

3.3 Food Management

Food management is typically an administrative function carried out at the State agency level. It involves establishing a food Category/Subcategory table, establishing information on approved foods, the construction of food packages, establishing benefit proration schedules, and creating food instrument-based food package data.

The State WIC Program designates approved foods that participants can purchase with WIC food instruments. To facilitate the prescription of foods to participants, WIC Program regulations delineate maximum monthly allowances and authorized substitutions for all WIC-eligible foods. Food packages are structured for each WIC category (e.g., pregnant, breastfeeding, and postpartum women, infants, and children) as well as to address specific nutritional risks or lifestyles. The various packages developed may vary in the types, physical forms and brands of food approved to address different nutritional requirements as well as cost management considerations.

Food instrument means a voucher (including a CVV), check, warrant, coupon, electronic benefits transfer card (EBT), or other document that is used to obtain supplemental foods. However, for the sake of brevity, the term “food instrument” will be used to refer to paper food instruments, and “EBT” will be used to refer to electronic benefits transfer cards. Each food package may consist of one or more food instrument types.²⁸ Food instrument types are the various possible grouping of foods used to make up a complete food package spreading the foods across multiple food instruments to allow participants to use benefits through out the month rather than force them to buy all of their WIC items at one time. A food instrument type may contain one or more specific approved foods. The foods identified for each food instrument type will include the food name (e.g., whole milk), a food unit size (e.g., gallon), and a food unit quantity (e.g., three units). For fruits and vegetables redeemed using a paper cash-value voucher, the food instrument type will include the food name (e.g., fruits and vegetables) and a food unit dollar amount (e.g., \$6). In an EBT environment the CVV will be represented by a specific food category in the account balance. For infants, the food instrument usually identifies the brand, type of infant formula, and form of infant formula (e.g., Similac, milk-based, concentrate). Usually a State agency issues three to four food instruments per month to coincide with participant shopping patterns.

²⁸ Food instruments types are generally associated with paper issuance systems, however many State using EBT have modified their paper based IS to support EBT and may still use food instrument types. A new EBT-ready IS does not necessarily require the set up of food packages using food instrument types.

When food prescriptions are issued, adjustments may be made for a variety of reasons. For example, if the participant is certified mid-month, the State agency may prorate the benefits initially and then adjust the prescription the following month so the participant may receive the full food package.

In an EBT environment, the monthly food benefits for each participant are issued using category/subcategory codes and quantity. Benefits for the entire family (or household) are aggregated into one EBT account or onto one EBT card. When the participant shops, the quantity of foods purchased is deducted from the account.

To ensure that the participant purchases the proper food prescription at the grocery store in an EBT environment, a database of Universal Product Codes (UPC) and Price Look Up (PLU) codes²⁹ of approved foods must be maintained. For the purpose of this document, it is assumed that PLUs are included in the UPC database. The UPC database/approved food list is provided to authorized WIC vendors as part of *the EBT system*³⁰ processes. This provides the data to permit the store electronic cash registers to screen for unauthorized food purchases and prevent food substitution. While using UPCs is required in an EBT system to manage redemptions, in a paper system, a similar UPC database is encouraged, although not required, for screening for eligible food purchases. Many vendors are implementing such systems in the interest of integrity, reducing cashier error, and streamlining the WIC checkout process.

The UPC database includes the food item, Category/Subcategory (e.g. milk-whole), standard package/container size, and the corresponding UPC. This database is used by vendors in their store scanning systems. When a WIC purchase occurs, the scanning system automatically flags any foods that are not WIC-authorized. FNS has worked with State agencies to develop a standard Food Category Subcategory Table to support this function.

National UPC database has been developed and is be maintained by FNS to provide UPC data to State agencies for the creation and maintenance of the States UPC database. Details regarding the National UPC database have been provided in *Appendix F*. In addition, a National Food Category /Subcategory Table maintained by FNS should be used in setting up the food Category/Subcategory table within any WIC IS.

²⁹ PLUs are often used for random weight items such as bulk beans, deli cheese and fresh produce, and can be used for store packaged items such as store packaged deli cheese. For example the PLU for bananas is 4011. PLUs can also be a store or chain specific.

³⁰ In online EBT systems, the authorized product list by UPC may be located at a central EBT host computer rather than distributed to each store system or a portion may be downloaded for store use.

The following functions are included in Food Management

- Maintain Food Categories/Subcategories
 - Maintain Food Category/Subcategory Table
- Maintain Foods and Food Package Information
 - Establish and Maintain Approved Foods
 - Set up and Maintain Food Package Data
 - Determine Food Package Proration Schedule
- Maintain Food Instrument Data
 - Record Food Instrument Types
 - Establish Food Instrument Maximum Allowed Amounts
- Maintain UPC Database and Food Item Maximum Allowed Amounts
 - Maintain UPC Database for WIC Authorized Foods
 - Establish Food Item Maximum Allowed Amounts

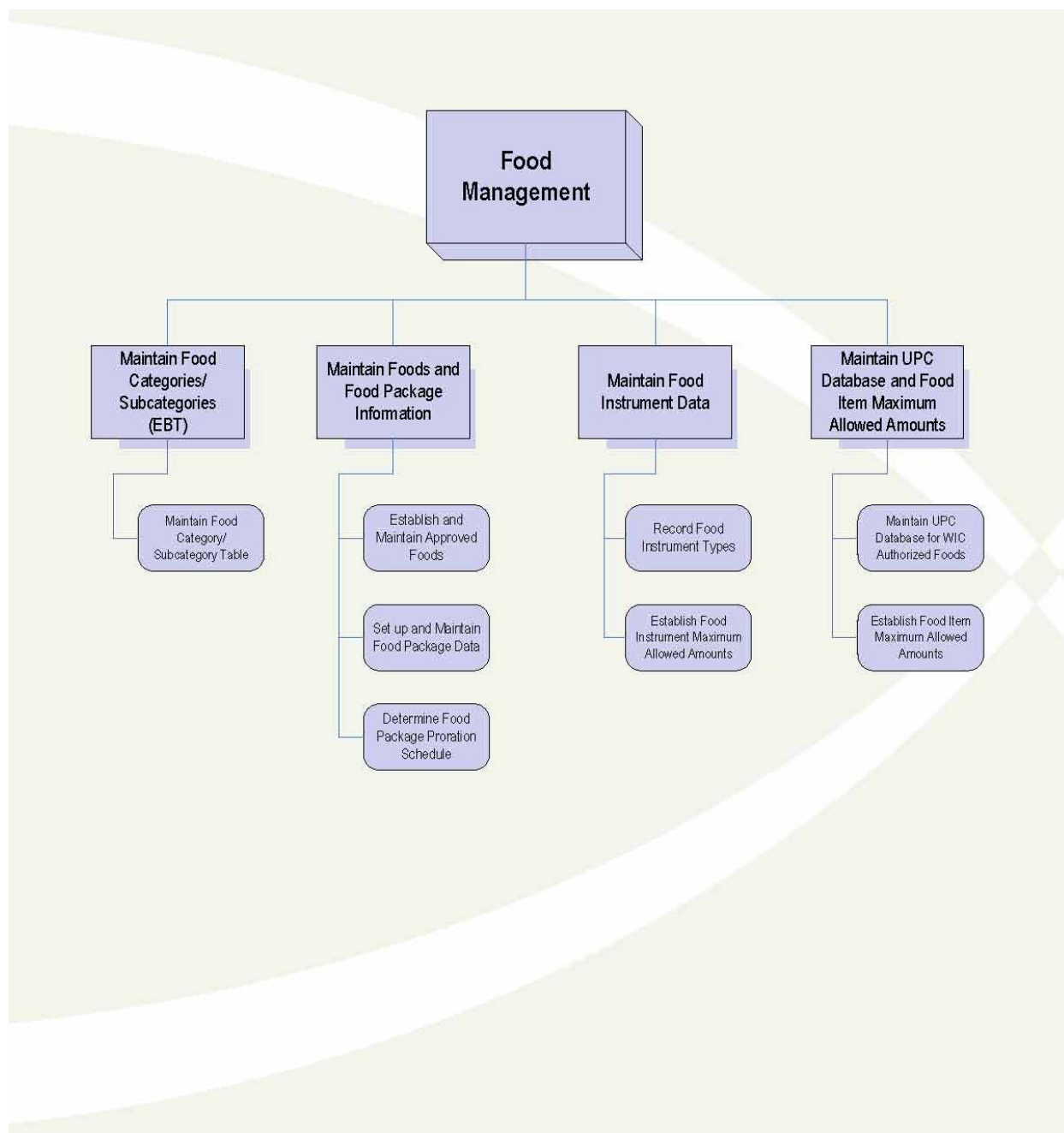


Exhibit 3-3: Functional Decomposition Diagram – Food Management

3.3.1 Maintain Food Categories/Subcategories

The Food Category/Subcategory Table is required for the EBT environment and recommended for the paper environment as part of EBT readiness functionality. The Category/Subcategory codes are used to electronically identify generic types of food items.

The table includes food categories and subcategories and associates them with a numerical identifier. Categories use a two-digit identifier for each food type such as Milk (01), Cheese (02), Eggs (03), Juice (04), and Cereal (05). Each category is then broken down further into smaller classifications called subcategories and identified with a three digit number. For example, milk subcategories include Any (000)³¹, Whole (001), Low Fat (002), Fat Free (003), and Buttermilk (004). In this example, fat free milk would be denoted as 01-003. Additionally, a default unit of measure is assigned to each category. For example, the default unit of measures for milk is one quart, cereal is one ounce, and eggs are one dozen.

USDA FNS maintains a National Category/Subcategory list that is used in setting up the system's Category/Subcategory Table. The table is used along with the list of approved foods in establishing food data in the system. Refer to *Appendix F* for information on where to find the most up-to-date Category/Subcategory Table.

3.3.1.1 Maintain Food Category/Subcategory Table

Using the National Category/Subcategory list, the system should maintain a Category/Subcategory Table. When updates or additions are made to the National list or an adjustment needs to be made to meet a State agency need, the system should support updates to the Food Category/Subcategory Table.

Inputs:

Category/Subcategory Category Code

Category/Subcategory Category Name

Category/Subcategory Standard Unit of Measure

Category/Subcategory Subcategory Code

³¹ The 000 subcategory, also referred to as "broadband," is a subcategory that when issued to the client allows them to buy items assigned to any subcategory within the category.

Category/Subcategory Subcategory Name

Process:

- Add or update new approved foods and store in Category/Subcategory data store

Outputs:

Display or report of the Food Category/Subcategory Table

3.3.2 Maintain Foods and Food Package Information

In general, data about WIC foods and food packages should be relatively stable. The system should support the input and maintenance of food items data, which is then used to construct and maintain food package data.

3.3.2.1 Establish and Maintain Approved Foods

The system should capture information about the authorized foods approved for use by the State agency for use in establishing food packages.³² The system should support adding new foods and deleting foods from the list of approved foods.

Inputs:

Category/Subcategory Category Code

Category/Subcategory Standard Unit of Measure

Category/Subcategory Subcategory Code

Food Item Description

Vendor Price Survey Food Item Name

Process:

- Add or update new approved foods and store in Food Item data store
- Associate foods with a category and subcategory

³² Note the approved foods discussed in this function are the generic set of foods used in issuing benefits (such as milk or cheese), not specific food items such as Cheerios cereal or JIF peanut butter. Foods at this level are addressed in *3.3.4.1 Maintain UPC Database for WIC Authorized Foods*.

Outputs:

Screen display or report of approved foods

3.3.2.2 Set up and Maintain Food Package Data

Food packages consist of a set of approved food items in specific quantities. Food packages should be associated to applicable participant categories to ensure that the appropriate food items are prescribed.

The system should support the creation and maintenance of food packages. (Note that for a cash-value voucher benefit the unit quantity and/or the amount prescribed would be the dollar value of the cash-value voucher.)

Inputs:

Category/Subcategory Category Code

Category/Subcategory Standard Unit of Measure

Category/Subcategory Subcategory Code

Food Item Description

Food Item Prescribed Unit Quantity

Food Item Standard Amount Prescribed

Food Package Identification Number

Food Package Name

Food Package Type Code

Participant Category Code

Vendor Price Survey Food Item Name

Process:

- Add or update new approved food packages, associate with a participant category, and store in Food Package data store

Outputs:

Screen display or report of approved food packages

Implementation Approach

- ▶ The system can establish default food packages for different categories of WIC participants, different nutritional requirements, and different risks within categories.

3.3.2.3 Determine Food Package Proration Schedule

WIC food packages are based on the nutrients a participant should consume over the period of a month. Program regulations allow an option of either issuing food instruments for the current month or the remaining portion of the month if a participant is late picking up benefits or to synchronize family/household members onto the same issuance schedule. For State agencies that prorate food benefits, the system should reduce the food package based on the policy adopted by the State agency. To ensure consistency, a food package proration schedule should be established as part of the food package set up process, which will allow proration to apply to any issuance method, including paper food instruments or EBT.

The system should have the capability to establish prorated food packages to be used for late pick-ups or to allow for synchronizing of participants in a household with the same food benefit prescription start date.

Inputs:

Category/Subcategory Category Code
Category/Subcategory Standard Unit of Measure
Category/Subcategory Subcategory Code
Food Item Description
Food Item Prescribed Unit Quantity
Food Item Standard Amount Prescribed
Food Package Identification Number
Food Package Name
Food Package Type Code
Food Benefit Prescription Proration Amount
Vendor Price Survey Food Item Name

Process:

- Select the appropriate food package type
- Calculate reductions in the food package
- Create or update prorated food package and assign a Food Package Identification Number

Outputs:

Prorated food package schedule

Implementation Approach

- ▶ To prorate for late pick-up, the system should subtract the foods that the participant would have purchased and consumed if the instrument had been picked up on schedule. Depending on State agency policy, the amount of the reduction may depend on the number of days remaining from the pick up date until the expiration of the food instruments. The exact amount of the food reduction may also depend on the number of units and unit size of the prescribed foods.
- ▶ To prorate for family to synch benefits, the system should subtract a portion of the participant's food issuance amount in an amount consistent with the time elapsed in the issuance cycle of the other members of the family. It is a design choice by the state of how this should be handled. States typically set up prorated food packages based on three or more periods in the month. For example if a family's issuance cycle has elapsed through a third of the month, the new participant that needs to be synched with the other members would receive 2/3 of their food package for the first month.
- ▶ For EBT, the system may need to have additional functionality to void an entire issued food package or a portion of it. This allows for reissuance of an adjusted prorated food package.

3.3.3 Maintain Food Instrument Data

In the paper environment, the food package is usually composed of several food instruments, each containing a group of foods. The food instruments usually contain approximately one week's supply of foods (e.g. two gallons of milk, one pound of cheese, two cans of juice, etc.). The majority of participants receive standard, pre-defined food instruments. To support paper-based food instrument issuance and redemption, the system should have the ability to construct and record multiple food instrument types and establish a maximum allowed amount for each food instrument type by peer group.

Food instrument types are not required for the EBT environment because food packages are issued in total (or in a prorated amount) to the EBT account or EBT card. For information on related topics in the EBT environment, please refer to section [3.3.4: Maintain UPC Database and Food Item Maximum Allowed Amounts](#).

3.3.3.1 Record Food Instrument Types

Food instrument types can be used in breaking up food packages in more manageable amounts to allow participants to purchase food throughout the month rather than at one time. Food instrument types are mainly used in a paper issuance environment and are not necessarily needed for an EBT environment. Sometimes the local agency must tailor

the food package to accommodate food allergies, taste preferences, or for other reasons. The functionality for food package tailoring has been addressed in Section 3.1.5.1 Select and Nutrition Tailor Food Prescription.

The system should support the creation of food instruments and the association of food instruments to food packages. (Note that for a cash-value voucher benefit the quantity allowed and/or the amount prescribed would be the dollar value of the cash-value voucher.)

Inputs:

Food Instrument Type Category Code
Food Instrument Type Classification
Food Instrument Type Description
Food Instrument Type Identification Number
Food Instrument Type Name
Food Instrument Type Quantity Allowed
Food Item Standard Amount Prescribed
Food Package Identification Number
Food Package Type Code
Participant Category Code

Process:

- Display appropriate standard, predefined food packages
- Allow user to add or update new food instrument types and store in Food Instrument Type data store

Outputs:

Screen display or report of food instrument types

► Some State agencies use a matrix approach to food instrument design as opposed to the development of food instrument “types.” In other State agencies, food instruments are assigned based on a profile of the participant. These approaches to food instrument design may be more conducive to EBT conversion.

3.3.3.2 Establish Food Instrument Maximum Allowed Amounts

A maximum allowed amount is assigned to a food instrument based on the peer group of the vendor submitting it for redemption and is applied as food instrument edits used in the redemption process. Food

instruments that exceed the maximum value are rejected for payment, paid only up to the allowed amount, or offset against a future payment in prepayment systems, or the vendor is billed for the overage in postpayment systems. The maximum allowed amount for a food instrument is typically based on a peer group's average redemption amount for that food instrument, either in a period prior to redemption, such as the previous month, or at the time of redemption, such as the month when the food instrument is received. This amount may change from month to month, and, in postpayment systems, may not be known until after the food instrument is submitted for redemption. Also, State agencies typically add an inflator onto the averages, such as a percentage or several standard deviations, to account for the normal range of redemption amounts in a peer group. If the State agency uses a contract price for each food or food instrument, the price paid to the vendor cannot exceed the contract price. In such systems, the vendor is automatically billed for food redemption amounts that exceed the contract price. The State may offset payments to the vendor or the vendor must submit repayments for the excess charged.

Thus, in a paper food instrument system, each time a food instrument is issued, the system uses the projected average food cost to establish a food obligation for expenditure tracking purposes.

In establishing maximum allowed amounts, consideration must be made of vendors with WIC sales above 50 percent of their food sales ("A50 vendors"). FNS has established guidance on options for establishing maximum allowed amounts for these vendors. In support of these options, State agencies must be able to determine the average redemption amount per food instrument type for all regular vendors (all vendors which are not A50 vendors), because State agencies will be subject to claims for exceeding these averages in payments to A50 vendors, regardless of the option chosen.

Prior to issuance to a participant, the State agency should assign a maximum allowed value to each food instrument or food instrument type (setting maximum allowed amounts by food item which is used in an EBT environment is addressed in [Section 3.3.4.2 Establish Food Item Maximum Allowed Amounts](#)). The system can use the average redemption values or price survey data to project expenditures and as a cost containment tool to prevent a vendor from charging unreasonable prices.

Inputs:

Category/Subcategory Category Code

Category/Subcategory Subcategory Code

Food Instrument Average Redemption Amount

Food Instrument Type Peer Group Average Value

Food Instrument Type Category Code

Food Instrument Type Classification
Food Instrument Type Description
Food Instrument Type Identification Number
Food Instrument Type Maximum Allowed Amount
Food Instrument Type Name
Food Instrument Type Quantity Allowed
Food Item Inflation Factor
Food Item Maximum Quantity
Vendor Price Survey Food Item Name
Vendor Price Survey Food Item Shelf Price
Vendor Peer Group Code

Process:

- For paper food instrument systems, retrieve the actual redemption value for each food instrument type over a period of time or vendor price survey data to calculate a Food Instrument Type Peer Group Average Value
- Store the Food Instrument Type Peer Group Average Value in the Food Instrument Type data store
- Calculate a Food Instrument Type Maximum Allowed Amount by inflating the Food Instrument Type Peer Group Average Value by an amount to be determined through vendor redemption and price analysis.
- Store the Food Instrument Type Maximum Allowed Amount in the Food Instrument Type data store

Outputs:

Screen display or report of food instrument type peer group average and maximum allowed amounts

Screen display or report of food item average prices by peer group

Implementation Approach

- ▶ The system can obtain a historical redemption value by peer group for each food instrument type. Usually the estimated value is the average value of all redemptions for a food instrument type for a recent time period. For example, the price of a milk/cheese/juice food instrument type might have averaged \$15.00 for the last two months. FNS has provided guidance regarding food instruments which may have been only partially redeemed.

- ▶ The system can obtain a historical price survey data for determining an estimated average value of each food instrument type.
- ▶ The system can use a matrix to derive standard food instruments instead of food instrument types for the purpose of estimating redemption values.

3.3.4 Maintain UPC Database and Food Item Maximum Allowed Amounts

For systems using EBT, and optionally, for systems using paper food instruments, the WIC IS can maintain a UPC database. The UPC database can be used to provide UPC and PLU data to *the EBT system* for use in transaction processing and for download to vendor systems. Note also that the function of maintaining a UPC database and determining food item maximum allowed amounts can also be performed solely by *the EBT system*.

For systems issuing benefits via EBT, the UPC database is used as part of the redemption process to determine if a food item that a cardholder is attempting to purchase is an approved food item. Information regarding food item³³ maximum allowed amounts (also referred to as maximum pricing) should be linked to each UPC or food item type based on subcategories. Food item maximum allowed amounts should also be established for each food item by peer group.

The UPC database identifies food items by:

- Category: 2-digit numeric code for each food item type, e.g. milk is 01
- Subcategory: 3-digit numeric code for each subcategory of a food item type, e.g. milk-whole is 001
- Description: alpha description of the subcategory type
- Unit: quart, ounce, can, bottle, dozen, pack
- Exchange value: the number of units that will be decremented from the benefit record when an item is purchased
- Comment: any special information needed
- UPC or PLU: identification for each food item under a Food Category/Subcategory
- UPC or PLU Description: food type, brand, unit size

³³ Some States may maintain maximum allowed amounts by category/subcategory.

3.3.4.1 Maintain UPC Database for WIC Authorized Foods

The system shall support the capture and update of UPC data for all foods authorized by the State agency. All UPC codes should be tied to a specific category and subcategory codes. These are the same codes that are maintained in the Category/Subcategory table discussed in *Section 3.3.1.1 Maintain Food Category/Subcategory Table*. (Note maintaining the UPC database can also be maintained exclusively by *the EBT system* separate from the WIC IS, in which case State agency users would have access through an interface for making updates to the database.)

Inputs:

Category/Subcategory Category Code
Category/Subcategory Standard Unit of Measure
Category/Subcategory Subcategory Code
Food UPC/PLU Authorization Date
Food UPC/PLU Code
Food UPC/PLU Description
Food UPC/PLU Exchange Value
Vendor Identification Number (for store-specific PLUs)
Vendor Chain Code (for chain-specific PLUs)

Process:

- Add, update and delete food UPCs and PLUs in the Food UPC/PLU data store

Outputs:

Transmission of UPC updates or entire UPC table to EBT system
Screen display, report, or electronic file for UPC/PLU food list, which displays the UPC/PLU, and description for each food category/subcategory.

3.3.4.2 Establish Food Item Maximum Allowed Amounts

Like paper food instruments, a maximum allowed amount must be established for foods by peer group so that vendors cannot exceed price limitations. In establishing maximum allowed amounts consideration must be given to A50 vendors. FNS has established guidance on options for establishing maximum allowed amounts for these vendors.

For each UPC, a maximum allowed amount shall be assigned. Alternately, a state agency may choose to set maximum allowed amounts by food subcategory rather than by UPC. (Note that this can also be a function of *the EBT system*.)

Inputs:

Category/Subcategory Category Code

Category/Subcategory Subcategory Code

Food UPC/PLU Code

Food UPC/PLU Peer Group UPC Average Price

Food UPC/PLU Peer Group UPC Maximum Allowed Amount

Vendor Peer Group Code

Process:

- Using price survey or redemption data, calculate food item maximum allowed amount by peer group for each item (or food subcategory)
- Update Food UPC/PLU data store

Outputs:

Transmission of maximum allowed amount updates or entire list of maximum allowed amounts to EBT system

Screen display, report, or electronic file of entire food list and associated maximum allowed amount.

Implementation Approach

- ▶ For systems issuing benefits via EBT, the actual cost for each food can be obtained from the food transaction data. The food transaction data provides the price charged by the vendor for cost of each food by UPC (e.g., General Mills Total cereal – 36-ounce box for \$3.50) and by vendor. This shelf price cost is stored in the EBT system and can be reported back to the State agencies in transaction history and monthly reports. Similar to a paper food instrument system, the average cost for a food item, such as cereal, is computed based on purchases of all brands of cereals by peer group over a specific time period.
- ▶ For systems issuing benefits via EBT, the maximum allowed amount can be automatically calculated for each UPC (or food subcategory) by vendor peer group based on actual transaction data. On a periodic basis, the new system-calculated maximum allowed amounts may be recalculated, reviewed manually by State agency staff, and scheduled for implementation and updated as needed. Some State agencies have automated this with manual overrides where necessary (e.g., too few items to be representative as an average).

- ▶ As an alternative, the maximum allowed amount could be assigned to a unit of a food within a food subcategory (i.e., Milk: Whole or Cheese: Swiss). For example, instead of assigning a maximum allowed amount to each brand of half gallon whole milk; any half gallon whole milk would be assigned a single maximum allowed amount. When using this method, consideration must be made for handling foods that have smaller base units of measure such as cereal that is measured by the ounce. A maximum allowed amount may be set for one ounce of cereal and then multiplied by the number of ounces in a box to determine the maximum allowed amount for that item, however typically the larger size box purchased is less expensive per ounce than a smaller size box, therefore adjustments may need to be in order to calculate an appropriate maximum allowed amount.
- ▶ For State agencies that decide to set the maximum allowed amount by food item, there may be times when there is not enough redemption data to establish an accurate maximum allowed amount. When this occurs, the system can be designed to default to a maximum allowed amount for the subcategory.