

You might wonder how procurement and inventory management can bring a smile to students' faces. How well you manage these functions within your district's budget affects the degree of variety and quality that menus provide. A fiscally sound school nutrition program provides the best possible meal experience for students and the school community.

## In this chapter, you will learn about:

- Procurement:
- The Buy American Provision
- Forecasting, sourcing, and bidding
- USDA Foods: Variety, menu options, and available resources
- Buying locally - Farm to School and geographical preferences
- Documenting - Child Nutrition (CN) Labels, product formulation statements (PFS), and Nutrition Facts labels
- Inventory management: Ordering, receiving, storage, recall management, and safefood practices
- Equipment needs: Choosing and using equipment for healthy meals.

This chapter will guide you through procurement and inventory management as they relate to menu planning. Your menus drive both functions, each key to your goal of providing quality, nutritious meals.

## THE BUY AMERICAN PROVISION

The Buy American Provision is a very important provision in the National School Lunch Program/ School Breakfast Program (NSLP/SBP) and applies to a Child and Adult Care Food Program (CACFP) sponsor that is a school food authority operating the NSLP/SBP. It does not apply to CACFP sponsors that are not school food authorities operating the NSLP/SBP.

This provision requires that a school food authority purchase, to the maximum extent practicable, domestic commodities or products. The term "domestic commodity or product" means an agricultural commodity that is produced in the United States (US); and a food product that is processed in the US substantially using agricultural commodities that are produced in the US.

The definition of "substantially" means that over $51 \%$ of the final processed product consists of agricultural commodities that were grown domestically. There are very limited exceptions to the purchase of domestic foods. These are only permitted:

- after first considering domestic alternatives and;
- when domestic foods are unavailable or prohibitively expensive.
Thus, for foods that are unprocessed, agricultural commodities must be domestic, and for foods that are processed, they must be processed domestically using domestic agricultural food components that are comprised of over $51 \%$ domestically grown items, by weight or volume.

For products procured by SFAs using nonprofit food service account funds, the product's food component is considered the agricultural commodity. FNS defines food component as one of the food groups which comprises reimbursable meals. The food components are: meats/meat alternates, grains, vegetables, fruits, and fluid milk. Please refer to 7 CFR 210.2 and 226.20 for full definitions.

Food Service Director and Site Managers Create Efficient Ordering
Molly Rainey, food service director, Valley Center School District, has developed an ordering spreadsheet that site managers receive and complete weekly. Ms. Rainey reviews the completed forms to fill the purchasing order for the following week. This practice has been instrumental in aiding managers to stay atop of their current inventory levels and be more precise in ordering practices. With this approach, the school nutrition program now operates in the black and is completely self-supporting - a true success story!

Valley Center School Food Ordering Sheet - HIGH SCHOOL

Order Period: $\qquad$

| Am Cheese <br> Shred |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Black Beans |  |  |  |  |  |  |  |
| Black Olive |  |  |  |  |  |  |  |
| Broccoli |  |  |  |  |  |  |  |
| Carrots |  |  |  |  |  |  |  |
| Eggs |  |  |  |  |  |  |  |
| Peppers |  |  |  |  |  |  |  |
| Red Onion |  |  |  |  |  |  |  |
| Tomato, <br> fresh |  |  |  |  |  |  |  |
| Turkey <br> Bacon |  |  |  |  |  |  |  |

Excerpt from Valley Center School Food Ordering Sheet
Each Valley Center ordering spread sheet is unique to a menu type (such as High School) and features products and suppliers for the menu week.


School District:
Valley Center Unified School District 262

## Located:

Valley Center, Kansas

Enrollment: 2,800

Website: www.usd262.net

## Menu Chat

## Hi colleagues!



Tyler

I am learning more about procurement. How does this work in your schools? Are you the only person who is responsible for procurement?


Megan

We run a large school nutrition program and I am part of the management team. Other team members are also dedicated to procurement and inventory management. We follow Federal procurement requirements and handle most details of the solicitation process ourselves. It makes sense for us to work closely on this since we understand our needs better than anyone else.


Our district's food service operation is small so we depend on the expertise of the district's business manager. She listens to our needs based on program requirements and helps us with procurement. We have a great partnership. Additionally, the business manager plays a significant role in the various accounting processes involving the nonprofit school food service account. Working together on issues that involve the use of the account funds ensures that we work collaboratively to properly manage nutrition program funds.
Lin


Elena

When I first started working for our school nutrition program, I did not know much about procurement. I made sure I was familiar with the applicable Federal procurement requirements for schools and in doing so learned how important it is to forecast my program's needs. There was a lot to learn at first, but understanding the benefits of forecasting program needs, how to use the proper procurement methods, and how to develop effective specifications and solicitations to express my district's scope of need has benefitted our program greatly. The Institute of Child Nutrition offers a comprehensive procurement training that we found very helpful.


Tyler

## THANK YOU

Thanks for the tips and the reminder to check out the available tools and resources when we revise menus.

## Procurement in the 21st Century

School Food Authorities (SFA) are required to comply with requirements and rules addressing procurement of goods, products, and services for School Nutrition Programs (SNP). The Institute of Child Nutrition (ICN) provides an excellent resource that details the steps needed to develop and maintain a strong procurement program. Procurement in the 21st Century may be accessed at http://www.theicn.org. This resource addresses general concepts about procurement. The purpose is to assist you in identifying key concerns when executing a cost-effective procurement program.
Procurement is a multistep process necessary for a cost-effective program. Planning is a critical part of the procurement process to guarantee high-quality products and services at the least cost. Solid planning will enable you to:

- Use resources wisely
- Comply with appropriate laws
- Ensure competitive procurement.

Procurement in the 21st Century provides detailed information on these topics and more:

- Procurement standards
- Competitive procurement and noncompetitive proposals
- School nutrition food supply chain
- Menu information
- Forecasting
- Solicitations
- Product specifications
- CN labeling
- Contract varieties
- Group-purchasing cooperatives
- USDA Foods
- Food service management companies
- Local purchasing.

Your school nutrition team will find this 188-page publication invaluable. This resource is a must-read... and a must-implement guide for you and your procurement team.

## ELEMENTS IN PROCURING QUALITY FOOD

Procurement, or the processes for purchasing goods and/or services, supports the goal of school nutrition programs: to provide safe and nutritious food to all children in the school system. The nutritional needs of children drive every purchasing decision. What you purchase also supports your staff's work in food preparation and service. Procurement in school nutrition is a multistep process where planning is critical to procuring highquality products and services at the lowest cost.

Depending on your role, you may be responsible for procurement in your school nutrition program. Or, you may support the process because you are responsible for menu planning. Either way, you must understand the procurement process and your local procedures to ensure:

- Safe, nutritious, quality meals
- Economical purchases
- Full and open competition
- Adherence with Federal, State, and local regulations.


## PARTNERS IN THE PROCUREMENT PROCESS

Procuring food and products for school meals may seem as simple as buying the items. In reality, it is a complicated process that requires open communication and collaboration among everyone in the food supply chain. This chain includes the school food authority (SFA) staff, USDA, local producers and processors, food service management companies, manufacturers, distributors, and brokers.

The SFA is the governing body responsible for administration of one or more schools and has legal authority to operate any of the Federal Child Nutrition Programs. Your SFA's procurement policies will drive purchasing decisions. Depending on the size of your school district, you may work with the school business office on procurement or have that function performed by school nutrition staff members. No matter which office handles the procurement work, there are requirements to follow.

The SFA is responsible for the proper use of school nutrition program funds to provide nutritious foods to students. The process must be competitive and transparent - clear, honest, and open. Transparency leads to accountability and cost effectiveness, which are important in Federally funded programs.

Your school nutrition programs must provide full and open competition so that all suppliers have the same opportunity to compete. Your school nutrition program must seek responses from qualified suppliers who are capable of meeting the contract terms and conditions. Fairness and honesty throughout the process is both a requirement and the right thing to do.

USDA's Food and Nutrition Service (FNS) oversees child nutrition programs. USDA support for SFAs includes policy, technical assistance, nutrition education, meal reimbursement, and USDA Foods. Approximately 15-20 percent of foods in school nutrition programs are provided by USDA Foods. This program supplies foods that are 100 percent American-grown in order to support domestic agriculture. USDA also provides guidance to State agencies (SAs) for use during a targeted procurement review. Your State agency can provide you with more information on these processes.

> The SFA is responsible for the proper use of school nutrition program funds to provide nutritious foods to students. The process must be competitive and transparent - clear, honest, and open. Transparency leads to accountability and cost effectiveness, which are important in federally funded programs.

Manufacturers, distributors, and brokers work to provide the quantity, quality, delivery schedule, and best price for the products requested. They are your partners in acquiring food and supplies.
Farm to School is a popular way to feature local foods, where the SFA may define local and use this to apply a preference for unprocessed locally

## Innovative Solicitation Process Maximizes Local Produce in County Menus

Sarasota County Schools created a solicitation process to develop its Farm to School program. Since 2009, the district has had a separate Florida "Farm Fresh Produce" bid solicitation, in addition to one for produce grown outside the State. This method allows the district to receive a variety of produce items while also emphasizing the importance of Farm to School and selecting Florida-grown fresh produce as much as possible. In Florida, the growing and harvest seasons coincide with the school year. Working with the menu committee, Malory Foster, RDN, LDN, Farm to School liaison, ensures seasonal menus maximize Florida-grown fresh produce and highlight Florida foods in marketing efforts.

|  | 2013 -2014 | $\mathbf{2 0 1 4 - 2 0 1 5}$ |
| :---: | :---: | :---: |
| August | $5 \%$ | $0 \%$ |
| September | $3 \%$ | $5 \%$ |
| October | $8 \%$ | $16 \%$ |
| November | $13 \%$ | $24 \%$ |
| December | $14 \%$ | $35 \%$ |
| January | $21 \%$ | $45 \%$ |
| February | $27 \%$ | $54 \%$ |
| March | $27 \%$ | $55 \%$ |
| Total | $\mathbf{1 4 \%}$ | $\mathbf{3 0 \%}$ |

The chart shows increases in local fresh produce percentages for Sarasota County Schools with a Florida "Farm Fresh Product" bid solicitation and promotion program.
produced foods. These foods provide benefits of seasonality and often cost savings. Your school nutrition program may competitively purchase foods from local farmers or access these products through a distributor. The USDA Farm to School Program is a resource to help you with sourcing local and regional foods.

Your goal is to provide nutritious and safe food daily. You can achieve this goal through:

- Careful planning
- Quality preparation
- Strong commitment from nutrition program partners in the food supply chain.


## PROCUREMENT STARTS WITH THE PLANNED MENU

Your menu is the driving force when beginning the procurement process. The menu and standardized recipes determine the type of products needed.
Forecasting describes how you determine the amount of each food needed; sourcing describes matching the products you want to possible suppliers.

## Forecasting

The time you spend to accurately estimate the quantity and quality of goods, products, and/or services needed for the school year is important. Use historical information from menus, production records, and average daily participation (ADP) to help develop your forecast numbers. Proper forecasting leads to accurate estimates and financial success. Forecasting also includes projecting how changes in your program or school district may affect historical information. For example, implementing the Community Eligibility Provision, adding Breakfast in the Classroom, or adding a new school may substantially increase program participation. Likewise, closing schools due to reduced enrollment or moving from a 5-day to 4-day school week also affects your forecasting. These changes need to be included when projecting estimated quantities.

As part of your forecasting process, conduct product taste tests. Taste tests help you determine
which items/brands best suit your customers. Include students to help build relationships and to ensure products have student appeal. Ask students to provide feedback on foods, and then market your program as "student-approved." Use your students' preferences to forecast volumes of popular items. Working together with your customers will have a positive impact on program credibility and participation.

When you are forecasting, review your recipe file. Does your file include USDA standardized recipes? USDA recipes provide marketing information that helps estimate the amount of certain ingredients needed for production. Use the marketing guide on USDA recipes, and add it to other recipes, as needed. See the Take a Closer Look feature on page 170 to learn more.

## Sourcing

In addition to knowing the type, quality, and quantity of products needed to produce the menu, you need to find the source for each product. Sourcing will often involve several options. Depending on the product and time of year, you may be working with a variety of sources. For example, peaches may be available fresh from a local farmer at the beginning of the school year and fresh from a produce distributor until November. Then, they may be available canned or fresh from USDA Foods, and from a distributor when your USDA Foods are out of inventory. Local producers, manufacturers, distributors, and brokers are all sources to consider when competitively procuring products.

## USDA Foods

USDA Foods are valuable resources available to schools that participate in the National School Lunch Program (NSLP). School districts can take advantage of USDA Foods by choosing from a wide variety of options, including fruits, vegetables, whole grain-rich items, lean meats, and cheese. These items can be delivered throughout the year to meet the needs of your school district. Check with your State Distributing Agency (SDA) for more information about USDA Foods in your State. School districts participating in NSLP receive USDA Foods "entitlement dollars" to support their school nutrition program. Entitlement dollars are

## USDA Recipe Marketing Guide

USDA recipes provide information to assist in purchasing necessary quantities of food for recipe production. Recipes call for the specific amount of an ingredient. However, the ingredient amount is seldom equal to the purchasing amount for many types of food. For example, when recipes call for fresh fruits or vegetables, the
 ingredient amount is typically the edible or trimmed portion. The purchase amount will be more than the ingredient amount to account for losses. These losses include portions of the fruits and vegetables that are not consumed. The marketing guide section of each recipe provides purchasing information, including:

- Food as Purchased (AP) - lists each food item to purchase
- Food quantity for each recipe yield; for example, 50 servings or 100 servings.

This recipe for Mediterranean Quinoa Salad calls for fresh red pepper, green onions, red onions, cherry tomatoes, and parsley. The asterisk next to these ingredients calls attention to the prepared amount, or edible portion (EP).

| Mediterranean Quinoa Salad |  |  |  |
| :---: | :---: | :---: | :---: |
| Meal Components: Other Vegetable-Grains |  |  |  |
| Ingredients | 50 Servings |  | $\mathrm{w}_{\text {c }}$ |
|  | Weight | Messure |  |
| Quinoa, dry | 316602 | 2 tat /cup | 616 |
| Low-sodium chicken broth |  | 1 gal |  |
| Lemon juice |  | y, cup |  |
| Red wine vinegar |  | y/cup |  |
| Fresh garic, minced |  | 2 Tbsp |  |
| Extraviging olve oil |  | y/cup |  |
| Salt |  | 1 Thsp 1 tsp |  |
| Ground white epper |  | 1 15p |  |
| FFresh red bell peppers, diced | 1102 | 2 cups | 116 |
| *Fresh green onions, diced | 402 | 1 cup | 8 |
| 'Freshred onions, diced | 602 | 1 cup | 12 |
| FFiesch cherry tomatoes, halved | 1166\% 2 | 19 t | 216 |
| Neese, cumbled *Fresh red bell peppers, diced | *Fresh red bell peppers, diced |  |  |
| - *Fresh green onions, diced |  |  |  |
|  | *Fresh red onions, diced |  |  |
|  | *Fresh cherry tomatoes, halved |  |  |
|  | Black olives, sliced |  |  |
|  | Feta cheese, crumbled |  |  |
|  | *Fresh parsley, finely chopped |  |  |

The recipe marketing guide shows the amount of each fresh vegetable to purchase that will trim to the recipe quantity. For example, the 50 -serving recipe calls for 11 oz of diced red pepper. The marketing guide shows that 14 oz , or just under 1 lb , of red bell peppers will trim and dice to 11 oz . Both of these measurements are weight. A volume amount of diced red pepper is also provided: 1 cup for 11 oz. When appropriate, both weight and volume are listed in the recipe.

The Food Buying Guide for Child Nutrition Programs (FBG) shows how to determine marketing guide quantities. Use the FBG information under Column 6, Additional Information. Here you see that 1 lb whole red peppers yield about $0.80 \mathrm{lb}(12.8 \mathrm{oz})$ of diced red pepper.


## SECTION 2 - VEGETABLES, RED/ORANGE SUBGROUP

| 1. | 2. <br> Food As <br> Purchased, AP | Purchase <br> Unit | Servings Per <br> Purchase Unit, <br> EP | 4. <br> Serving Size Per Meal <br> Contribution | Purchase <br> Units For <br> 100 Servings |
| :--- | :--- | :--- | :--- | :--- | :--- | | Additional <br> Information |
| :--- |
| Peppers, Bell <br> Fresh <br> Orange or Red, <br> Medium or <br> Large, Whole |
| Pound |

The online FBG Calculator calculates the purchase quantity of red bell peppers. To determine a recipe quantity, enter the number of servings and a serving size that correspond with the recipe yield. In the example, the calculator shows that 0.82 lbs ( 13.2 oz) will trim to 2 cups volume. The purchase amount is rounded up to 1 lb .

Marketing guides help prevent underand over-purchasing. Consider adding a marketing guide to all of your school recipes. Your standardized recipes may be for quantities larger than 100 servings; create a marketing guide that matches your usual production for each recipe.

## Food Buying Guide <br> Calculator for Child Nutrition Programis



The Mediterranean Quinoa Salad is found in the Recipes for Healthy Kids Cookbook for Schools located at USDA's What's Cooking?
Website (https://www.fns.usda.gov/tn/recipes-healthy-kids-cookbook-schools).

## USDA Foods: Changing School Lunch and Supporting American Agriculture

USDA Foods provide healthy foods to schools by:

- Purchasing more than 2 billion pounds of food from American farmers each year
- Meeting strict food safety and nutrition standards and using 100 percent American-grown foods
- Providing high-quality meals to more than 30 million students each school day
- Adding versatility and being an economical way to provide the Nation's children with appealing meals.


## Serving up Nutritious Options in Schools

USDA Foods include a wide variety of high-quality fruits, vegetables, dairy products, whole grains, and lean meats and other protein options. They align with the Dietary Guidelines for Americans and the school meal pattern requirements to help schools prepare healthy meals. USDA Foods now offer more fruits, vegetables, and whole grain options than ever before.

In recent years, USDA has reformulated products in every food category to help schools offer nutrient-dense, kid-friendly meals. Not only do these high-quality foods taste good, but they are also lower in sugar, sodium, and fat. For example, canned fruits are packed in extra-light syrup. Frozen and canned vegetables are low-sodium or no-salt-added. Many meats and cheeses have lower fat and sodium profiles than commercial equivalents.
"In working to meet the school nutrition standards, I find the USDA Foods Program has worked hard to increase our choices and access to new food items. I am particularly glad to see more red/orange and dark-green vegetables available through the USDA Foods Program. Schools should take full advantage of the products available through USDA Foods and also reach out to USDA as great sources for program support."

- Doug Davis, SNS Director of Burlington School Food Project

When planning what to serve, explore ways USDA Foods can complement your existing menus. The sample menu on the next page displays how USDA Foods may be incorporated into your menus to create nutritious, flavorful meals.

## Sample Menu

## TACO BAR

Whole Grain-Rich Tortilla

## Choice of Meat/Meat Alternate:

- Diced Chicken,
- Turkey Taco Filling,
- Catfish Strips,
- Shredded Cheddar Cheese


## Choice of Vegetable Toppings:

- Refried Beans
- Black Beans
- Salsa
- Corn
- Lettuce

Fiesta Rice (brown rice, diced tomatoes, chopped peppers)
Strawberries, frozen cup

## 1\% Milk or Fat-Free Milk

Foods highlighted in yellow are USDA Foods, foods highlighted in green may be purchased through the USDA Department of Defense Fresh Fruit and Vegetable Program (USDA DoD Fresh).

## MEAL

COMPONENT

## HOW USDA FOODS SUPPORT THE NSLP AND SBP REQUIREMENTS

USDA offers a variety of fresh, frozen, canned, and dried fruits, which are low in sugar or have no added sugars:

- Fresh: apples, oranges, pears, other fruits available through the USDA DoD Fresh Fruit and Vegetable Program

Fruits

- Frozen: apples, apricots, blueberries, wild blueberries, cherries, peaches, strawberries
- Dried: cherries, cranberries, fruit mix, raisins
- Canned fruits in extra-light syrup or water: apple slices, unsweetened applesauce, apricots, cherries, mixed fruit, peaches, pears
- Juice: 100\% orange.

USDA offers a variety of fresh, frozen, dried, and low-sodium or no-salt-added canned options:

- Dark green: broccoli, spinach
- Red/orange: butternut squash, carrots, sweet potatoes, tomato products

Vegetables

- Beans and peas (legumes): black, black-eyed peas, garbanzo, lentils, lima, pink, pinto, red kidney, refried, small red, vegetarian
- Starchy vegetables: corn, peas, potato products
- Other: green beans, pepper/onion blend
- Additional options available through USDA DoD Fresh.

USDA offers a variety of nutrient-dense meats/meat alternates, many of which have lower sodium and fat profiles.

- Beans and peas (legumes), low-sodium canned and/or dry: black, blackeyed peas, garbanzo, lentils, lima, pink, pinto, red kidney, refried, small red, vegetarian
- Beef: ground, patties, crumbles, canned
- Cheese: American, cheddar, mozzarella
- Chicken: cut-up, oven roasted, diced, unseasoned strips, fajita strips, canned
- Eggs: liquid whole
- Fish: whole grain-breaded catfish strips and Pollock fish sticks, bulk Pollock, tuna
- Nuts/seeds: peanut butter, sunflower seed butter, peanuts
- Pork: leg roast, pulled pork, ham
- Turkey: roast, taco filling, deli breast, turkey ham
- Yogurt: high-protein.


## MEAL

COMPONENT

## HOW USDA FOODS SUPPORT THE NSLP AND SBP REQUIREMENTS

All USDA direct-delivered products meet the whole grain-rich criteria.

- Flour: whole wheat, white whole wheat/enriched blend
- Oats: quick-cook rolled

Grains - Pancakes: whole grain

- Pasta: whole grain-rich spaghetti, rotini, macaroni, penne
- Rice: brown rice
- Tortillas: whole grain.

Milk Purchased locally; not provided through USDA Foods.

## USDA Foods Are High Quality, Versatile, and Economical

USDA Foods offer more than 50 agricultural products and a wide variety of different items and pack sizes. USDA Foods offer school districts flexibility to order products in various package sizes or forms. You can order fresh, canned, frozen and dried, ready-to-serve, and bulk sizes for processing. With so many healthy options available, USDA Foods are versatile and economical.

## USDA Supports American Agriculture

The USDA Foods program has a dual mission of providing healthy food to nutrition programs while supporting American farmers. All products purchased are grown, processed, and packaged in the United States or its territories. The Nation's agricultural system supplies a variety of nutritious foods for schools, such as fruits, vegetables, whole grains, meats, fish, eggs, nuts, and dairy products.

## Using USDA Foods to Complement Local Purchasing Efforts

Because USDA Foods are all produced in the United States, it is possible to order foods produced in your region. For example, Mississippi is the only State that produces significant, commercial quantities of catfish. This means that if a school is in the Southeast, USDA Foods catfish could be local or regional to that school. Likewise, apricots offered through USDA Foods normally come from California, and pears usually originate in the Pacific Northwest, so States in those areas can take advantage of these local products as well.

The USDA Foods website (https://www.fns.usda.gov/fdd/food-purchase-resources) provides State- of-origin information for previously purchased USDA Foods. However, due to the competitive nature of procurements, USDA cannot provide State-of-origin information prior to ordering. Still, you can check what products USDA often purchases from your State or neighboring States. Just keep in mind future procurements may not follow these trends.

Schools also have the option to use their USDA Foods value to purchase fresh produce through USDA DoD Fresh. DoD contracts with produce suppliers, to distribute fresh products to schools. These contracted vendors offer local products whenever possible. The ordering catalog identifies locally sourced items; vendors can also indicate the State of origin for their products. Several States rely on USDA DoD Fresh produce as an integral part of farm to school efforts.

## USDA Foods Resources

The USDA Foods Toolkit (https://www.fns.usda.gov/usda-foods/usda-foods-toolkit-child-nutrition-programs) is an online collection of valuable resources. The site can assist you in using USDA Foods. You will also find useful tools for educating the school community about the health and nutrition contributions of USDA Foods. USDA Foods publishes a Foods Available List (https:// www.fns.usda.gov/fdd/foods-expected-be-available) showing items expected to be available each school year. One of many useful features of this document is that vegetables are highlighted by subgroup.
USDA Foods Product Information Sheets (https://www.fns.usda.gov/fdd/nslp-usda-foods-fact-sheets) are also available for USDA Foods items. The Information Sheets reflect nutrition information, food safety, and preparation tips for all USDA Foods products available for direct delivery.
Contact your State Distributing Agency for more information about the USDA Foods distributed to schools and institutions in your State. A list of the State Contacts may be found on the FNS website: https://www.fns.usda.gov/fdd/food-distribution-contacts.
Additional information may also be found on the FNS Food Distribution website: https://www.fns. usda.gov/fdd/food-distribution-programs. For additional questions or comments, please e-mail: USDAFoods@fns.usda.gov.
calculated using the entitlement rate published in the Federal Register annually and are based on the number of lunches served in the previous school year. The number of breakfast meals and after school snacks served is not included in these calculations, but you can still use USDA Foods for both. In a way, you can think of USDA Foods as a different form of currency to support your program.

## Local Products

You can often source seasonal favorites locally. Additionally, some local products are available in all 50 States. Your food distributors and contract management companies may have products to meet your geographic preferences. You can use USDA Foods entitlement dollars to source local fruits and vegetables through the USDA Department of Defense Fresh Fruit and Vegetable Program (USDA DoD Fresh). See Take a Closer Look for more information.

## Manufacturers

Manufacturers may develop products to specification for school districts, for example, chili with ground turkey and beans. Additionally, manufacturers may process USDA Foods bulk items into finished products and distribute them directly to school districts.

## Distributors

Distributors offer a variety of products, both name brand and distributor's labeled comparable products. They offer a wide variety of choices and pricing and have facilities to warehouse products until distributed to sites.

## Brokers

Brokers work with manufacturers and distributors to provide product lines to schools. They negotiate sales and share information about new products. Brokers serve as an important link between manufacturers, distributors, and school nutrition programs.

## Geographical Preferences and Sourcing Locally

Do you know you can go directly to the Community Food Systems website (https:// www.fns.usda.gov/farmtoschool/procuring-local-foods) to learn all you need to know about buying locally produced foods? Take advantage of the information available to you from USDA on Farm to School, Local Foods, and determining geographical preferences.
This is a "short list" of the information you will find:

- Guide: Procuring Local Foods for Child Nutrition Programs
- Finding, Buying, Serving Local Foods webinar series
- Using USDA Foods as Resource to Purchase Local
- Using USDA DoD Fresh to Purchase Local
- Fact Sheets:
- 10 Facts About Local Foods in Schools
- Geographical Preferences
- Resource for Local Producers
- And many more.

For details about USDA DoD Fresh, visit https://www.fns.usda.gov/fdd/usda-dod-fresh-fruit-and-vegetable-program. USDA DoD Fresh allocations may be changed throughout the year, and USDA does not impose a cap on the amount of entitlement used through this program.

## Menu Chat

 (i) (8) (8)Hello!


Elena

I wondered if anyone is promoting local foods on your printed menus.


Dylan

Our posted menus have an asterisk next to menu items that we serve that may be locally sourced. I include a note that local foods are our first choice unless supplies are not sufficient for menu needs. Remember, you may be able to include milk and other foods that are local, in addition to produce. Of course, when buying locally we ensure that all procurement requirements, including competition, are met.


Sandra

We live in an agricultural area. I highlight which local orchard our fruit was harvested from for each menu day. We like to promote the connections to local producers. Our patrons see this as high quality. And as others have mentioned, we ensure that all our procurements are conducted competitively.


Elena

## THANK YOU

Thanks for the tips and the reminder to check out the available tools and resources when we revise menus.

Product type, quality, and quantity information gathered will assist you in writing product specifications for solicitation documents. Providing clear and concise product specifications helps manufacturers, distributors, and brokers meet defined requirements as required for competitive procurement. Use proper forecasting to meet student preferences. When students know their favorite foods will be available, participation may
remain steady or increase. Forecasting well may be hard work, but it helps lead to program success.

## Navigating the Solicitation Process

Once you know the quality and quantity of menu items needed and have a list of potential sources, the next step is the solicitation process. The solicitation process uses the estimated value of the purchase to determine which procurement
method to follow and the type of contract to award. Then, the solicitation documents are developed. Part of these documents address transparency and full and open competition, such as details on your solicitation process, terms, conditions, evaluation criteria, and scoring procedures. Other documents explain all required provisions suppliers need to consider when developing their response. Solicitation documents also address product quantities and specifications.

## Product Specifications

Product specifications (also known as bid specs) identify the quality of products needed. General terms in a bid specification include:

- Product description - Simple (example: peaches, canned in light syrup) or complex (example: ingredients and crediting for a pre-prepared burrito)
- Case-pack and weight: 6/\#10 cans, 5 lb container, 48/case, etc.
- Minimum size and/or number of pieces - Each serving must weigh 3.9 ounces (oz) and no more than 4.1 oz , etc.
- Primary ingredients - Black beans; shredded cheddar cheese; 8-inch whole grain-rich tortilla (at least 50 percent of grains are whole), with less than 2 percent noncreditable ingredients)
- Other, secondary product ingredients - Onions, thickeners, seasonings, etc.
- Nutritional standards for NSLP and School Breakfast Program (SBP)
- Food safety requirements, including delivery conditions (refrigerated vehicle), Good Agricultural Practices (GAP) for farm-to-school produce (see the Take a Closer Look feature later in chapter), Global Trade Item Number (GTIN) (see product traceability in Inventory Management section later in the chapter), and allergen labeling
- Ingredient preferences for any additional State or local standards
- Quality of products needed.

Take a Closer LOOK

## Sample Product Specifications

A product description is necessary to explain the product required. Review and update these descriptions each solicitation cycle:

Basic products may require a brief description that includes Standard of Identity (SOI), quality grade, and pack size.

Example: Cut Green Beans, grade "B" or better, low-sodium; 6/\#10 can
Example: Fruit Cocktail, grade "B" or better, light syrup or juice pack; 6/\#10 can
Single-ingredient foods, such as produce and graded meat, require a brief explanation.

Example: Ground beef, no more than 10\% fat, frozen 5 pound chub, like IMP \#136
Example: Apples, red delicious, U.S. Fancy, 125-138 count
Processed foods are more involved. You may include a "brand name" but need to include the wording "preapproved equivalent" to maintain free and open competition.

Example: XYZ Brand ${ }^{\circledR}$ 6" Mini, \#12345, 96/case; 2 oz eq grain (whole grain-rich $50 \%$ or higher and balance enriched grain product), 2 oz eq M/MA; $1 / 8 \mathrm{c}$ red/orange vegetable; Smart Snack eligible preferred; or preapproved equivalent

## Menu Chat

## (i) (8) (®)

Hi friends,


Do you have any tips for the annual solicitation process?

Dylan

We carefully review our previous year's specifications for product descriptions and item numbers each year. It helps us remove products we no longer menu, add updates in product codes, and add new items now available on the market. Additionally, we can identify whether we need to procure different items to help meet meal pattern requirements. It also develops good relationships with our suppliers; they are not bidding on products we do not intend to menu.

Lin


Keeping a spreadsheet of the dietary specifications of our menu items, such as grams of sodium, helps not only in menu planning, but in the solicitation process. We make sure that we list the sodium level for canned vegetables in our bid. USDA Foods are low sodium so we want a similar product when we need to purchase more to meet menu needs. Sometimes a frozen vegetable is more economical.

Sandra


Elena

Regarding ways to procure the best-tasting foods that meet dietary specifications, we attend school meal program trade shows to identify new products not currently available through our purchasing cooperative, and speak with our food distributors about adding these and other lower sodium products to be available for our next solicitation. Since our 5-district co-op formed 3 years ago, we have seen reduced prices, greater quality, and better solicitations than we could have created on our own.


Megan
Yes, a food-buying cooperative helped our smaller district tremendously with not only purchasing power, but also in getting more bids to choose from, sharing ideas from trade shows we attended, and streamlining our purchasing process.


## THANK YOU

Thanks for the ideas! I usually copy my document from the previous year; I do need to look for items we will not use the following year and delete them. I will also consider attending more trade shows and joining a co-op. Thanks for helping me improve my process.

Dylan

Your product specifications also need to support the meal pattern requirements and dietary specifications of the NSLP and SBP. The requirements were covered in Chapter 2. Here is a summary of the information to include on your product specifications. General information needed for all food products:

- Nutrition Facts label or nutrition information per serving including at a minimum the calories, sodium content in milligrams (mg), saturated fat in grams, and trans fat at 0 grams (<0.5 grams) per serving; any products labeled with trans fat from a natural source, such as meat or dairy, must have a product statement verifying source of trans fat.
- Verification that all food items are commodities or products of the United States or territories: no foreign source foods, unless the SFA provides an exception.
- Component contributions can be documented by a Child Nutrition (CN) Label for eligible processed products.
- Component contributions can also be documented by a Product Formulation Statement (PFS) for meats/meat alternates, grains, fruits, and vegetables.
- In addition, the Food Buying Guide (FBG) can serve as documentation for component contributions for the food items listed in the FBG.
- Complete ingredient statements for all products with common allergens listed.

Nutrition Facts Label

| Nutatiton Fects |  |
| :---: | :---: |
| 8 servings per container |  |
| Serving size $2 / 3$ cup | 2/3 cup (55g) |
| Amount per serving Calories | 230 |
|  | \% Daily Value* |
| Total Fat 8 g | 10\% |
| Saturated Fat 1 g | 5\% |
| Trans Fat 0g |  |
| Cholesterol Omg | 0\% |
| Sodium 160mg | 7\% |
| Total Carbohydrate 37g | 37g 13\% |
| Dietary Fiber 4g | 14\% |
| Total Sugars 12g |  |
| Includes 10g Added Sugars | ed Sugars 20\% |
| Protein 3g |  |
| Vitamin D 2mcg | 10\% |
| Calcium 260mg | 20\% |
| Iron 8mg | 45\% |
| Potassium 235mg | 6\% |

* The \% Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Highlighted portions are required to be included in Product Specifications.

# Ingredient Statement with Common Allergens 

## 100\% WHOLE WHEAT BREAD

INGREDIENTS: WATER, 100\% WHOLE WHEAT FLOUR, WHEAT GLUTEN, YEAST, BROWN SUGAR, CONTAINS 2\% OR LESS OF THE FOLLOWING: MOLASSES, SALT, DOUGH CONDITIONERS (MONO \& DIGLYCERIDES, SODIUM STEAROYL LACTYLATE, ETHOXYLATED MONO- DIGLYCERIDES, ASCORBIC ACID, CALCIUM PEROXIDE, AZODICARBONAMIDE), CALCIUM PROPIONATE (TO PREVENT SPOILAGE), GUAR GUM, YEAST NUTRIENTS (CALCIUM SULFATE, CALCIUM CARBONATE, AMMONIUM SULFATE), FUMARIC ACID, WHEAT STARCH, PALM OIL, SOY LECITHIN. CONTAINS: WHEAT, SOY.

## CN Label

## 1 Chicken Stir-Fry Bowl

## Ingredient Statement:

2 Chicken, brown rice, broccoli, red peppers, carrots, onions, water, olive oil, soy sauce, spices.

3 CN

## XXXXXX

Each 4.5 oz . Chicken Stir-Fry Bowl provides 1.5 oz . eq. meat, 1.0 oz . eq. grains,
CN $1 / 4$ cup dark green vegetable, $1 / 4$ cup red/orange vegetable, and $1 / 8$ cup other vegetable for Child Nutrition Meal Pattern Requirements. (Use of this logo and statement authorized by the Food and Nutrition Service, USDA 09/16).

CN
Net Wt.: 18 pounds

Chicken Wok Company 1234 Kluck Street • Poultry, PA 1235



1 Product Name
2. Ingredient Statement
(3) CN Logo
(4. Inspection Legend

## CN Label Requirements

It is important to know, the CN Logo (the box with CN on each side that surrounds the meal pattern contribution statement) is one of the four integral parts of a label, which includes the product name, ingredient statement, and inspection legend. All four parts must be on the product carton in order for the CN label to be valid.

Examples of specifications to request for each component group include:

## All Component Food Groups

- Commodity of the United States and/or processed in the United States and contain over $51 \%$ of its agricultural food component from the United States.


## Fluid Milk

- Pasteurized and fortified with vitamins A and D, and local standards met
- Unflavored or flavored fat-free and $1 \%$ (low-fat)
- Pre-portioned pack matches volume desired, 8 -fluid-ounce for meals; a la carte portions no larger than 8 -fluid-ounce for elementary schools and 12 -fluid-ounce for middle schools and high schools to meet Smart Snacks In School Nutrition Standards
- Documentation for milk substitutes showing nutrition equivalency.


## Fruits

- Packed in juice, water, or light syrup for canned fruit
- $100 \%$ fruit juice; a la carte portions no larger than 8 -fluid-ounce for elementary schools and 12 -fluid-ounce for middle schools and high schools to meet Smart Snacks In School Nutrition Standards.


## Vegetables

- Pre-portioned pack matches volume desired, such as $1 / 4$ cup baby carrots per package
- Low-sodium canned vegetables (to match USDA Foods for secondary product source)
- A PFS, as appropriate, which can be especially helpful for blended vegetable products to determine how each vegetable credits by subgroup
- $100 \%$ vegetable juice; a la carte portions no larger than 8 -fluid-ounce for elementary schools and 12 -fluid-ounce for middle schools and high schools to meet Smart Snacks In School Nutrition Standards.


## Grains

- At least 50 percent whole grain ingredients and enriched-grain ingredients make up the balance for whole grain-rich products
- Ingredient statement including documentation that product has less than 2 percent of noncreditable grain fractions, as needed
- A PFS, as appropriate, or a CN Label, if the grain item is combined with a meat/meat alternate for processed products
- A la carte items meet Smart Snack criteria for entrées and sides (calories, sodium, total fat, saturated fat, trans fat, and total sugar), including whole grain-rich criteria.


## Meats/Meat Alternates

- A CN Label or
- A PFS with Alternate Protein Product (APP) documentation, if needed, or
- A description as listed in the FBG that provides the Meat/Meat Alternate (M/MA) meal contribution. A la carte items meet Smart Snack In School Nutrition Standards for entrees and sides (calories, sodium, total fat, saturated fat, trans fat, and total sugar).
Check Appendix 5.A for PFS templates for grains, M/MA, and vegetables and fruits. In the Additional Resources section, you can find links to PFS for all components, as well as frequently asked questions about APP. Smart Snacks in School Nutrition Standards are found in Appendix 3.B. If your district or State has stricter criteria, be sure to follow those criteria. The examples of product labels in this chapter are highlighted to show location of required information.

You may also need additional product specifications to accommodate diet-related disabilities or menu modifications. Use your district policies for guidance.

## Food Safety Practices of Suppliers

Supplier food safety practices need to be considered before awarding a contract. During the solicitation process, visit prospective suppliers to observe their warehouse cleanliness and food safety program. All suppliers should have Hazard Analysis and Critical Control Point (HACCP) plans for their operations. Verify the cleanliness and temperatures of suppliers' warehouse refrigeration, freezers, delivery docks, and dry goods storage areas.

## Informal and Formal Procurement Methods

Your procurement must always achieve full and open competition. Federal, State, and SFA standards and policies will direct the type of procurement methods, informal and formal, required.

Informal methods are relatively simple, depending on the value of the purchase. Purchases below the new micro-purchase threshold (aggregate of $\$ 3,500$ or less) must be reasonably and equitably distributed among all qualified sources. These may include purchases during emergencies or for small quantities from vendors with a purchase order agreement in place. For purchases above \$3,500 and below the simplified acquisition threshold (\$150,000 for Federal, or most restrictive State or local threshold), simple procedures apply. These procedures include using written specifications, quantities, and required terms and conditions, as applicable, to obtain and document price quotes from multiple sources. You may obtain price quotes via email, catalogues, orally, in person, by phone, etc.

When the expected total cost of products exceeds the simplified acquisition threshold, formal procedures are required. Formal procedures require the use of one of two methods: solicitation of sealed bids using an invitation for bids (IFB), or solicitation of competitive proposals using a request for proposals (RFP). Remember, all purchases must be competitive. Be sure to specify if you want suppliers to submit sealed bids or proposals, and include the type of contract to be awarded: fixed-price or cost-reimbursable.

## An IFB:

- Is publicly solicited
- Requires complete product specifications and service descriptions
- Awards contract based on lowest price
- Results in a firm, fixed-price contract.

You may choose an IFB solicitation process if all products or services require similar specifications and price is the only difference. To consider factors in addition to price, you will use an RFP process.

## An RFP:

- Must be publicized
- Identifies all evaluation factors and their relative importance
- Defines terms and conditions of the contract
- Asks respondents to state how they will accomplish services requested
- Considers cost as the primary factor, evaluation criteria, and scoring when determining the contract award
- Results in a fixed-price or cost-reimbursable contract.

If you choose an IFB, only a firm, fixed-price contract may be awarded. A firm, fixed-price contract may require a fixed price for a period and may include a cost adjustment tied to a standard index, such as the Consumer Price Index (CPI). When choosing an RFP, you may have a firm, fixedprice contract with or without price adjustments tied to a standard index, or you may use a costreimbursable contract.

## Fixed-Price Contract:

- States price during the life of the contract, with or without a price adjustment tied to a standard index (up or down) at stated times/frequencies
- Increases risk to the supplier and may result in higher bid or proposal price
- Requires suppliers to submit sealed bids or competitive proposals.


## Cost-Reimbursable Contract:

- Stipulates that prices are at-cost plus a fixed fee
- Decreases the risk for suppliers to control the cost of goods
- Requires that allowable costs be net of all rebates, discounts, and other credits for payment from the nonprofit school food service account.

Because the price is set with fixed-price contracts, either party may end up absorbing costs when market prices change unless the solicitation and contract includes a cost adjustment tied to an index. School nutrition programs may use costreimbursable contracts. Market prices drive cost-
reimbursable contracts. State and local policies may vary regarding the use of this contract type.

Solicitations for contracts should include complete lists of food and supplies needed from a primary distributor. However, the solicitation and contract may include a provision for special purchases when needed. After identifying special needs, follow proper procurement processes. Informal procurement methods may apply and allow you to procure these items competitively from primary distributors or other sources. For example, you may need separate contracts for milk, bread, and produce as these items are perishable, and not all primary distributors provide these products.

Continued on page 188

## Procurement and Produce - Food Safety Considerations

Food safety is important during all phases in your school nutrition program. Produce requires special attention as you have learned in previous chapters. Part of the procurement process involves monitoring the food safety of local producers and produce suppliers.

The USDA's Verifying On-Farm Food Safety flyer (https://www.fns.usda.gov/ verifying-farm-food-safety) gives an overview of food safety programs followed by local farmers. Look for programs certified in Good Agricultural Practices (GAP) and Good Handling Practices (GHP). USDA has a school-specific resource to help you with Farm to School and local producers. If your schools have gardens for school meal use, share this information with those in charge.

The Institute of Child Nutrition has compiled an extensive list of online resources that address food safety aspects of product procurement (http://www.theicn.org), including a mock recall of produce in a school nutrition operation.

How produce is handled by both your vendors' delivery staff and your school staff is extremely important to maintaining food safety. Many schools now use packaged, precut produce; it must be refrigerated at $41^{\circ} \mathrm{F}$ or colder. Use the Food-Safe Schools Action Guide (https://www.fns.usda.gov/sites/default/files/Food-Safe-Schools-Action-Guide.pdf) Produce Safety Checklist to assess your procurement processes from sourcing to storing. If you find an area that needs attention, use these resources to update your food safety program.

## Procurement Options to Fit District and Regional Needs

Melinda Bonner, M.B.A., R.D., S.N.S., Child Nutrition Program director, Hoover City Schools, uses several procurement options to access the widest variety of products for the best prices. The district contracts through Alabama's State procurement system, but also independently bids for bread, milk, and produce annually, using the State's contract guidelines. These independent bids provide:

- Opportunity to include local dairy
- Flexibility to source local produce
- Seasonal options for produce.



## (220) FARM:2=SCHOOL

Proudly serving Red \& Green Jonagold Apples from Scottsboro \& Hazel Green Alabama!



School District:
Hoover City
Schools
Located:
Hoover, Alabama

## Enrollment:

13,900
Website:
www.hoovercity schools.net

Hoover City Schools are able to provide wide menu variety with a mix of procurement practices, including locally sourced produce.


## Menu Chat

 (i) (8) (®)
## Hi Everyone!



Lin

I have heard about buying cooperatives. Does anyone have experience with one?


Megan

We had difficulty accessing the variety of whole grain-rich options we wanted until we joined together with other districts to create a buying cooperative. Together we have sufficient volume which results in lower prices. Plus we can share menu ideas. I enjoy the support from the group. We made sure, however, that when joining the buying cooperative, we were still following proper procurement requirements.


Sandra

I agree, besides the financial benefits to our program, the idea sharing with other districts is a benefit to me. Because we use many of the same products, we can share ideas on new menu items or recipes. We have also participated in procurement training as a group.


Lin

## THANK YOU

Thanks so much! I am going to look into this option.

In general, when contracts cover a longer period of time (semester or school year), the result is lower costs due to higher quantities. Smaller school districts may not use sufficient volume in their food service to command lower prices. However, when smaller districts join together to create a purchasing cooperative (co-op), one solicitation includes all districts. The combined quantities, and potentially more vendors to choose from, often result in lower costs due to volume prices saving money for all co-op members. Some States maintain State-wide purchase agreements in which smaller districts may participate. Check with your State agency whether this is an option.

Additional information on IFBs and RFPs is available in ICN's Orientation to School Nutrition Management: Procurement and Inventory Management (http://www.theicn.org).

## Award the Contract

Your written procurement procedures guide how to evaluate a solicitation and award a contract. Once the contract is awarded, monitoring begins. It is essential to monitor the contract to verify the right products are ordered and received at the right price. Monitoring also includes receiving products at delivery, as well as monitoring food and supply costs by physical or perpetual inventory.
Now that you've learned about the procurement process, let's turn to inventory management, including ordering and receiving. An effective inventory management system will provide cost control throughout your school nutrition program.

## Purchasing Cooperative Generates Savings for Rural Schools

South central Kansas is a sparsely populated rural area. Because of small sizes and remoteness, area school districts had challenges finding economical suppliers. The Kansas School Food Purchasing Association started a purchasing cooperative (co-op) of school districts located in south central Kansas. The co-op has grown to 10 school districts from the original 5. Jeanne Munsell, food service director, Rose Hill School District, oversees the co-op. The co-op has experienced savings of $\$ 5.00$ - $\$ 20.00$ per case, due to the 10 school districts bidding together. Rose Hill serves 1,000 meals daily and collectively the co-op represents 15,000 meals daily. The co-op provides additional menu flexibility meeting:

- Student preferences
- Meal component needs
- Dietary specifications.


Jeanne Munsell, food service director of Rose Hill School District, stands beside foods purchased through the Kansas School Food Purchasing Association


School District:
Rose Hill Unified School District 394

## Located:

Rose Hill, Kansas
Enrollment:
1,700
Website:
www.usd394.com

## INVENTORY MANAGEMENT

The primary focus of an inventory management system is maintaining high-quality food while controlling costs. Food safety and food security are additional concerns for inventory management. To address food safety and security issues, you must be able to trace food from the source through consumption or disposal.

Key steps in inventory management are:

- Projecting your food needs
- Knowing where and how much food is on hand
- Practicing First In, First Out (FIFO) method of inventory management
- Controlling waste, theft, and loss
- Maintaining sufficient inventory for meal production without overstocking
- Being able to trace food within district storage facilities and back to its source
- Receiving and storing food safely.

Your staff conducts a physical inventory at the same time each inventory period (often at the end of each month). Perpetual inventory tracks on an on-going basis, often electronically. This ongoing tracking is based on products received and removed from inventory for use in meal preparation and service.

Completing a monthly physical inventory helps determine the cost of products used for the month. After a physical count of inventory, you can determine the financial value of inventory available during the month. To do this, add the ending inventory value from the prior month to the cost of goods (food products and supplies) purchased during the current month. The total is the value of inventory available during the month. Then subtract the value of the current end-of-month inventory from the total value. The difference is the cost of goods used for the month. Example:
January ending inventory
\$34,000.00
February purchases
$+\$ 44,000.00$
78,000.00
February ending inventory
-\$35,000.00
Cost of goods for February
\$43,000.00

Perpetual inventory provides the cost of goods on demand. With perpetual inventory, you still need to perform a physical inventory periodically to verify product counts. Your SFA's policies may require a specific inventory management tool. Monitoring inventory costs leads to a better understanding of food and supply expenses.

The ordering process requires that you determine food and supplies needed to produce the menu planned for each week. The forecasted quantities used during the solicitation process are helpful. Check average daily participation and production records for current trends. Review standardized recipes for as purchased (AP) and edible portion (EP) information to calculate the volume of each product needed. After reviewing current on-hand inventory levels, order only the products needed for the menu week.

Ordering while production is in process means you are practicing just in time (JIT) delivery. JIT delivery involves reviewing inventory on hand and estimating quantities needed prior to the next delivery. This approach helps prevent overstocking. Overstocking can lead to inventory loss and increased food costs.

Delivery schedules for products will be set by the terms and conditions in the solicitation and vendor contracts. This schedule allows your staff to plan receiving duties for a specific day and time. Depending on your usage and storage capacity, fresh products (dairy, produce, bread, etc.) may require deliveries more frequently than weekly. Be sure to follow the schedule listed in your solicitation and contracts. Adding an additional day not in your contract schedule, also called an off-day delivery, may increase costs.

## Effective Inventory Management Approaches to Maximize Dollars

Federal Way Public Schools have integrated an electronic barcode system for inventory and software generated ordering. Mary Asplund, R.D., director of Nutrition Services, reports these approaches have greatly reduced labor hours for receiving, ordering, and tracking products for the two semi truckloads received weekly and the USDA Foods semi truckloads each month. Menu writing efficiency increased and mistakes in the prior inventory program disappeared.

Barcoding inventory has increased organization of the warehouse, increased efficiency and accuracy of inventory, enabled auto-generated suggested orders, and streamlined quick updates subsequent to distributor product or USDA Foods changes. Having an exact picture of


Through an electronic barcode system and software-generated ordering, Federal Way Public Schools have improved inventory management. current inventory readily available by scan translates to accurate product identification and nutritional information on menu items. The improved ordering and receiving has also prevented outages at school kitchens.
More staff are able to place orders because of extremely detailed instructions that explain the entire ordering process. The department has been strengthened because it does not rely on a single individual to understand and place orders, or track inventory.
The amount of time spent ordering commercial products alone has decreased from 16 hours per week to 4. That is a reduction of 75 percent in labor hours from the district's previous nonautomated process.

## Product Traceability

Electronic inventory systems allow you to trace products easily from farm to table. Food manufacturers have adopted a barcode that is scanned during receiving. You have seen the Universal Product Code (UPC) on products in the grocery store. The Global Trade Item Number (GTIN) is to food service what the UPC is to retail groceries. Your procurement program should request GTIN technology during the solicitation process. Regardless of whether you have an electronic inventory system, include GTIN numbers in your inventory management. GTIN allows traceability in case of recalls or other problems with a product and allows verification of compliance with the requirement to buy domestic commodities and products to the maximum extent practicable.

Below are GTIN samples. The GTIN numbers are a list of numbers that provide information on the product.

These GTIN numbers appear as barcodes on all food boxes. ICN provides an excellent resource to lead you through development and implementation of an electronic system. You will find an online course, Inventory Management and Tracking, and a reference guide at the ICN Resource Center (http://www.theicn.org).

Product traceability is now a critical aspect of inventory management. It is another food-safe practice that supports school communities' commitment to a culture of food safety.

## Examples of Global Trade Item Numbers

GS1 ITF-14 Barcode Inside packages will have different item reference number.


GS1-128 Barcode
with application identifiers. This one shows a lot number of 10036 .

GS1 ITF-14 Barcode Inside packages will have the same item reference numbers.

## Food-Safe Receiving and Storing

Standard operating procedures (SOPs) provide safeguards for food and supplies during receiving and storage. SOPs for receiving provide strict guidelines for your vendor and team during the delivery. Storage SOPs assure proper and safe processes after receipt. If you use a central warehouse, you will need additional SOPs.

Vendors must:

- Maintain clean vehicles, staff, and equipment.
- Handle food properly.
- Maintain appropriate food temperatures.
- Accept damaged or otherwise rejected products back with credit.
- Reflect GTIN on invoices.

Your team must:

- Maintain clean receiving and storage areas.
- Check delivery vehicles for cleanliness and temperature control.
- Verify product quality, temperatures, and origin during receiving.
- Store toxic and poisonous materials separate from food supplies.
- Avoid bare hand contact with ready-to-eat foods.
- Verify that invoices and purchase orders reflect GTIN.
- Keep labels and any product Safety Data Sheets (SDS) you have received.

Record the delivery date on food packages at the time of delivery. Remove canned goods from cardboard boxes before storing, but be sure to note the delivery date on each can.

As stated above, always practice First In, First Out (FIFO) storage. FIFO means using old inventory before using new inventory.

If you have an offsite warehouse, be sure to control access to your storage facility both for food safety and loss, or theft prevention reasons. Your storage system SOPs should include inventory procedures for traceability in the event of a food recall.

Your receiving staff should monitor safe food handling practices during all deliveries. They should monitor:

- Delivery personnel and vehicle cleanliness
- Food temperatures.

Your staff will check and record temperatures during delivery to confirm cold food is cold ( $41^{\circ} \mathrm{F}$ or lower), frozen food is frozen ( $0^{\circ} \mathrm{F}$ or lower), no ice crystals are present in frozen products, no damaged products are received, and ensure chemicals are separated from food products in the delivery truck.

Storage areas must meet food safety guidelines. Store foods at appropriate temperatures to prevent spoilage or loss:

- Refrigeration, $41^{\circ} \mathrm{F}$ or lower
- Freezers, $0{ }^{\circ} \mathrm{F}$ or lower
- Dry goods, approximately 50-70 ${ }^{\circ} \mathrm{F}$.

Food should be stored 6 inches or more off the floor, 6 inches below the ceiling, and away from walls. Check with your health and safety authorities, because local requirements may differ. Chemicals must be stored separately from food and properly marked.

Follow proper refrigerator storage hierarchy (top to bottom shelf), based on the recommended cooking temperatures:

Practicing food-safe habits throughout the school nutrition program is necessary to safeguard the food supply during purchasing, receiving, storage, preparation, holding, and service. Be sure to follow any State or local requirements.

## Refutserate for safety



[^0]Institute of Child Nutrition. (2017). Refrigerate for safety. Retrieved from http://theicn.org/ResourceOverview.aspx?ID=74.

## Handling a Food Recall

The SOP for a food recall requires that your team follow specific steps to help prevent a foodborne illness when a food is recalled. Your team must:

- Electronically scan for the recalled GTIN in all areas or use an appropriate approach if scanners are not in place.
- Identify, separate, and store all food recalled from storage, open containers, preparation, and leftovers.
- Mark containers clearly "Do Not Use" and "Do Not Discard" as appropriate.
- Notify team members not to use the recalled product.
- Notify all appropriate local, State, and regional agencies.
- Notify distributors and brokers.
- Follow USDA directives for any recalls of USDA Foods.


## Administrative Review Check - Buy American and Storage

Each SFA is required to ensure that facilities for the handling, storage, and distribution of purchased and donated foods are properly safeguarded against theft, spoilage, and other loss. In addition, the SA must review a variety of foods by component category to assess if the food is produced or processed domestically, and if domestically processed, done so substantially using domestic agricultural commodities.

To determine compliance, the SA must observe the conditions in the onsite, and offsite if applicable, storage facilities of the reviewed schools/SFA. Onsite storage facilities may include freezers, refrigerators, dry goods storage rooms, and other areas. Offsite storage facilities would include SFA contracted or self-operated warehouses. When examining the applicable storage facilities, the SA must be
 mindful of the following rules regarding proper storage practices. These statements are not exhaustive, and the SA should use its own discretion regarding other potentially harmful observations related to proper food storage:

- Temperature is appropriate for the applicable equipment (e.g., freezer, refrigerator, milk cooler).
- Food is stored 6 inches from the ceiling and 6 inches off the floor.
- The food storage facility is clean and neat.
- Canned goods are free from bulges, leaks, and dents.
- Chemicals are clearly labeled and stored away from food and food-related supplies.
- Open bags of food are stored in containers with tight-fitting lids.
- The FIFO (First In, First Out) method of inventory management is used.
- No obvious evidence of pests is present.

Excerpted from U.S. Department of Agriculture, Food and Nutrition Service, Child Nutrition Program, Administrative Review Manual.


Your food recall and food defense SOPs provide instructions on monitoring, corrective action, verification, and recordkeeping to safeguard food. SOPs assist in supporting a strong culture of food safety. You can tailor the sample SOPs available from ICN to your operation. This resource is available at the ICN Resource Center (http://www.theicn.org). Also, you can sign up for FDA food recall notices at https:// www.fda.gov/Safety/Recalls/ and notices about significant holds or recalls of commodity foods distributed through FNS programs at https://www.envoyprofiles.com/USDA-ALERTS/.

## CHOOSING AND USING EQUIPMENT FOR HEALTHY SCHOOL MEALS

You do not purchase equipment as often as you purchase foods and supplies. However, solicitation processes described for foods and supplies will be followed for equipment, depending on the estimated cost of the item. State contracts may also exist for equipment procurement. Among the factors in considering new equipment is how equipment supports healthy preparation methods. You will find resources on purchasing and selecting equipment at ICN (http://www.theicn.org).

Menu Chat

## Hi fellow menu planners!



Tyler

We just received a grant for new kitchen equipment through the USDA National School Lunch Program Equipment Assistance Grants and I want to make sure we consider everything before we purchase. Help!


We were fortunate to receive grant funding for new kitchen equipment. We used the procurement information from Institute of Child Nutrition to find the right choices for our new preparation methods. It certainly made the process easier.

Elena


THANKS!
I will contact the Institute today.

Here's a list of some of the equipment that can help you prepare healthy meals. You may find other equipment to be helpful as well.

Tilting skillets: These are convenient and fast for braising, pan-frying, sautéing, steaming, and boiling.

Steam-jacketed kettles: Faster and simpler to control than range-top cookers, these are good for soups, stocks, sauces, stews, vegetables, and more.

Pressure steamers or convection steamers: Steamers are great for batch-cooking in high-volume school food service. Rice, pastas, and vegetables can be cooked in steamers.

Convection or conventional ovens: These are used for baking, roasting, and broiling, all of which are low-fat cooking techniques. When fats in meat are heated to high temperatures, they change from solids to liquids, so the fat drains away.

Combination (combi) ovens: These will reheat prepared food without drying it out. They will also roast meats with little shrinkage. They can cook with steam, convection, or both.

Microwave ovens: When foods are prepared in a microwave oven, they retain more nutrients than foods that are boiled, baked, or even steamed. This is especially helpful in batchcooking vegetables. (Microwave ovens are becoming more popular and affordable in school nutrition programs.)


## CONCLUSION

Procurement and inventory management support school nutrition program goals to provide nutritious, great-tasting, and safe food to all customers in a competitive, cost-efficient manner. Wise decisions of what to buy within your district's budget determine the degree of variety and quality your menus will provide. The information in this chapter is an overview of procurement. Use the procurement resources from USDA and ICN to fully develop your knowledge, skills, and abilities in this critical program area.

These are key take-away concepts from this chapter:

- Use your menus to gather product type, quality, and quantity information to develop solicitation documents that support your school nutrition programs' menu, staff, and financial requirements.
- Use clear and concise product specifications to meet menu needs.
- Obtain required documentation from suppliers to support your menus' meal components, dietary specifications, and domestic origin.
- Include USDA Foods, USDA DoD Fresh, and local producers and manufacturers in your mix of suppliers.
- Develop SOPs for ordering, receiving, and storing food and supplies for an efficient, safe, and useful inventory management system.
- Procure and use equipment that supports your program's nutrition goals.
- Use the extensive USDA and ICN procurement resources and training materials.

Procurement and inventory management are important to the continued success of your school nutrition program. A fiscally sound child nutrition program provides the best possible meal experience for students and the school community. In Chapter 6, we will cover ways to make school meals the best possible experience for students with disabilities that restrict their diet and other medical or special dietary needs.

## Review and answer each of these questions. You will find the answer key at the end of the Menu Planner.

1. When it comes to procurement, what is forecasting and why is it important?
2. Including a marketing guide on a recipe accomplishes what?
3. What are two ways schools can save money when procuring foods for menu items?
4. Product specifications in solicitation documents need to include what information to support dietary specifications of school meals?
5. What are three key steps in inventory management?

If you got the answers right, great job! You are ready for the next chapter. If you missed any, review that section of the chapter before moving on to the next chapter.

## LINKS TO ADDITIONAL RESOURCES

Institute of Child Nutrition, Best Practices for Handling Fresh Produce in Schools, University, MS (http://www.theicn.org).

Institute of Child Nutrition, Equipment Purchasing and Facility Design for School Nutrition Programs, University, MS (http://www.theicn.org).

Institute of Child Nutrition, Food Production and Operation Management, Instructor's Manual, University, MS (http://www.theicn.org).

Institute of Child Nutrition, HACCP-Based Standard Operating Procedures, University, MS, 2005 (http://www.theicn.org).

Institute of Child Nutrition, Orientation to School Nutrition Management: Procurement and Inventory Management, University, MS (http://www.theicn.org).
Institute of Child Nutrition, Procurement in the 21st Century, University, MS (http://www.theicn.org).

Institute of Child Nutrition, Produce Safety University - Additional Resources, University, MS (http://www.theicn.org).
U.S. Department of Agriculture, Commodity Alert System (https://www.envoyprofiles.com/USDAALERTS/).
U.S. Department of Agriculture, Food and Nutrition Service, U.S. Department of Defense Fresh Fruit and Vegetable Program (https://www.fns.usda. gov/fdd/dod-fresh-fruit-and-vegetable-program).
U.S. Department of Agriculture, Food and Nutrition Service, Facilitator's Guide: Procuring Local Foods for Child Nutrition Programs, Alexandria, VA (http://www.theicn.org).
U.S. Department of Agriculture, Food and Nutrition Service, Farm to School (https://www.fns.usda. gov/farmtoschool/farm-school).
U.S. Department of Agriculture, Food and Nutrition Service, Farm to School - Geographic Preference (https://www.fns.usda.gov/sites/default/files/ F2S_geo_pref.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program (https://www.fns.usda.gov/sites/ default/files/cn/SP38-2017os.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Farm to School Frequently Asked Questions - Food Safety (https://www.fns.usda. gov/farmtoschool/faqs-food-safety).
U.S. Department of Agriculture, Food and Nutrition Service, Farm to School Verifying On-Farm Food safety (https://www.fns.usda.gov/sites/default/ files/foodsafety_onfarm.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Food Distribution Programs (https://www. fns.usda.gov/fdd/food-distribution-programs).
U.S. Department of Agriculture, Food and Nutrition Service, Food-Safe Schools Action Guide, Alexandria, VA (https://www.fns.usda.gov/sites/ default/files/Food-Safe-Schools-Action-Guide.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Guidance for Accepting Processed Product Documentation for Meal Pattern Requirements (https://www.fns.usda.gov/sites/ default/files/cn/TA07-2010v3os.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Policy Memo, Administrative Review Process Regarding the Child Nutrition (CN) Label, Watermarked CN Label and Manufacturer's Product Formulation Statement SP27-2015, March 2015 (https://www.fns.usda.gov/school-meals/ policy).
U.S. Department of Agriculture, Food and Nutrition Service, Procuring Local Foods for Child Nutrition Program (https://www.fns.usda.gov/farmtoschool/ procuring-local-foods).
U.S. Department of Agriculture, Food and Nutrition Service, Product Formulation Statement Documenting Fruits and Vegetables (https://www.fns.usda.gov/cnlabeling/foodmanufacturersindustry).
U.S. Department of Agriculture, Food and Nutrition Service, Product Formulation Statement for Grains in School Meals (https://www.fns.usda.gov/ cnlabeling/food-manufacturersindustry).
U.S. Department of Agriculture, Food and Nutrition Service, Product Formulation Statement for Meat/ Meat Alternate Products (https://www.fns.usda. gov/cnlabeling/food-manufacturersindustry).
U.S. Department of Agriculture, Food and Nutrition Service, Questions and Answers on Alternate Protein Products (APP) (https://www.fns.usda.gov/ sites/default/files/APPindustryfaqs.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Reviewer's Checklist for Evaluating Manufacturer Product Formulation Statements
(Product Analysis) for Meat/Meat Alternate (M/MA) Products (https://www.fns.usda.gov/sites/default/ files/reviewer_checklist.pdf).
U.S. Department of Agriculture, Food and Nutrition Service, Child Nutrition Programs, Administrative Review Manual (please contact your State agency for the most current version).
U.S. Department of Agriculture, Food and Nutrition Service, USDA Farm to School Procurement Webinar (https://www.youtube.com/ watch?v=0GYvblfRbvs\&feature=youtu.be).
U.S. Department of Agriculture, Food and Nutrition Service, USDA Foods further Processing Fact Sheet (https://www.fns.usda.gov/fdd/usda-foods-processing-home).
U.S. Food and Drug Administration, Recalls, Market Withdrawals and Safety Alerts (https://www.fda. gov/Safety/Recalls/).

## APPENDIX ITEMS

Appendix 5.A USDA Product Formulation
Statement for Documenting Grains, Meats/Meat Alternates, and Vegetables and Fruits in School Meals


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