

Food Service Facts

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16. Menu Planning Basics

Background

Careful menu planning is an important key to a successful Child Nutrition Program. It is the foundation for serving school meals that meet nutrition targets, appeal to students and fulfill all requirements for reimbursement. The menu also influences almost every aspect of the food service operation from which foods are purchased to the amount of labor required to prepare the food.

Heart disease, cancer, diabetes, stroke and osteoporosis are the leading causes of death and disability among Americans. Obesity is increasingly prevalent among American children. Most experts agree that a healthful diet combined with exercise can help to prevent chronic diseases. Unfortunately, many Americans, including children, are not making healthful food choices. The American diet is often low in whole grains, fruits and vegetables, and too high in fats and sweets. This can result in consumption of excess calories and too much fat, cholesterol and sodium.

School nutrition programs play an important role in the health of school children. The programs not only improve the nutritional well-being of the student but also model the foods that should be eaten for a balanced diet.

The Dietary Guidelines for Americans (DGA) are designed to help us choose diets that will meet nutrient requirements, promote health, support active lives, and reduce chronic disease risks. Federal law requires school lunch and breakfast programs to comply with the current recommendations of the DGA. The requirements of this law are referred to as the School Meals Initiative (SMI) for Healthy Children. The current Dietary Guidelines are listed on the next page.

Nutrition and Your Health – Dietary Guidelines for Americans

The new *2010 Dietary Guidelines for Americans* focus on balancing calories with physical activity, and encourage Americans to consume more healthy foods like vegetables, fruits, whole grains, fat-free and low-fat dairy products, and seafood, and to consume less sodium, saturated and *trans* fats, added sugars, and refined grains.

During children’s developmental years, there are opportunities to promote and influence healthy food choices through school meals. For many children, school meals make a significant contribution to their total day’s nutrient intake. School meals offer a variety of foods to reflect the cultural diversity and changing needs of students. Menu planners have a tremendous opportunity to improve the health of American children by serving healthier meals.

Planning Healthy School Meals

The concept of a healthy school meal encompasses more than just meeting the DGA. It also means meeting the following additional goals:

1. Apply culinary principles of taste and presentation.
2. Focus on the customers served, incorporating regional, cultural, ethnic and other preferences.
3. Provide safe meals for children.
4. Make meals accessible to all children.
5. Reinforce classroom nutrition education by providing a “learning laboratory” in the cafeteria for healthy food choices.
6. Assist in increasing appreciation for food origins, cultural food history, variety of foods and the relationship of food to the environment and agriculture.
7. Support and teach the principles of the “social meal”.
8. Provide education in the preparation and service of healthy, economical meals.
9. Create a positive, supportive environment with adequate time for meal service.
10. Link with a school nutrition policy promoting healthy food choices throughout the school.

SMI Nutrition Goals

SMI underscores our responsibility to provide healthy school meals. This is accomplished through meeting the following SMI nutrition goals.

- ◆ Provide Recommended Dietary Allowances (RDA):
 - ◆ 1/4 RDA for age/grade group for breakfast
 - ◆ 1/3 RDA for age/grade group for lunch
- ◆ Meet calorie goals appropriate for each age/grade group.
- ◆ Comply with the Dietary Guidelines for Americans.

Menu Planning Systems

To meet the SMI Nutrition Goals, the United States Department of Agriculture (USDA) offers a variety of menu planning systems:

- ◆ Enhanced Food Based Menus, also known as Food Based Menus
- ◆ Traditional Food Based Menus
- ◆ Nutrient Standard Menu Planning (NSMP)
- ◆ Assisted Nutrient Standard Menu Planning
- ◆ Alternate Menu Planning Systems.

Each sponsor selects the menu planning system that will be used in each school. Each menu planning system has unique requirements and is described briefly on the following page.

Food Based Menu Planning

The Food Based Menu Planning system is based on a meal pattern containing specific food group components. Food group components must be served in specific amounts to meet SMI nutrition goals. These components are meat/meat alternate, vegetables and/or fruits, grains/breads and milk.

Schools must offer five (5) food items from four (4) food components in specified quantities. Minimum portion sizes are established for age and grade groups. To assure that the SMI Nutrition Goals are met, KSDE periodically completes a computerized nutrient analysis of the menus.

Refer to Chapter 17 for more information about Food Based Menu Planning.

Traditional Food Based Menu Planning

The Traditional Food Based Menu Planning system is a method that was used prior to the introduction of the School Meals Initiative for Health Children in 1996. The Traditional Food Based Menu system uses meal patterns that require less vegetables/fruits and grain/breads than the Food Based system. Before a sponsor may use the Traditional Food Based Menu planning system, a nutritional analysis of the menu cycle must be completed and submitted annually to KSDE for approval. KSDE will review the nutrient analysis to assure that the menus meet the SMI Nutrition Goals.

For additional information concerning the Traditional Food Based Menu Planning system requirements, contact KSDE.

Nutrient Standard Menu Planning (NSMP)

Nutrient Standard Menu Planning (NSMP) uses a nutrient-based approach. Planning is done with the help of USDA-approved computer software that is specifically designed to document how menus meet the SMI Nutrition Goals. NSMP has no required food components. There are no specific foods required, except fluid milk. A nutrient analysis is done before the menu is served providing immediate feedback on compliance with the SMI Nutrition Goals.

Assisted Nutrient Standard Menu Planning

Assisted Nutrient Standard Menu Planning is used when NSMP is implemented with the help of an outside consultant or other agency using the USDA-approved computer software to plan menus and do a nutrient analysis. The menus are planned to satisfy local preferences. A sponsor may choose this system when they want to implement NSMP but do not have the resources to complete the nutrient analysis.

Alternate Menu Planning Systems

USDA allows sponsors to develop other alternative menu planning systems, also known as “Any Reasonable Approach”, as long as the systems meet the SMI Nutrition Goals. It is the sponsor's responsibility to develop and provide proof to KSDE that the alternate system meets the required nutrition goals.

For more information about NSMP, Assisted NSMP and Alternate Menu Planning Systems, refer to Chapter 18, Nutrient Standard Menu Planning.

Basic Menu Planning Principles

Across Kansas, schools are offering meals in a variety of interesting formats ranging from simple boxed lunches to extensive buffets. Just as school lunches and breakfasts come in many formats, so do the foods that go into them. Advances in food technology make it possible to select foods in many forms—frozen or chilled, partially or totally prepared, pre-portioned or in bulk, pre-prepared or as single ingredients to assemble recipes.

All this makes menu planning exciting as well as challenging. It takes skill and practice to design a great menu. It also takes wide knowledge of foods including their nutritive value, cost and the many different methods for preparing and serving them. The menu planner needs knowledge of the students being served including their nutritional needs, food likes, dislikes and habits as influenced by their race, culture and customs. A good menu planner needs to be aware of the arrangement of the kitchen and serving areas, the equipment, the abilities of the employees, the style of service and the amount of money provided in the budget. Outside factors such as the season of the year, the climate, and the availability of foods will influence the menus planned. It is important to understand how to combine food items so that customers are eager to come to the cafeteria and eat.

The basic menu planning principles listed on the following pages are a good starting point. These principles should be kept in mind as menus are planned to meet the customers' preferences and nutritional needs.

Strive for Balance

Menus should be planned so that they are nourishing, appealing to students and taste good. Combine foods in ways that help meet the nutrient standards, balance flavors in appealing ways, and offer a balance of color, flavor, texture, shapes and size. Balance higher fat foods with ones that have less fat.

Balance in “weight” and “flavor” can also be achieved as the menu items are added. If the first menu item planned is heavy, plan a light vegetable or a dessert such as fresh fruit. If

the entrée or main course is light, add a higher calorie food such as a healthy baked dessert, a cooked vegetable (such as potatoes or corn), or a hearty bread at breakfast.

To balance flavor, use a combination of mild and strong flavored foods. Too many foods with strong flavors in the same meal may result in students not accepting the meal.

Care must also be given to balance workloads of the food service staff and usage of kitchen equipment.

Offer Variety in Shapes and Sizes

Using a variety of shapes and sizes can help make a menu more attractive and interesting. Consider a meal with chicken nuggets, potato rounds, carrot coins, mini-muffins and pear chunks. Those foods have a similar shape. Presenting foods in several different shapes appeals to children. For example, a menu that offers good variety of shape and size might include: barbequed chicken leg, potato rounds, carrot sticks, hot roll, watermelon wedge and milk.

Offer Variety in Flavor

Menus should include a variety of foods. Specific foods should not be offered too frequently. No one form of meat should be offered more than three times per week. Food items to watch in particular include ground beef, chicken and cheese. Vegetables should not be repeated more than once a week unless choices are offered.

Offer Choices

When choices are offered within the menu, students are more likely to participate and eat what they select. When healthy foods are offered, students will select healthy foods. Offering a choice of fresh or canned fruit allows students the opportunity to choose a fruit that he/she would more likely eat. In elementary and secondary schools, offering a simple entrée, vegetable or fruit choice can be achieved by utilizing a choice bar. Schools that offer choices generally have higher participation, greater student satisfaction and improved student consumption of the foods offered. With careful planning, most schools can successfully offer students choices with some or all the menus.

Make Menus Colorful

Color on the tray gives eye appeal. Even a touch of color in a garnish helps. Foods come in a rainbow of colors. Use red, yellow, green, brown, white, purple, orange and blue foods to provide contrast in color. Use at least two colorful foods in each menu. Vegetables and fruits are a natural way to add eye appeal. Add a bright colored food to a menu with little or no color. For example, add a slice of tomato to a salad or put a fresh grape or strawberry on a dish of diced pears or peaches. A dash of cinnamon or paprika can be used to achieve the same effect.

Most foods provide pleasing color combinations, with the exception of some reds. The orange-reds of fresh tomatoes don't combine well with the purple-reds of beets or plums. The absence of color in a menu is often more of a problem. Baked chicken, boiled potatoes, cauliflower, sliced pears and white cake would make a dull menu because of the lack of color contrast.

Add Contrast

As menu entrées are planned and the rest of the menu is built, there is an opportunity to add texture, shape and color. To add texture use crisp, firm foods. Add shape by including a food that is long next to a food that is round. Add color by using bright fruits and vegetables or a colorful dessert item. Vary temperature by offering fresh fruits or vegetables frequently.

Marketing the Menu

Well-planned menus keep student participation high. Students and their parents can be informed through printed menus sent home with students, menus published in the local newspaper or school newsletter or on the school's Internet web site. The printed menu can be used to market the program, let parents and students know that school meals are nutritional bargains and communicate the advantages of eating at school. The printed menu is often posted at home, in school classrooms and in the school office.

KSDE recommends posting menu choices for the day near the serving line. An attractive menu board is a good way to let students know what is being offered and what choices are available. For additional information about marketing the school meal program, refer to Chapter 24, Parent and Student Involvement.

Menu Planning Evaluation

The menu planner must develop menus that meet the needs and desires of the customer. To obtain feedback about the menus, menu planners can:

- ◆ Analyze food waste.
- ◆ Track participation rates for meals.
- ◆ Establish a menu advisory group including students, parents and school staff.
- ◆ Hold taste testing for new menu items.
- ◆ Conduct food surveys.
- ◆ Visit informally with students about food likes and menu suggestions.
- ◆ Meet with food service staff to obtain their comments about menus.

Making menu changes to better meet the students' food preferences should be the goal. Be flexible. For more information on how to involve students in the menu planning process, refer to Chapter 24, Parent & Student Involvement. In addition, it is important to evaluate menus objectively. The Menu Evaluation Checklist (Form 16-A) can be used as a tool for better menu planning.

Meeting the School Meals Initiative Nutrition Goals

On the following two pages are general guidelines KSDE has found helpful in meeting the SMI nutrition goals that are outlined on page 16-3.

1. Offer good sources of **Vitamin A** rich foods 2-3 times per week. Good food sources of Vitamin A include:
 - ◆ Carrots
 - ◆ Tomatoes and tomato products
 - ◆ Broccoli
 - ◆ Pumpkin
 - ◆ Cantaloupe
 - ◆ Fortified cereals
 - ◆ Mixed vegetables
 - ◆ Fresh peaches
2. Offer good sources of **Vitamin C** rich foods 3-4 times per week. Good food sources of Vitamin C include:
 - ◆ Oranges
 - ◆ Orange juice
 - ◆ Strawberries
 - ◆ Cantaloupe
 - ◆ Pineapple
 - ◆ Kiwi
 - ◆ Watermelon
 - ◆ Tomatoes and tomato products
 - ◆ Potatoes
 - ◆ Cabbage
 - ◆ Fortified cereals
 - ◆ Cauliflower
3. Offer good sources of **Iron** frequently. Good food sources of iron include:
 - ◆ Beef
 - ◆ Peanut butter
 - ◆ Dry beans
 - ◆ Fresh spinach in salads
 - ◆ Green beans
 - ◆ Broccoli
 - ◆ Fortified cereals
 - ◆ Enriched and whole grain breads
4. Assure students get adequate **Calcium** by:
 - ◆ Encouraging them to drink milk with their meals
 - ◆ Limiting the sale of other beverages during the meal period
 - ◆ Offering foods containing calcium such as cheese, yogurt, school made bread with dry milk added, fresh spinach in salads, tuna, pudding, gravy and fortified cereals with added milk
5. Assure students' **Fiber** levels are adequate in meals. To increase fiber:
 - ◆ Offer fresh fruits such as apples, oranges, bananas, grapes, watermelon or cantaloupe
 - ◆ Offer fresh vegetables such as carrots, celery, broccoli, cauliflower, coleslaw, tossed green salads, tomato slices
 - ◆ Add whole wheat or other whole grains to school made breads
 - ◆ Use cooked dry beans in chili, tacos, burritos
 - ◆ Offer higher fiber grains and cereals
6. Limit the total **Sodium** in menus. To decrease sodium in menus:
 - ◆ Add less salt or no salt when other ingredients contain salt
 - ◆ Monitor sodium on pre-prepared meats and purchase those that contain less
 - ◆ Limit processed meats such as hot dogs, luncheon meats and ham
 - ◆ Limit cheese on menus to once or twice per week
 - ◆ Limit salad dressings, catsup, pickle relish and other high sodium condiments
 - ◆ Limit the portion size and the frequency that pickles are served
 - ◆ Compare sodium contents of pre-prepared food items and choose those that contain less
 - ◆ Prepare more foods from scratch so that salt added can be controlled

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7. Control the total **Fat** and **Saturated Fat** in the menus. Guidelines to reduce fat and saturated fat include:
- ◆ Entrées should generally contain less than 16 grams of fat. Lower-fat entrées (10-12 grams per serving) should be served at least two to three times a week. Higher-fat entrées (more than 16 grams per serving) should be served no more than once a week. If students have a choice of entrée, entrée choices should be similar in fat content.
 - ◆ High-fat desserts that contain more than six (6) grams of fat per serving should be limited to two (2) servings per week. Portion sizes of high-fat desserts should be limited to 3/4 to 1-ounce cookies, 1/3-1/2 cup of ice cream or pudding, 8x10 cut cakes or brownies. Adding additional low-fat desserts and/or low-fat versions of high-fat desserts may lower the percent fat in the meal while assuring adequate calories.
 - ◆ Omitting regular frosting and serving cakes plain can reduce fat. Cakes can be topped with gelatin, whipped topping, glaze, powdered sugar or fruit.
 - ◆ Lower-fat versions of food items can be substituted for high-fat favorites such as chicken fried steak, sausage, hot dogs or luncheon meats, chips, deep-fried foods, cookies and margarine. Read labels to identify the lower fat items. Limit regular chips to 1/2-ounce up to 1-ounce portions, served not more than once a week.
 - ◆ Planned seconds should NOT be available for high-fat food items such as entrées and desserts.
 - ◆ The type of foods served and the amounts served should be well controlled. Menus should be served as planned and recipes should be standardized and followed. Menu items should be portioned accurately. Amounts of food served should be recorded and used in future menu planning.
 - ◆ Menus should not contain excessive calories. Aim for no more than 120% of the calorie requirement for each meal.
 - ◆ Chocolate fat-free milk should be offered as a beverage. For those students selecting unflavored milk, encourage them to select 1% fat milk.
 - ◆ Limit regular cheese as a condiment or recipe ingredient. Limit cheese to 1/2 - 1 oz. per person no more than two or three times per week.
 - ◆ Limit (or do not serve) the following foods to 1 tablespoon per student for a maximum of 3 servings per week: high-fat salad dressings (8-11 grams of fat per tablespoon), sunflower seeds and regular margarine. Portions can be limited by using portion-controlled packets, by pre-portioning servings, by reducing the amount of dressing per “squirt” from dispensers, and/or by using smaller ladles or spoons for serving. High-fat dressings generally include mayonnaise and ranch-type or blue-cheese type salad dressings. Offer jelly or honey for rolls in place of margarine.