B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

I. Respondent universe and sampling methods

The purpose of this survey is to obtain national estimates of the type, quantity, and value of foods purchased by public schools that participate in the National School Lunch Program (NSLP) or the School Breakfast Program (SBP) and the relative importance of foods donated to these school districts by USDA. The target population is participating, unified, public SFAs in the 50 states and Puerto Rico. "Unified" means SFAs that include kindergarten through grade 12 (K-12).

Two sampling plans are required, one for the contiguous 48 states and one for Alaska. Hawaii and Puerto Rico have centralized institutions for school purchasing, so no sampling plan is needed for those two. They will be asked to submit data for the full school year. The sampling plan described here for the contiguous 48 states is very similar to the one used in the 1996/97 School Food Purchase Study survey. The plan for Alaska is new and separate because this is the first time that Alaska has been included, and the USDA wishes to obtain enough data from Alaska to treat it as a separate domain of study. The sampling plans for the two surveys are described in the next two subsections.

a. The Contiguous-48 survey

The Contiguous-48 survey has been done twice before with very similar sampling plans - during the 1984-85 and 1996-97 school years. As before, the main source of data for the sampling frame will be Quality Educational Data (QED). It has been used as the sampling frame in the last two surveys without a problem, and it appears to have the most up-to-date list of SFAs available and a coverage rate of 100 percent. Even so, the QED data will be checked against the latest list available from the USDA, and it will be checked by state agencies. The QED data will be acquired just before the sample is drawn so that it will be as close to current as possible.

The specific objective of the survey is to estimate the annual quantity and cost of food acquisitions by SFAs participating in the school feeding programs on a national level. The Contiguous-48 sample of SFAs will supply food purchase data for one quarter (3 months) of the SY 2009/10. The sample will be stratified evenly by quarter as it was in the last two surveys. This reduces the burden on respondents and ensures that FNS gains an estimate of food purchases that is not biased by any seasonal effects.

It is planned to stratify the sample by the Farm Production Regions used by USDA (see Figure 1 below) to ensure that the sample will be evenly distributed across the country. Dividing the sample among the ten regions in the chart below will also facilitate examination of differences in procurement of certain items, such as fresh fruits and vegetables that are related to purchase location of the products. All stratifications within the Contiguous-48 sample design are to control the distribution of the sample across key characteristics; the individual strata are not intended to be used as domains of study. Table 4 illustrates the SFA counts per region.



Figure 1: Farm production regions

Table 4: SFA counts by region

		Number of
Region	States	School
		Districts
Pacific	WA, OR, CA	1,662
Mountain	MT, ID, WY, NV, UT, CO, AZ, NM	1,246
Northern Plains	ND, SD, NE, KS	1,057
Southern Plains	TX, OK	1,741
Lake States	MN, WI, MI	1,456
Corn Belt	IO, MO. IL, IN, OH	3,129
Delta	AR, LA, MS	497
Appalachia	KY, TN, WV, VA, NC	690
Southeast	AL, GA, SC, FL	651
Northeast	ME, NY, VT, NH, PA, MA, CT, RI,	
	NJ, MD, DC, DE	3,478

The final stratification separates SFAs into those that operate independently and those that are operated by Food Service Management Companies (FSMCs). The last survey found that 9.7 percent of SFAs were operated by FSMCs. Taking recent estimates of FSMC use and allowing for trend indicates that they could be found in about 15 percent of SFAs today. The purpose of this stratification is to reduce the variance in the number of FSMCs in the sample. As FNS plans to test for differences between SFAs that use an FSMC versus those who do not use one, the point of this stratification is to reduce the chance of accidentally drawing fewer FSMCs than expected.

FNS would like the sample to be more representative of students enrolled, rather than SFAs, so the sample will be drawn in a fashion similar to PPS (probability proportional to size), but the probability of

selection will be S^{β} , where S is students enrolled, and β will be either one or somewhat less than one. Experience with the last survey showed this to be a helpful innovation because it allows the measure of size to preclude probabilities greater than one. Also, having slightly less weight on the larger SFAs reduces the cost of the survey, as the larger districts are more expensive to handle. As in the last two surveys, the random draws will be based on interval sampling across the list of SFAs sorted by size (students enrolled). This provides the same sort of control over the sample's distribution by size as stratification.

The expected response rate (percent of SFAs responding) is 67 percent. This was the response rate obtained during the second survey, which was surprisingly lower than the 83.3 percent expected from the experience of the first survey. The use of this conservative response rate for developing the sampling plans reflects the desire to be realistic in a period of intense belt tightening in the SFA community. In fact FNS is optimistic that the response rate of SFPS-II can be exceeded as a result of the actions identified by the contractor and listed in Section B3 and the wider application of computerized record keeping.

b. The survey in Alaska

The preliminary data from Alaska indicate that the population of SFAs is skewed. Table 5 below shows the size distribution in the strata that FNS plans to use to draw the sample. Anchorage is by far the largest SFA and will be drawn with certainty. The second stratum has three districts that are similar in size (12.5, 10.9, and 7.2 percent of the state's students). They will all be drawn with certainty, too, but these three and Anchorage will be grouped together into a homogeneity response group so that the respondents' weights can be adjusted to account for nonresponse. All four of the SFAs in the first two strata will receive the most intensive recruiting efforts as their participation will be so important to the results. Unlike the Contiguous-48 survey, any of these key SFAs that agree to participate will be asked to provide data for as many quarters as they are willing. Any extra quarters for which they participate will increase the precision of the results significantly.

Stratum	Enrollment	Percent
I. Anchorage	48,144	37.3
2. Matsu, Fairbanks, & Kenai	39,447	30.6
3. Remaining 41 districts	41,384	32.1
Totals	128,975	100

Table 5: Stratification of Alaska SFAs

The third stratum includes the remaining 41 SFAs, which average 1,009 students per district. Sampling from this stratum will be done with the modified PPS procedure described above.

The sampling frame for the Alaska survey will be taken from the QED data. FNS expects to obtain the same 67-percent response rate as in the contiguous 48 states. The sample size is discussed in Section B2.

2. Procedures for the collection of information

As described in Section B1, this survey is a single-stage probability sample of unified, public SFAs in the contiguous 48 states and Alaska. Data will also be collected from the single consolidated SFAs in Hawaii and Puerto Rico, but no sample design is required for them.

The Contiguous-48 sample design includes the following stratifications:

- 10 Farm Production Regions
- Using a food-service management company (FSMC)
- Quarter of the year

In addition, the sampling will use a skip interval across the list of SFAs sorted by size (students enrolled) which effectively stratifies the sample by size. The probability of selection will be modified PPS, as described in B1. The sample size will be 600 SFAs.

The Alaska sample design includes these stratifications:

- **Size:** Anchorage is alone in the first stratum to be drawn with certainty. The next three largest SFAs are in the second stratum to be drawn with certainty. The third stratum has the remaining 41 districts, which will be sampled with PPS.
- As with the Contiguous-48 sample, the selected SFAs will be allocated to the quarters of the year, but those in the first and second strata may participate for more than one quarter.

a. Estimation procedure for the Contiguous-48 survey

Weights for the respondents in the Contiguous-48 survey will be developed through a multistep procedure. Starting with a draft weight equal to the inverse of the probability of selection, the weights will be calibrated to known enrollment totals within each cell of the design defined by a quarter, region, and FSMC status. The weights will be adjusted for nonresponse within homogeneity response groups (HRG) after recruitment. Thus, the final weights will be the triple product of the draft weights, the cell-calibration factors, and the nonresponse adjustment factors.

These weights can be used to compute national estimates as a straightforward weighted total or average of any variable in the survey data.

b. Degree of accuracy needed in the Contiguous-48 survey

FNS intends to use the survey data to make comparisons at the national level between mutually exclusive subgroups such as urban versus rural. The issue is that FNS may want to compare the mix of foods, such as the percent spent on low-fat milk or fresh fruits and vegetables, across various subgroups. Power estimates and minimum detectable differences of food mix for these subgroup analyses can be made by using the data from the last survey as a proxy. The key feature of the various comparisons that affects the power of such tests is that the sample split between one subgroup and the other may be as extreme as 85 percent to 15 percent (in the case of having an FSMC or not), because the statistical power is greatest at a 50-50 split and falls as the split becomes more uneven.

Table 6 below shows the minimum detectable differences (MDDs) for two different allocations of sample SFAs – 200 of each type (e.g., large v. small districts) and 60 of one type and 340 of the other, two significance levels (5 and 10 percent, two-tailed test), and two power levels (80- and 90-percent chance of detecting a difference at least as small as the MDD). FNS believes that these MDDs range from quite good to satisfactory. So a sample size of 400 is appropriate.

		200-200 Sample Split		60-340 Sample Split	
Food Group	Power	l 0% Signif.	5% Signif.	10% Signif.	5% Signif.
Vegetables	80%	0.90%	1.01%	1.26%	1.42%
	9 0%	I.05%	1.17%	I.48%	I.64%
Fruits & Juices	80%	0.91%	1.02%	1.27%	1.44%
	9 0%	1.07%	1.19%	1.50%	1.66%
Low-Fat Milk	80%	1.60%	1.81%	2.25%	2.54%
	90%	1.89%	2.09%	2.65%	2. 9 4%

Table 6: MDDs for a total sample of 400 respondents/100 per quarter

c. Degree of accuracy needed in Alaska survey

The sample size for the third stratum is based on the assumption that the expected precision of the results should be at least as good as that expected from the last Contiguous-48 survey design. As no food cost data are available from Alaska's schools from a prior survey, it is assumed that the data from the other states will serve as a good proxy to support the design analysis.

The fraction of value of acquired vegetables, which was used in the power calculations discussed above, was taken as the design variable. The estimated variance by SFA and the estimated overall variance of the entire sample accounting for the weighting and stratification was taken from the data on vegetables as a percent of total acquisitions from the last survey. The estimated standard error by SFA was 3.6 percentage points. This estimate needed some adjustment to be used for Alaska because of the smaller mean SFA size (about one-third the enrollment) and the potential for a greater variance. The greater variance could come from several effects. The distribution of enrollment by district is even more skewed than it is in the contiguous 48 states. Anchorage has more than 37 percent of total enrollment, so it may have lower costs due to economies of scale, and it is in the south on the coast. The general cost of food is higher, and the cost of transportation among districts must vary more because of great distances and severe climate. All such factors would argue for a higher variance in food costs. Thus, the standard deviation of the district variance was adjusted upward by a third to 4.8 percent. This adjustment was based solely on judgment, the results below show that the exact magnitude of this adjustment is not critical.

The estimated standard error of the entire sample (0.201 percent) is adjusted to the variance that might have been obtained if the usable sample had been 400 districts instead of the 324 actually obtained, arriving

at a full-sample standard error of 0.178 percent. The object of the design is to yield an overall standard error no larger than this.

All scenarios assume that a minimum of four districts will be sampled in each quarter.

Table 7 below shows the estimated standard errors that might be obtained from various samples given the assumptions stated above. For example, row 1 indicates the estimated standard error (SE) of vegetable expenditures with the participation of Anchorage (Stratum 1), the 2 smallest of the three districts in Stratum 2, and 8 districts in Stratum 3. Row 1 includes the assumption that Anchorage contributes data for all four quarters, Stratum-2 districts contribute for two quarters of the year, and Stratum-3 districts contribute for one quarter. The other rows show different recruitment requirements and periods of data collection depending on the participation of Anchorage and the Stratum-2 districts. All scenarios assume that a minimum of four districts will be sampled in each quarter.

Table 7: Estimated standard error of the percent of Alaska SFA expenditures on vegetables under various nonresponse assumptions

	Estimated SE of Vegetable Expenditures Percent	First Stratum: Anchorage	Second Stratum: Matsu, Fairbanks, & Kenai	Third Stratum (41 districts)	Total quarterly data units to be collected
Ι	0.028%	Yes, all year	2 smallest, 2Q	8, IQ	16
2	0.046%	Yes, 2Q	3, 2Q	8, IQ	16
3	0.070%	Yes, IQ	3, IQ	12, IQ	16
4	0.087%	No	3, 2Q	10, IQ	16
5	0.127%	No	3, IQ	15, IQ	18
6	0.162%	No	None	28, IQ	28
7	0.178%	No	2 smallest , IQ	14, IQ	16
8	0.380%	No	None	16, IQ	16
	0.178%	48 contiguous states from last survey adjusted for 400 responses			

The results show, as expected, that obtaining a small standard error depends heavily on the responsiveness of the four largest districts. If none of those four cooperate (see row 6), it will take 28 districts from the third stratum to obtain the desired precision (SE = 0.162%), but this sample would come with great concern for its ability to represent the population.

Table 7 includes scenarios that suppose nonresponse from the Anchorage district. Proceeding without Anchorage would require adding caveats to the results. As discussed above, Anchorage has the potential to be significantly different from the other districts, so not having it in the survey introduces a large potential for bias in the results.

The second and third scenarios suppose that Anchorage will cooperate but will not provide costs for a full year. These would be much safer than not having Anchorage at all, as this provides the opportunity to compare Anchorage's costs to other districts to check the potential for bias in the quarters without Anchorage.

The table shows that as long as any two of the top four districts are responsive and participate for at least one quarter, the sample can be expected to produce the desired precision level with only four total districts participating per quarter. So, with the chance of recruiting more than two districts for more than one quarter, prospects seem good for obtaining satisfactory statistical results.

Therefore, the sampling plan is to try to recruit the top four SFAs, and then choose the number to draw from the third stratum that will meet the target precision level, given the response of the top four. The number drawn from the third stratum will be adjusted to account for the possibility of further nonresponse among the districts recruited in the first two strata. In the last survey 15.7 percent of districts that initially agreed to participate dropped out without providing data.

d. Estimation procedure for the Alaska survey

The first two strata will form a homogeneity response group (HRG). The respondents in the HRG will receive a proportional share of the weights of the nonrespondents. Stratum 3 will be an HRG, too. The final weights in Stratum 3 will be found similarly to the derivation for the Contiguous-48 respondents as the triple product of the inverse probability of selection, a calibration factor to known enrollment totals, and an adjustment for nonresponse.

These weights can be used to compute state estimates as a straightforward weighted total or average of any variable in the Alaska survey data.

e. Unusual problems requiring specialized sampling procedures

No specialized sampling procedures are involved.

f. Use of periodic data collection cycles to reduce burden

This is an infrequent survey data collection effort conducted every 12-14 years. When the survey has been conducted in the past, all respondents were asked to contribute only one quarter of data out of the survey year, which is a great reduction in burden. As shown in table 7, in the upcoming survey, four of the largest SFAs in Alaska will be asked to contribute more than one quarter of data. This is because of the very large share of total school enrollment in those four SFAs and the need to ensure that the food purchase volume and characteristics are representative of all Alaskan food purchases. If these four SFAs report food purchases for more than one quarter then, as indicated in table 7, fewer smaller rural Alaskan SFAs will be recruited. For Puerto Rico and Hawaii, which both have only one school district, data will be required for all four quarters to ensure that the results are fully representative of annual purchases and are not biased by seasonal factors.

g. Quality control

All staff involved in the study will participate in detailed training with an emphasis on maintaining quality standards.

A protocol for data verification has been developed for the food purchase data collection. This involves both manual editing of the data for completeness as well as computer verification of the data for both completeness and accuracy. SFAs will be notified immediately by telephone (with, if necessary, a follow-up by e-mail) as soon as discrepancies and/or incomplete data sets are discovered. The following steps for data verification begin once the data arrive at the data collection office.

- (a) Initial verification for completeness will be made as information from SFAs is received. If any items or data elements are found to be missing, the SFA (or vendor/distributor as appropriate) will be called or e-mailed immediately. Incomplete data will not be transcribed or entered.
- (b) Before transcription begins the data will be checked for duplicate invoices.
- (c) As the data are transcribed, senior staff members will perform spot checks on the data to ensure accuracy. Every transcriber will have their initial data set reviewed in its entirety.
- (d) Food purchase and commodity data will be entered into computer files using edit checks.
- (e) A hard copy of the entered data will be printed grouping the data in various ways for further editing and review by qualified staff.
- (i) Once the data are determined to be complete for the SFA for the quarter, final computer edits will be made to check several items of data (Pounds of food purchased/donated per lunch served, price per pound of foods purchased compared with the mean cost of food items purchased across all SFAs, etc.)
- (f) Following final edits, lists of food acquisitions will be printed and sent to each SFA for verification of the data (see Appendix 3, Data Summary Form – Part A). SFAs will also be asked to clarify the extent to which oils and fats are used for deep frying (see Appendix 3, Data Summary Form – Part B).

The procurement practices survey (See Appendix 4) will be subject to verification procedures and quality checks. All responses will be reviewed on return and missing data, data range and integrity checks will be conducted. Problems will be resolved with the SFA contact.

3. Methods to maximize the response rates and to deal with nonresponse

The response rate is the number of participating SFAs expressed as a percentage of the number of SFAs that are asked to participate. The expected response rate is 67 percent, the same as achieved with SFPS-II (see Section B1a). The use of this conservative response rate for developing the sampling plans reflects the desire to be realistic in a period of intense belt tightening in the SFA community. FNS is optimistic that the response rate of SFPS-II can be improved as a result of the actions identified by the contractor and listed below.

Despite the serious financial situation facing all in the private and public sectors, the contractors have made preparations to increase the response rate experienced in the SFPS-II study of SY 1996/97. The principal elements in their approach to get a higher response rate are as follows:

 Two senior recruiters have been engaged to gain the commitment of the SFAs to the study and to communicate the importance of assembling a representative picture of the nature of foods procured for school meal provision and of procurement practices. Both the recruiters are recently (2008) retired food service directors with many years of experience of developing and administering school meal programs in school districts. They are knowledgeable about participation in USDA studies and data collection efforts from the perspective of the SFA personnel. Both are well known in the profession and have many contacts among fellow professionals that will be making the decision to participate. The personal attributes of these two recruiters will greatly assist the recruitment process and will

promar International

be one of the key factors influencing participation. They will be given in-depth training on the details of this study and they will be armed with sufficient contextual and specific information about the study to answer any potential questions that may arise.

- The arguments for participation will be very carefully developed to emphasize the benefits to many in the school meals sector as a result of having a sound information base upon which to make administrative, policy and commercial decisions. The SFAs will be informed of the importance of understanding the costs that they face in running their services and the importance of the information coming from this survey to help understand the economics, and the likely impact on the meal consumers, the children in public schools.
- The contractors will emphasize that this is a Congressionally-mandated study underlining the level of interest at the highest levels of the political system for this survey and the issues that it will explore. Congress needs to know the underlying basis of school food procurement if it is to ensure that the system operates effectively in a period of considerable financial disruption.
- Before SFA recruitment begins, the contractors will gain the support of appropriate associations representing organizations with an interest in the success of this study. The contractors have the support of the School Nutrition Association which has agreed to sign a letter of support (for draft See Appendix 8). The contractors will also request the support of the American Commodity Distribution Association whose members are closely associated with the supply of USDA-donated foods. Designated FNS regional staff will serve as regional study liaisons and be kept closely informed of the development of the project and will be briefed appropriately to enable them to direct SFAs to a source of further information or, if necessary to encourage participation themselves.
- The contractors will introduce a special procedure to gain cooperation from those FSMCs managing school meals programs on behalf of SFAs. These were challenging to enroll in the SFPS-II and much has been learned about the factors that they consider important. In particular, while the decisions of the FSMCs to participate are normally made at a local or regional level, views of senior staff located centrally (e.g. at head office) can be important. Hence, once the contractor knows which FSMCs are managing school meal procurement in the sample, an approach will be made to the head office to gain their support so that that can be used to encourage local participation (See Appendix 9).
- In SFPS-II there were special efforts to recruit the larger SFAs. This involved senior project staff visiting these large SFAs and speaking to the senior managers responsible for the school meal service. They were successful in gaining cooperation in all of these face to face meetings. This procedure will be used more intensively for SFPS-III to increase the response rate above the levels experienced in SFPS-II.
- The development of instruments and procedures has involved close attention to the burden falling on the SFA. The efforts to limit that burden should contribute to a good response rate.
- A distinction must be made between unit nonresponse (i.e. the SFA refuses to participate) and nonresponse to an item in the research instruments (i.e. failure to answer a single question because it is confusing, laborious to complete, etc.). The experience from SFPS-II

suggests that the latter is unlikely to be a problem. For the food purchase data collection activity the procedures that worked before should be appropriate for SFPS-III. A close relationship with the SFA will ensure that purchases are consistently and accurately recorded. Also the SFPS-II procurement survey had a very low item non-response. This is largely attributed to the relationship established with the SFA, the design of the instrument used and the detailed protocols introduced for dealing with different types of missing data. Careful unambiguous wording of the questionnaire and providing prompt help with questions from respondents will ensure that low levels of non response to individual items are experienced.

- Once SFAs have agreed to participate, the contractors will initiate a data negotiation call with the SFA prior to their data collection period. This will be critical to success in consolidating support for participation. This data negotiation call will first and foremost develop a relationship with the SFA staff with responsibility for cooperating with the contractors and being responsible for organizing the provision of data. This relationship will be critical to achieving successful participation. As emphasized in Section A2c of this document, during this data negotiation call senior members of the data collection staff will discuss the most convenient way for the SFA to provide their food procurement records and will ensure that they recognize that they will not have to transcribe or record information themselves (See Appendix I). As noted earlier, for larger SFAs the personal visit to recruit will also be an opportunity to identify the most convenient and least burdensome way for an SFA to participate. The same data negotiation protocol will be followed.
- The data negotiation call will ensure that the respondent is fully aware that assistance and support is on hand at any stage in the data collection process. Trained staff who are fully subject matter experts with school food service operations will be available to support the SFA. Senior data collection office staff will be available by phone, internet and through the mail for follow-up with SFA staff who have questions, who are unclear on any aspect of their responsibility or who are delinquent in providing their data. The range of issues that might be raised is large and hence no script can be prepared for this process.
- An immediate thank you will be sent to the SFAs when they send each element of the data requested and return the procurement practices survey. This will garner ongoing cooperation through the data collection period.

4. Test of procedures or methods to be undertaken

The draft Procurement Practices Survey instrument (Appendix 4), the Data Negotiation Protocol (Appendix 1)) and the Data Summary Sheet (Appendix 3) were pretested among five school districts in January 2009. These are the only instruments that the school districts will see and be asked to respond to. A relatively small pretest was appropriate because these instruments were 'tested' with 324 school districts in the last survey.) The districts chosen for the pretest were Charles County MD, Baltimore County MD, Gaston County NC, Cleveland County NC, and Alexandria City VA. These districts were selected to represent a range of sizes and procurement systems.

The procedures for data collection and assembly are identical to those followed in the 1996/97 study and have not been retested. Lessons from the previous study have been incorporated.

5. Individuals consulted on statistical aspects and individuals collecting and/or analyzing data

The contractor is Promar International. They will implement the study with a consortium of four consultants and two specialized firms. Ender York Inc. will be responsible for most of the aspects of the collection of food purchase data. Mathematica Policy Research Inc. will be responsible for input relating to nutritional issues.

Promar International staff members Nick Young, Tom Earley, and Dr Salli Diakova are the senior personnel concerned with the overall design and management of the project. They will also be responsible for the procurement practices study and for recruitment of the very large SFAs in the sample and SFAs in Hawaii and Puerto Rico. They will also be involved in analyzing the data.

Dr Lynn Daft is the specialist advisor and was the project director on SFPS-II. He will advise on all aspects of the study including analysis.

Asa Janney is the consultant on statistical aspects of the design and analysis of the data.

William Verrill and Gene Miller are the consultants responsible for recruiting SFAs.

Cherie Root and Ann Krome (Ender York), Inc. are responsible for developing all aspects of food purchase data collection, for data negotiation with SFAs, and all activities of the data collection office. Don Berube will join the Promar staff as Data Entry Supervisor based in the data collection office.

Mary Kay Crepinsek and Elizabeth Condon of Mathematica Policy Research will contribute to nutritional issues and analysis.

Full coordinates of the project team are listed below.

Company	Phone	Email
Promar International	(703)739-9090	
Nick Young	ext.	nyoung@promarinternational.com
Tom Earley	ext. 113	tearley@promarinternational.com
Salli Diakova	ext. 112	sdiakova@promarinternational.com
Ender York		
Ann Krome	(571)225-4663	anniekrome@gmail.com
Cherie Root	(703)815-3212	<u>cherie.root@gmail.com</u>
Consultants		
Lynn Daft	(703)978-2538	<u>l.daft@verizon.net</u>
Asa Janney	(703)648-9219	statsace@verizon.net
Mathematica Policy Research		
Mary Kay Crepinsek	(617) 301-8998	MCrepinsek@mathematica-mpr.com
Liz Condon	(617) 301-8998	lcondon@mathematica-mpr.com
Recruitment		
Bill Verrill	(207) 829-5718	wverrill@maine.rr.com
Gene Miller	(717) 872-8404	genemil@gmail.com

There was consultation with FNS program staff from the Child Nutrition Division (Lynn Rodgers, Michelle Bucci); Food Distribution (Mike Buckley); Food Safety Staff (Brenda Halbrook); Office of Research and Analysis (John Endahl) as well as staff from ERS (Katherine Ralston).

Dave Dillard (<u>ddillard@nass.usda.gov</u>), a statistician with the Methods Branch of the National Agricultural Statistics Service of USDA also reviewed and commented on the statistical methods employed.

