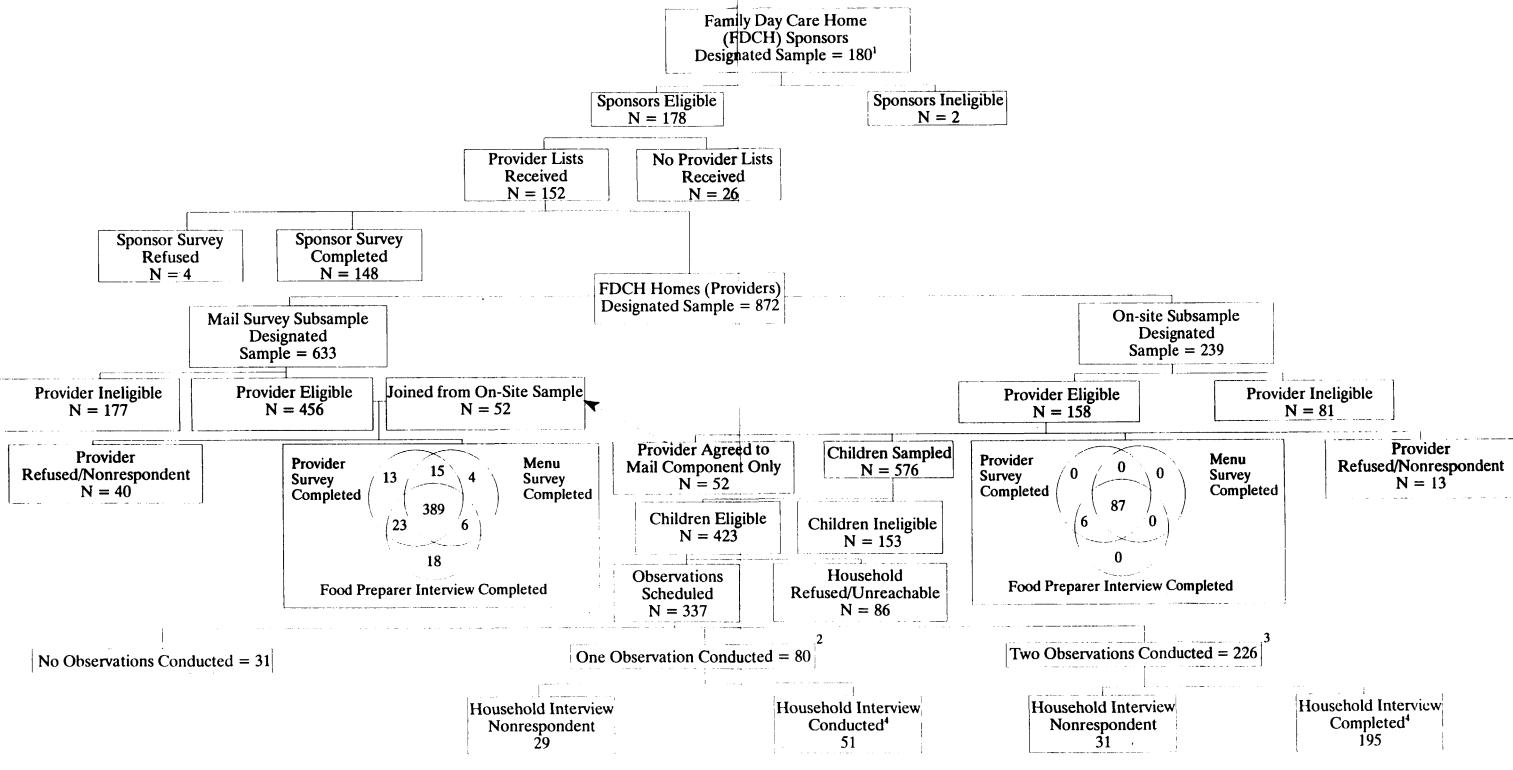
- **Sponsors:** Sampled sponsors were considered ineligible for the study if they no longer sponsored (or were incorrectly listed by the State as a sponsor of) the type of provider (homes, Head Start centers, or child care centers) for which they were selected or if they were no longer a CACFP sponsor.
- **Providers:** Sampled providers were considered ineligible for the study if they no longer participated (or were not currently participating) in the CACFP or were not in operation during the data collection period.
- Children: Sampled children were considered ineligible for the study if they did not regularly attend child care on both of the scheduled observation days (Monday and Thursday or Tuesday and Friday), had a sibling that was included in the sample, or were being breastfed.

## Family Day Care Homes

Exhibit F.2 displays the disposition of each component of the family day care sample—sponsors, providers, and children.

<sup>&</sup>lt;sup>7</sup>Only one child from each family was included in the study.

Exhibit F.2
SAMPLE DISPOSITION: FAMILY DAY CARE HOME SPONSORS, PROVIDERS, AND CHILDREN



<sup>&</sup>lt;sup>1</sup>Of the 180 FDCH sponsors, 12 are also included in the samples of Head Start or child care center sponsors. <sup>2</sup>Seven of the observed children are not included in nutrition analyses because of age (<1 or >10 years) or incomplete data.

<sup>&</sup>lt;sup>3</sup>Seventeen of the observed children are not included in nutrition analyses because of age (<1 or >10 years) or incomplete data.

<sup>&</sup>lt;sup>4</sup>A total of 382 Household Interviews were conducted, including 136 conducted as part of followup surveys of nonresponders.

Family Day Care Sponsors. A total of 180 FDCH sponsors<sup>8</sup> was initially selected into the study sample. Of these, 2 were ineligible for the study, leaving a total of 178 eligible FDCH sponsors. Of the 178 eligible sponsors, 152 (85%) supplied provider lists and 26 (15%) did not. Of the 152 sponsors providing lists, 148 (97%) completed the Sponsor Survey, representing 83% of the total eligible sponsor sample.<sup>9</sup>

Family Day Care Providers. A sample of 872 family day care homes was selected from all of the homes sponsored by the 152 eligible FDCH sponsors that provided lists. This sample was then randomly divided into two subsamples: 633 homes were allocated to the mail survey subsample, and 239 homes were allocated to the on-site subsample. Of the initial sample, 177 homes in the mail survey subsample and 81 homes in the on-site subsample were found to be ineligible for the study. This left a total of 456 sampled homes eligible for the mail survey and 158 homes eligible for the on-site study.

Of the 158 sampled homes that were eligible for the on-site study, 52 refused to allow site visits but agreed to participate in the mail component. This increased the number of homes eligible for the mail survey from 456 to 508 and decreased the on-site sample from 158 to 106. While most of the eligible homes in each subsample completed all three survey instruments, some completed only one or two. The number completing each combination of instruments is shown in the Venn diagrams in Exhibit F.2. Response rates for each instrument are shown in Exhibit F.5.

Family Day Care Children. Each of the 106 eligible homes that agreed to participate in the onsite study provided lists of enrolled children. From these lists, an initial sample of 576 children was selected for observations and Dietary Recall Interviews; of these, 153 were found to be ineligible, leaving an eligible sample of 423 children. Of the eligible children, 337 were

<sup>&</sup>lt;sup>8</sup>Of the 180 FDCH sponsors, 12 are also included in the samples of Head Start sponsors or child care center sponsors.

<sup>&</sup>lt;sup>9</sup>All of the sponsors of multiple program types (FDCHs, Head Start centers, and child care centers) completed the Sponsor Survey. The survey returns of these sponsors are reported again under each appropriate program type.

scheduled for observations. Of those not scheduled, most (84%) were not scheduled because their parents could not be reached.

Absenteeism was a serious problem in all three child care settings. In the family day care setting, of the 337 children for whom observations were scheduled, only 226 (67%) were present for two observations. An additional 80 (24%) were present for one, but not both, observations. When children were not present for the observation, no attempt was made to conduct the Dietary Recall Interview with parents.

Frequently, parents were unavailable for the scheduled telephone interview and, despite repeated attempts, the Dietary Recall Interviews were not completed for some of the observed children. Exhibit F.2 shows the number of children observed once, twice, and not at all, and the number of Household Interviews completed. Response rates for each component are shown in Exhibit F.5.

## **Head Start Centers**

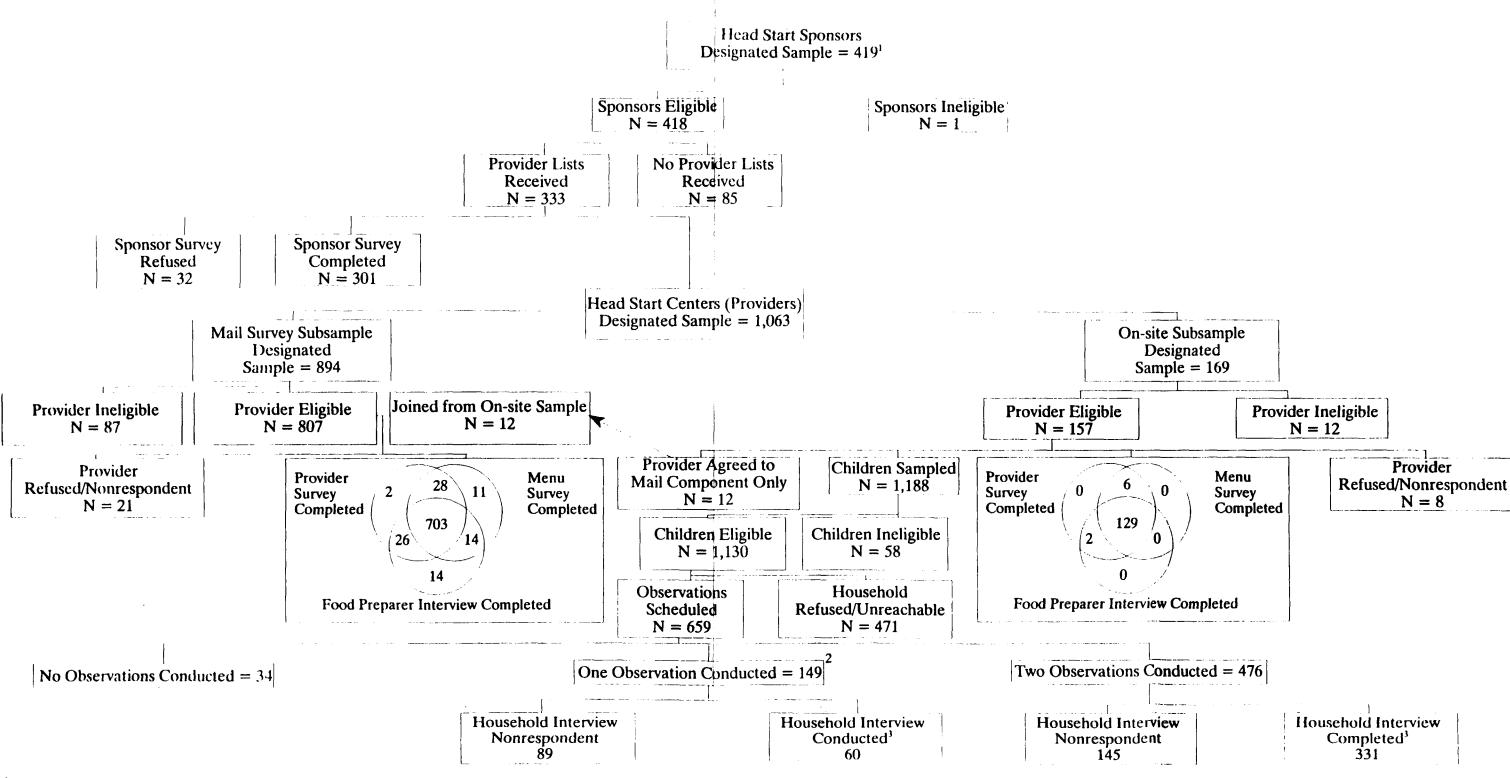
Exhibit F.3 presents the disposition of the samples of sponsors, providers, and children for the Head Start center segment of the study sample.

Head Start Center Sponsors. An initial sample of 419 Head Start center sponsors was selected for participation in the study; of these, 1 was found to be ineligible, leaving a total eligible sample of 418 sponsors. Provider lists were received from 333 (80%) of the 418 sponsors. The Sponsor Survey was completed by 301 (90%) of these sponsors, representing 72 percent of the eligible sponsor sample.

<sup>&</sup>lt;sup>10</sup>Of the 418 Head Start center sponsors, 28 are also included in the samples of FDCH or child care center sponsors.

Exhibit F.3

# SAMPLE DISPOSITION: HEAD START CENTER SPONSORS, PROVIDERS, AND CHILDREN



<sup>&</sup>lt;sup>1</sup>Of the 419 Head Start sponsors, 28 are also included in the samples of FDCH or center sponsors.

<sup>&</sup>lt;sup>2</sup>One of the observed children is not included in nutrition analyses because of age (<1 or >10 years) or incomplete data.

A total of 915 Household Interviews were conducted, including 524 conducted as part of followup surveys of nonresponders.

Head Start Center Providers. An initial sample of 1,063 Head Start centers was selected from among the eligible 333 sponsors who had provided lists. This initial sample was then randomly divided into the two subsamples: 894 centers were allocated to the mail survey subsample and 169 centers were allocated to the on-site subsample. Of the 894 centers in the mail survey subsample, 87 were found to be ineligible, leaving a total of 807 eligible centers for this component. Similarly, of the initial sample of 169 centers in the on-site study subsample, 12 were ineligible, leaving a total of 157 centers eligible for this component of the study.

As in the case of family day care homes and child care centers, some (12) Head Start centers refused to allow on-site visits but agreed to participate in the mail survey component of the study. This increased the number of Head Start centers eligible for the mail survey from 807 to 819 and reduced the number for the on-site study from 157 to 145. The Venn diagrams in Exhibit F.3 show the number of eligible providers in each study component that completed various combinations of the three survey instruments. Response rates for each instrument are shown in Exhibit F.5.

Head Start Center Children. An initial sample of 1,188 children was selected from among the 145 Head Start centers that agreed to participate in the on-site study. Of the initial sample of children, 58 were found to be ineligible, leaving a sample of 1,130 eligible children for this component of the study. Of the eligible sample of 1,130 children, 659 were scheduled for observations. Of those not scheduled, most (79%) were not scheduled because parents could not be reached.

Of the 659 children scheduled for observations, 476 (72%) were present and observed on the two scheduled nonconsecutive days. Another 149 (23%) were present on just one observation day. Exhibit F.3 shows the number of children observed once, twice, and not at all, and Household Interviews completed for these children. Response rates are shown in Exhibit F.5.

## Child Care Centers

The disposition of the child care center study component is shown in Exhibit F.4.

Child Care Center Sponsors. A total of 596 sponsors of child care centers was initially sampled for participation in the study; of these 165<sup>11</sup> are sponsoring organizations and 431 operate as self-sponsored independent centers. Of the 165 sponsoring organizations, 144 (87%) supplied provider lists; independent centers were not asked to provide lists as they are self-sponsored, single units. Sponsor Surveys were completed by 117 (81%) of the sponsors that had provided lists, representing 71% of the sponsors; 2 sponsors were found to be ineligible.

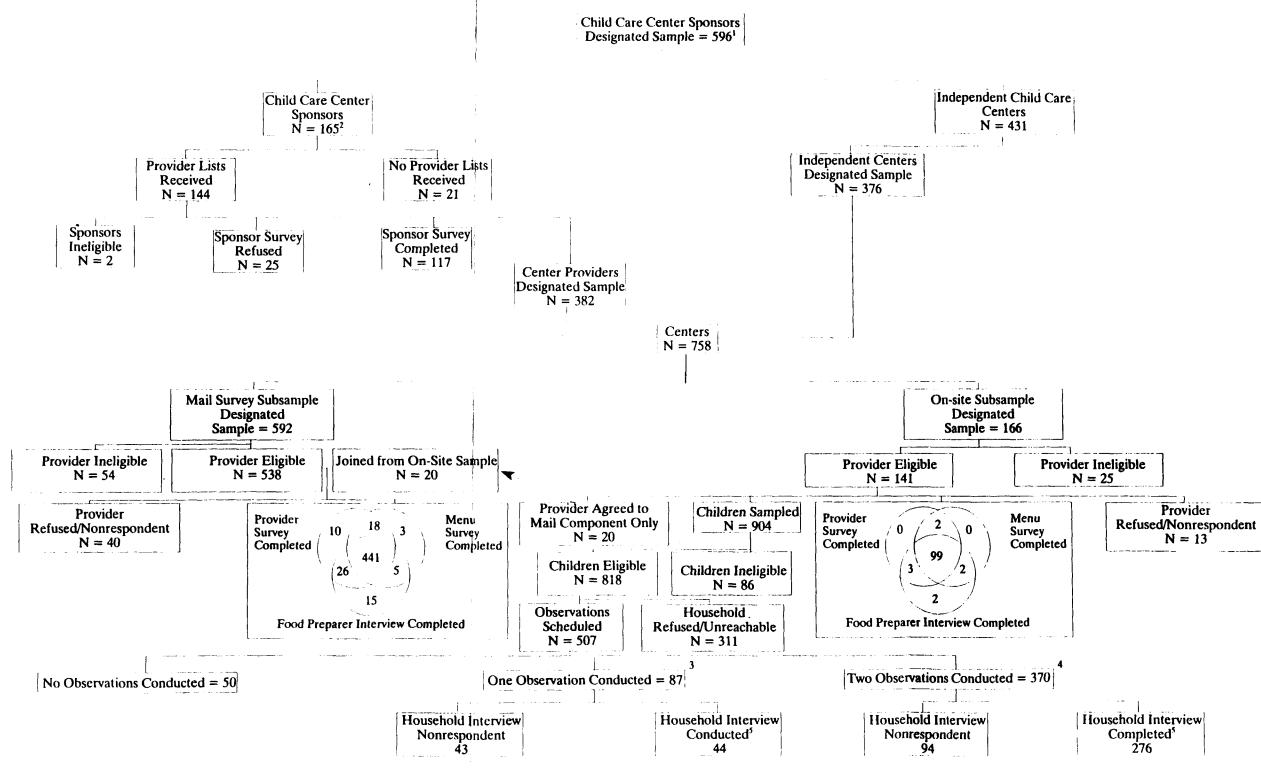
Child Care Center Providers. From all of the child care centers sponsored by the 144 sponsors that supplied provider lists, a sample of 382 child care centers was initially selected for participation in the study. Because centers may operate as independent entities, we also selected a sample of 376 child care centers for whom there is no sponsor, yielding a total of 758 centers. This sample was then randomly divided into two subsamples; 592 centers were allocated to the mail survey component and 166 centers were allocated to the on-site component.

Of the 166 centers initially included in the on-site sample, 25 were found to be ineligible, leaving a total of 141 centers eligible for this component of the study. As with the FDCH and Head Start provider samples, a number of providers selected for the on-site component refused to allow site visits but agreed to participate in the mail component (20 centers). This increased the child care center mail sample from 538 centers to 558 centers and decreased the on-site sample from 141 centers to 121 centers. As shown in the Venn diagrams in Exhibit F.4, the majority of providers in both components completed all three survey instruments. Response rates for each instrument are shown in Exhibit F.5.

<sup>&</sup>lt;sup>11</sup>Of the 165 child care sponsors, 20 are also included in the samples of FDCH or Head Start center sponsors.

Exhibit F.4

SAMPLE DISPOSITION: CHILD CARE CENTER SPONSORS, PROVIDERS, AND CHILDREN



The 596 sponsors include organizations that sponsor child care centers for the CACFP plus independent child care centers (ICCCs), which are self-sponsored.

Of the 165 child care center sponsors, 20 are also included in the samples of FDCH or Head Start sponsors.

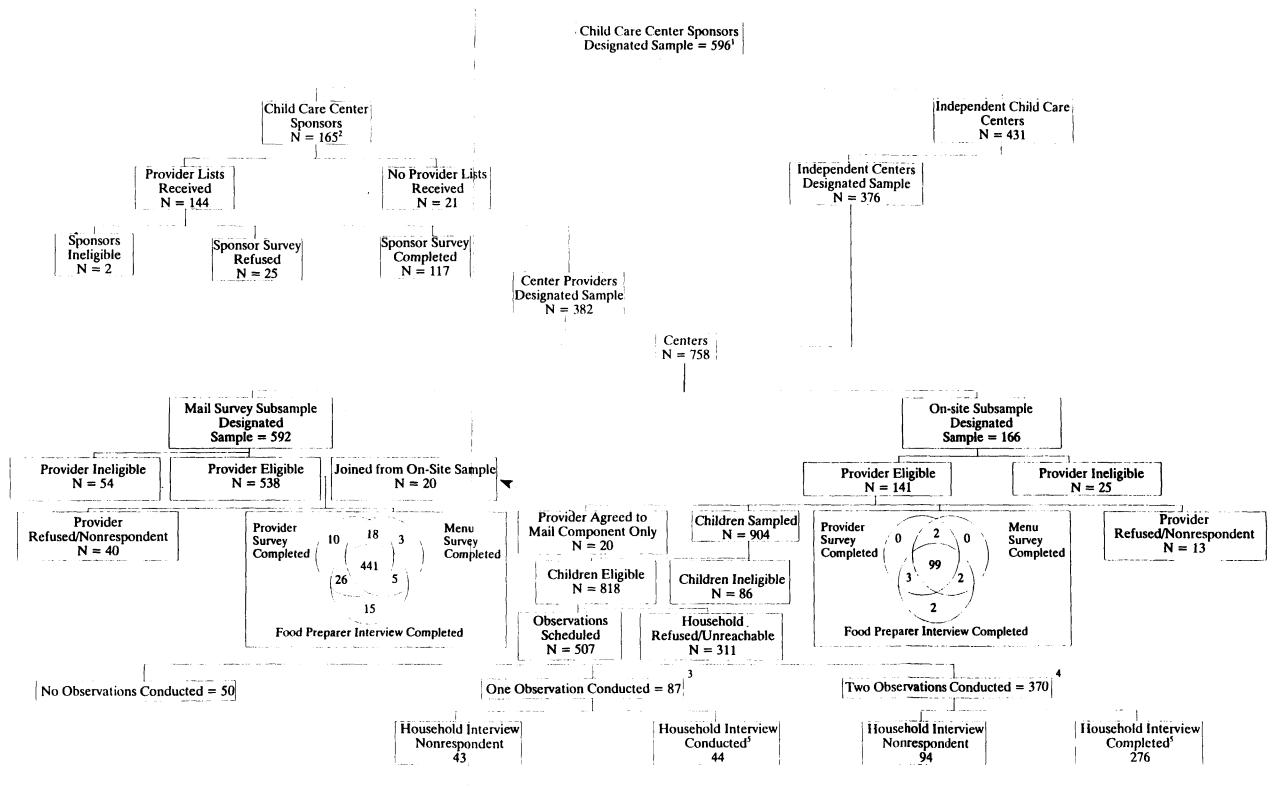
Five of the observed children are not included in nutrition analyses because of age ( $<1~\rm gr>10~\rm years$ ) or incomplete data.

<sup>&</sup>lt;sup>4</sup>Eleven of the observed children are not included in nutrition analyses because of age (<1 or >10 years) or incomplete data.

A total of 654 Household Interviews were conducted, including 334 conducted as part of followup surveys of nonresponders.

Exhibit F.4

SAMPLE DISPOSITION: CHILD CARE CENTER SPONSORS, PROVIDERS, AND CHILDREN



The 596 sponsors include organizations that sponsor child care centers for the CACFP plus independent child care centers (ICCCs), which are self-sponsored.

Of the 165 child care center sponsors, 20 are also included in the samples of FDCH or Head Start sponsors.

Five of the observed children are not included in nutrition analyses because of age ( $<1~{\rm gr}>10$  years) or incomplete data.

<sup>&</sup>lt;sup>4</sup>Eleven of the observed children are not included in nutrition analyses because of age (<1 or >10 years) or incomplete data.

A total of 654 Household Interviews were conducted, including 334 conducted as part of followup surveys of nonresponders.

Child Care Center Children. A sample of 904 children was initially selected from among the 121 child care centers that participated in the on-site study. Of these, 86 were found to be ineligible, leaving a sample of 818 eligible children. Observations were scheduled with 507 of the 818 eligible children. Among children not scheduled, most (83%) were not included because their parents could not be reached.

Of the 507 children scheduled for observation, two observations were conducted with 370 (73%) children; another 87 children (17%) were present for just one observation. Exhibit F.4 shows the number of children observed once, twice, and not at all, and Household Interviews completed for these children. Response rates are shown in Exhibit F.5.

## FOLLOWUP SURVEY OF NONRESPONDERS

One of the principal goals of the Early Childhood and Child Care Study was to collect reliable income data for FCS' legislative initiatives that involve the CACFP. A key FCS initiative is implementing the CACFP provisions of the Personal Responsibility and Work Opportunity Act of 1996 (P.L. 104-193). Household incomes of (a) providers who operate family day care homes and (b) families of CACFP children may play an important role in FCS' future proposals to improve implementation. While the response rates to the Provider Surveys were quite good (Exhibit F.5), ranging from 87 percent for FDCHs to 93 percent for Head Start centers, the response rates for the Household Survey were unacceptably low, ranging from 35 percent for Head Start centers to 58 percent for FDCHs. The primary reason for the low response rates for the Household Survey was the inability to reach parents by telephone during the recruitment phase of the study and within two days of the meal observations rather than parents' refusal to participate. Therefore, a Followup Survey of all nonresponders to the original Household Survey was conducted in an effort to raise response rates to a level sufficient for FCS to make critical budgetary estimates on welfare reform issues.

The Followup Survey focused narrowly on household income, household size, and participation in the WIC and food stamps programs. The Followup Survey was conducted between December

F-22

# Exhibit F.5 Response Rates for Sponsors, Providers, and Children

	All Providers	Family Day Care Homes	Head Start Centers	Child Care Centers
Sponsors				
Provider Lists	83%	85%	80%	87%
Sponsor Survey				
All eligible sponsors	74	83	72	71
Sponsors supplying provider lists	90	97	90	81
Providers				
Provider Survey	90	87	93	88
Menu Survey	87	82	92	84
Food Preparer Interview	89	86	92	87
Children and Households				
Observations <sup>1</sup>	59	76	54	57
Household Interview	39	58	35	39
Dietary Recall Interviews				
At least 1 interview	41	58	36	39
Two interviews	19	30	15	19

Note that since the analysis of meals consumed in care is intended to describe children in care on a typical day—not all children enrolled in care—children who were selected into the sample but absent on one or both observation days were not nonrespondents for purposes of constructing the corresponding weights  $(W_{meak})$ , but rather outside of scope. The response rate for child observations is equal to:

1996 and April 1997 and collected retrospective data for the period corresponding to the original Household Survey (Spring 1995).

### Data Collection Procedures

No sampling was employed in the Followup Survey. Rather, attempts were made to contact all nonresponders to the original Household Survey. An intensive effort was made to locate and contact the nonresponders. The data collection for the Followup Survey used a combination of telephone, mail, and in-person surveys. The procedures used to locate and contact the nonresponders are described below.

Locating Respondents. As indicated above, the primary reason for nonresponse to the original Household Survey was the inability to reach respondents by telephone. While we had addresses for nearly all nonresponders, we had telephone numbers for only 30 percent of nonresponders. Therefore, our initial efforts were directed towards obtaining current telephone numbers and addresses for the nonresponders. The entire sample file of nonresponders was sent through the National Change of Address Directory to obtain the most current known addresses. An advance mailing, describing the study and the purpose for conducting the Followup Survey, was sent to all nonresponders. This advance mailing asked respondents to fill out an information sheet giving their current telephone number and address and return it in an enclosed Business Reply Envelope. Respondents were also given the option of calling a toll-free 800 number to supply the necessary information.<sup>12</sup> A \$1 incentive was included in the advance mailing. The advance mailing also informed respondents that they would receive an additional \$5 after completing the survey.

Tracking Procedures. Several steps were taken to locate those nonresponders whose advance mailings were returned as undeliverable as well as to locate those households that did not return the mailing or call the toll-free number. The first step was telematching the nonresponder file

<sup>&</sup>lt;sup>12</sup>An attempt was made to administer the survey over the telephone to those people calling in on the toll-free number.

against an electronic version of all telephone listings throughout the United States. The next sources were Credit Bureau of Information and Trans Union searches. Both of these sources allowed us to search for individuals who have applied for credit. These searches sometimes provided new telephone numbers, addresses, and social security numbers.

Telephone Survey. The field period for the telephone effort was approximately 10 weeks. Calls were made at diverse times in the evenings (between 5:00 p.m. and 9:00 p.m. respondent time) and on weekends (Saturday 11:00 a.m.-5:00 p.m., Sunday 2:00 p.m.-9:00 p.m.). Those cases that were consistently "no answer" in the evenings and on weekends were also attempted during daytime hours Monday through Friday. Not set limit was made on the number of attempts made on each case; rather, all non-final cases were reviewed on a daily basis to determine the next step for reaching the household.

Mail Survey. All households for which we did not have a telephone number along with all households who could not be reached in the telephone survey were included in the mail survey. These cases were sent a letter explaining the study and the purpose of the Followup Survey along with self-administered questionnaire. As in the case of the advance mailing, respondents were given the option of calling a toll-free 800 number to provide the requested information. The letter also reminded respondents that they would receive \$5 if they returned questionnaire or called the toll-free number to provide the information.

Field Component. All cases that could not be reached in the telephone survey and did not respond to the mail survey were assigned to field interviewers. Field interviewers attempted to locate prospective respondents and conduct in-person or telephone interviews. When necessary, field interviewers contacted child care providers that participated in the study to obtain locating information.

# Response Rates

Exhibit F.6 summarizes the response rates for the Followup Survey. The response rates for the Followup Survey were sufficiently large to bring the overall response rates up to acceptable levels. When combined with the responses from the original Household Survey, the Followup Survey brought the overall response rate up to 82 percent. The combined response rate ranged from a high of 90 percent for FDCHs to a low of 80 percent for child care centers.

Exhibit F.6 Sample Size, Number of Completed Interviews, and **Response Rates** 

		Mode of Care		
	All Providers	FDCHs	Head Start Centers	Child Care Centers
Number of eligible households for original survey	2,371	423	1,130	818
Total number of household interviews originally completed <sup>1</sup>	1,181	284	495	402
Number of remaining nonresponders	1,190	139	635	416
Response rate for Followup Survey	65%	71%	66%	60%
Number of completed interviews in Followup Survey	770	98	420	252
New total number of completed interviews	1,951	382	915	654
New total response rate for survey	82%	90%	81%	80%

<sup>&</sup>lt;sup>1</sup>Includes 224 respondents to earlier nonresponse survey.

# Appendix G

# Reference Tables for Approximate Confidence Intervals

Appendix G provides reference tables for calculating the approximate confidence intervals for the estimates presented in this report. Assuming that the population is large, a 95 percent confidence interval for a population proportion P using a sample proportion p based on a simple random sample of p units from this population is given by

$$p \pm 1.96\sqrt{\frac{p(1-p)}{n}} . \tag{1}$$

If the sample is selected using a multistage design, then the variance of the sample proportion is larger than the variance under simple random sampling. The variance under a multistage design is usually estimated by multiplying the variance under simple random sampling by a value known as the design effect (deff). The design effect is the ratio of the variance obtained from the complex survey sample to the variance of the estimate obtained from a simple random sample of the same size. Under a multistage design, the 95 percent confidence interval is given by

$$p \pm 1.96\sqrt{deff}\sqrt{\frac{p(1-p)}{n}}.$$
 (2)

The exhibits presented in this appendix provide approximate confidence intervals for population proportions for each of the provider types. Exhibits G.1a through G.1c provide confidence intervals for characteristics of children. Exhibits G.2a through G.2c provide confidence intervals for characteristics of homes and centers. Exhibits G.3a through G.3c provide confidence intervals for characteristics of sponsoring agencies (presented in Volume I). These intervals were obtained by first computing the variance under simple random sampling and then multiplying the variance by an average design effect for each of the provider types. The size of the confidence interval is presented for various sample sizes and estimated proportions. The value used as the square root of the average design effect for computing the confidence intervals

is given at the bottom of each exhibit. The average design effect was computed in each instance as the average across several variables of ratio of the variance under the design, estimated using SUDAAN, to the variance under simple random sampling, estimated using equation (1).

These tables can also be used to estimate the confidence intervals for sample sizes and proportions that do not exactly correspond to the values given in the exhibits. Use the column that approximates the estimated proportion and then use the row that most closely approximates the sample size upon which the sample estimate is based to determine the approximate size of the confidence interval for the population proportion that is being estimated. For example, if the estimated percentage of child care centers with a certain characteristic is 31 percent and this is based on a sample of 290 (see Exhibit G.2a), then the confidence interval for the population percentage is obtained by taking  $31 \pm 8.7$ . Consequently, we have 95 percent confidence that the population proportion is contained in the interval 22.3 to 39.7 percent.

Exhibit G.1a

Confidence Intervals for Proportions Based on a Sample from Children in FDCHs

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±14.1	±18.8	±21.6	±23.1	±23.6		
100	10.0	13.3	15.2	16.4	16.6		
200	7.0	9.4	10.8	11.5	11.7		
300	5.7	7.7	8.8	9.4	9.6		
400	5.0	6.7	7.7	8.1	8.3		
500	4.4	5.9	6.8	7.3	7.5		
600	4.1	5.5	6.2	6.7	6.8		

A value of 1.70 was used as the square root of the average design effect for the sample of FDCH children in computing the confidence intervals.

Exhibit G.1b Confidence Intervals for Proportions Based on a Sample from Children in Head Start Centers

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±16.4	±21.8	±25.0	±26.7	±27.3		
100	11.6	15.4	17.7	18.9	19.3		
200	8.2	10.9	12.5	13.3	13.6		
300	6.7	8.9	10.2	10.9	11.1		
400	5.8	7.7	8.8	9.4	9.6		
500	5.2	6.9	7.9	8.4	8.6		
600	4.7	6.3	7.2	7.7	7.9		

A value of 1.97 was used as the square root of the average design effect for a sample of Head Start children in computing the confidence intervals.

Exhibit G.1c

Confidence Intervals for Proportions Based on a Sample from Children in Child Care Centers

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±14.6	±19.5	±22.4	±23.9	±24.3		
100	10.3	13.7	15.8	16.9	17.2		
200	7.3	9.8	11.1	11.9	12.2		
300	5.9	8.0	9.2	9.8	10.0		
400	5.1	6.9	7.9	8.4	8.6		
500	4.6	6.2	7.1	7.5	7.7		
600	4.2	5.7	6.5	6.9	7.0		

A value of 1.76 was used as the square root of the average design effect for a sample of children in child care centers in computing the confidence intervals.

Exhibit G.2a

Confidence Intervals for Proportions Based on a Sample from FDCH Providers

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±13.9	±18.5	±21.2	±22.7	±23.2		
100	9.8	13.1	15.0	16.1	16.4		
150	8.0	10.7	12.3	13.1	13.4		
200	6.9	9.3	10.6	11.4	11.6		
250	6.2	8.3	9.5	10.2	10.4		
300	5.7	7.6	8.7	9.3	9.5		
400	4.9	6.6	7.5	8.0	8.2		
500	4.4	5.9	6.7	7.2	7.3		

A value of 1.67 was used as the square root of the average design effect for the sample of FDCH providers in computing the confidence intervals.

Exhibit G.2b

Confidence Intervals for Proportions Based on a Sample from Head Start Centers

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±12.6	±16.8	±19.3	±20.6	±21.0		
100	8.9	11.9	13.6	14.5	14.8		
150	7.3	9.7	11.1	11.9	12.1		
200	6.3	8.4	9.6	10.3	10.5		
250	5.6	7.5	8.6	9.2	9.4		
300	5.1	6.9	7.9	8.4	8.6		
400	4.4	5.9	6.8	7.3	7.4		
500	4.0	3.5	6.1	6.5	6.6		
800	3.1	4.2	4.8	5.1	5.2		

A value of 1.51 was used as the square root of the average design effect for a sample of Head Start centers in computing the confidence intervals.

Exhibit G.2c

Confidence Intervals for Proportions Based on a Sample from Child Care Centers

Sample Size		Percentage of Sample with Characteristic				
	10% or 90%	20% or <b>80</b> %	30% or 70%	40% or 60%	50%	
50	±10.5	±14.0	±16.1	±17.2	±17.5	
100	7.4	9.9	11.4	12.1	12.4	
150	6.1	8.1	9.3	9.9	10.1	
200	5.2	7.0	8.0	8.6	8.8	
250	4.7	6.3	7.2	7.7	7.8	
300	4.3	5.7	6.6	7.0	7.1	
400	3.7	4.9	5.7	6.1	6.2	
500	3.3	4.4	5.1	5.4	5.5	
600	3.0	4.0	4.6	4.9	5.0	

A value of 1.26 was used as the square root of the average design effect for a sample of child care centers in computing the confidence intervals.

Exhibit G.3a

Confidence Intervals for Proportions Based on a Sample from FDCH Sponsors

Sample Size	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
50	±16.8	±22.4	±25.6	±27.4	<u>+</u> 27.9
100	11.8	15.8	18.1	19.3	19.7
200	8.4	11.2	12.8	13.7	14.0
300	6.8	9.1	10.5	11.2	11.4
400	5.9	7.9	9.1	9.7	9.9
500	5.3	7.1	8.1	8.7	8.8
600	4. 8	6.5	7.4	7.9	8.1

A value of 2.02 was used as the square root of the average design effect for the sample of FDCH sponsors in computing the confidence intervals.

Exhibit G.3b

Confidence Intervals for Proportions Based on a Sample from Head Start Sponsors

Sample Size	Percentage of Sample with Characteristic						
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%		
50	±12.4	±16.5	±18.9	±20.2	±20.6		
100	8.7	11.7	13.4	14.3	14.6		
200	6.2	8.3	9.5	10.1	10.3		
300	5.0	6.7	7.7	8.3	8.4		
400	4.4	5.8	6.7	7.1	7.3		
500	3.9	5.2	6.0	6.4	6.5		
600	3.6	4.7	5.5	5.8	6.0		

A value of 1.49 was used as the square root of the average design effect for a sample of Head Start sponsors in computing the confidence intervals.

Exhibit G.3c Confidence Intervals for Proportions Based on a Sample from Child Care Center Sponsors

Sample Size	Percentage of Sample with Characteristic				
	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
50	±10.1	±13.4	±15.4	±16.4	±16.8
100	7.1	9.5	10.9	11.6	11.8
200	5.0	6.7	7.7	8.2	8.4
300	4.1	5.5	6.3	6.7	6.8
400	3.5	4.7	5.4	5.8	5.9
500	3.2	4.2	4.9	5.2	5.3
600	2.9	3.9	4.4	4.7	4.8

A value of 1.21 was used as the square root of the average design effect for a sample of child care center sponsors in computing the confidence intervals.