PART III

Planning the Menu and Special Events

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CHAPTER 16

Menu Planning

Food eaten outside the home has become an integral part of the American lifestyle. Patrons expect to have food choices that are creative, exciting, and nutritious. Menu writers are challenged to plan innovative menus that support the goals of the organization and that cater to customer preferences.

A well-planned menu is the cornerstone of a successful foodservice and the focal point from which many activities start. An understanding of menu types, factors affecting menu planning, and planning procedures is important before menu writing can begin.

TYPES OF MENUS

The menu is an outline of food items to be included in each meal or, in a broader sense, a total list of food items offered by a foodservice. Types of menus used in foodservices may be classified as static or set, cycle, or single use. Menus may be further categorized according to the degree of choice as selective or nonselective, and by the method of pricing.

Static or *set menus* include the same menu items every day, but with a variety of choices, the exact number depending on the type of foodservice. Most commercial foodservices use this type of menu, and an increasing number of hospitals have adopted the static or restaurant type menu.

Single-use menus are planned for a specific day or event and are not usually repeated in exactly the same form. This type of menu is often used for holidays, special functions, or catering events.

A *cycle menu* is a carefully planned series of menus that offer different items from day to day for one week, two weeks, or other time period, after which the menus are repeated. The length of the cycle depends on the type of foodservice. A short cycle is appropriate for foodservices having a frequent clientele turnover, such as hospitals. If a short cycle is used for patient meals, a longer cycle is necessary for the employees' and visitors' foodservice. In extended care facilities the cycle usually is four to six weeks. Using a cycle with numbers of days not divisible by seven ensures that the same menu is not served on the same day of the week. Restaurants may prefer to use monthly or seasonal cycles or may use the same menu throughout the year. Many foodservices recognize seasonal changes by having spring, summer, autumn, and winter cycles.

Cycle menus save time for the planner and are effective tools for food and labor cost control, forecasting, and purchasing. Repetition of the same or nearly the same menu helps standardize preparation procedures and gives the employees an opportunity to become more efficient through repeated use of familiar recipes. Menus can become monotonous and repetitious if not carefully planned, however. Regardless of the cycle length, menus should be constantly reviewed and updated. Each day's menus should be analyzed shortly after service, and any production problems or adverse reactions by the clientele should be noted and

TABLE 16.1 Types of menu patterns

Nonselective menu pattern		
Breakfast	***Lunch***	***Dinner***
Fruit Cereal Protein item Bread, butter or margarine Beverage	Soup (optional) Entree Salad and/or vegetable Bread, butter or margarine Fruit or other light dessert Beverage	Soup (optional) Entree Two vegetables (one may be potato or starch food) Salad Bread, butter or margarine Dessert Beverage

Selective menu pattern[a]	
Breakfast	***Lunch and dinner***
Fruits: 2 or more juices, fresh fruit in season Cereals: cooked, choice of cold cereals Entrees: eggs, bacon, ham, or sausage, potatoes, breakfast casserole Breads: toast, white and whole grain; one or more hot breads Beverages: coffee, decaffeinated coffee, tea, milk (whole and lowfat)	Soups: 1 cream, 1 broth Entrees: at least 2 meats, 1 meatless, 1 meat extender, poultry or fish, and a cold plate Sandwiches: 1 hot, 1 or more cold Rice or pasta: in addition to or as alternative to potatoes Vegetables: 3 or 4, including potatoes in some form Salads: 4 to 10, including entree, tossed green, vegetable, gelatin, fruit, cottage cheese, relishes Breads: 2 to 3, including white and whole grain, 1 hot bread Desserts: 4 to 8, including 2-crust pie, soft pie, cake and or cookies, pudding, yogurt, ice cream or sherbet, fruit Beverages: coffee, decaffeinated coffee, tea, milk (whole and low fat), fruit juice or fruit flavored drinks

[a]Menu variety may be increased or decreased to fit the demands of the foodservice.

corrected before the next cycle. The menu planner must allow flexibility for changes resulting from holidays, special occasions, leftover food, and inability to obtain specific food items for production.

Selective menus offer two or more items within each category. Foods from which the individual patron may choose a well-balanced meal should be included. Most commercial and noncommercial foodservices use this type of menu extensively. Table 16.1 gives a suggested pattern for a selective menu, using the same format for lunch and dinner.

Nonselective menus have a single item in each menu category. To ensure nutritional adequacy, foods from each of the basic food groups should be included. Table 16.1 gives a general pattern for a nonselective menu. A nonselective menu may be modified to include a limited selection; for example, two entrees may be offered or a choice of two vegetables may be given. A soup and salad may be offered as an alternative to an entree and vegetable for those who wish a lighter meal.

Menus may also be classified by method of pricing. *À la carte menus* price food items separately; the customer chooses menu items individually. *Table d'hôte menus* include the complete meal at a fixed price, and *du jour menus* are planned, written, and priced daily.

FACTORS AFFECTING MENU PLANNING

The production and service of food begins with the menu, which determines the foods to be purchased, the personnel needed and their work schedules, and the equipment necessary for production and service of the food. The menu is closely tied to financial management and marketing and, in a new foodservice, influences the design of the kitchen and selection of equipment. The menu, however, must be one that meets clientele expectations and that can be produced within facility constraints and demands. A number of factors must be considered when planning a menu.

Clientele

The menu planner must consider the makeup of the group to be served—age, gender, nutritional needs, food habits, and individual preferences. This is especially important if the foodservice offers a limited choice of food, as in some extended care facilities, child care centers, and retirement complexes. Menus for this type of foodservice are planned to meet the needs of

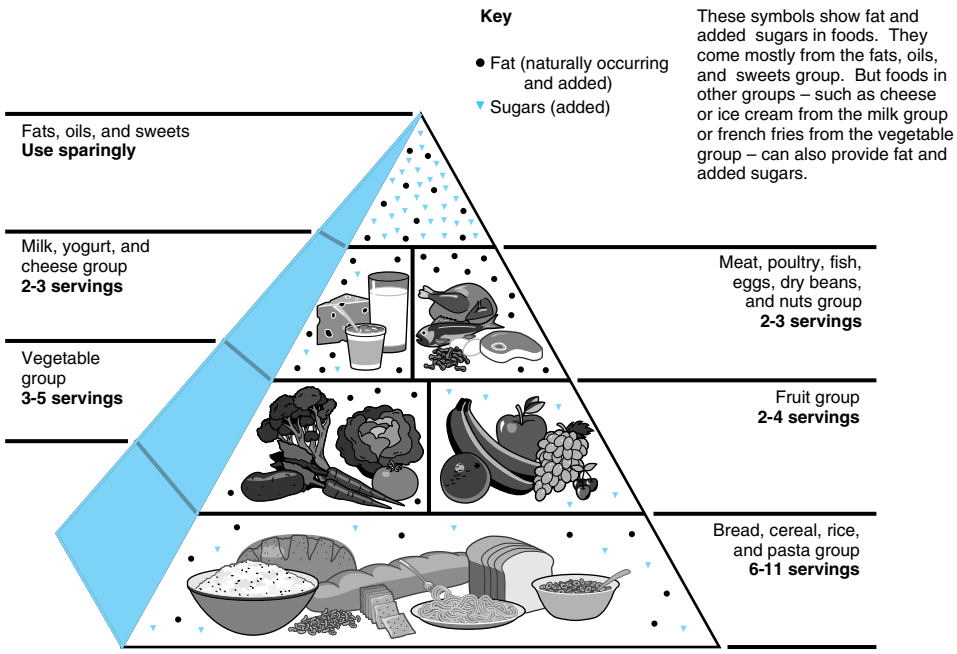

FIGURE 16.1 Food Pyramid. U.S. Department of Agriculture and U.S. Department of Health and Human Services.

Looking at the Pieces of the Pyramid

The Food Guide Pyramid emphasizes foods from the five major food groups shown in the three lower sections of the Pyramid. Each of these food groups provides some, but not all, of the nutrients you need. Foods in one group cannot replace those in another. No one of these major food groups is more important than another – for good health, you need them all.

the majority of patrons, with enough flexibility to satisfy everyone. Planning menus for foodservices with a static population requires strict attention to the complete nutritional needs of the group. Such menus also must offer enough variety to minimize monotony.

The emphasis today is on good nutrition and healthful eating styles, so providing nutritionally adequate food selections that parallel customer expectations is necessary. Menus must reflect foods that allow clientele to follow the Dietary Guidelines for Americans established by U.S. Department of Agriculture and U.S. Department of Health and Human Services:

1. eat a variety of foods;
2. balance the food you eat with physical activity—maintain or improve your weight;
3. choose a diet low in fat, saturated fat, and cholesterol;
4. choose a diet with plenty of grain products, vegetables, and fruits;
5. choose a diet moderate in sugars;
6. choose a diet moderate in salt and sodium;
7. if you drink alcoholic beverages, do so in moderation.

The food pyramid (Figure 16.1) has been distributed widely and is used frequently by clientele.

Clients are increasingly more knowledgeable about new and different foods and desire greater variety and an opportunity to select foods representing new culinary styles. Ethnic, meatless, and regional foods also are popular, and menus should incorporate choices from these categories.

Planning acceptable menus requires the menu planner to be aware of food preferences and periodically evaluate acceptance of foods and food combinations. Plate waste analysis, customer preference surveys, food usage data, meal census information, and informal interactions with clients are a few ways to assess menu acceptability.

Popular magazines, recently published cookbooks, and themes for new dining establishments reflect contemporary food interests of consumers and can be used as menu planning tools. Menu choices should include current dining trends; often slight adjustments or name modifications to existing recipes will satisfy clientele requirements for contemporary menu items.

Type of Foodservice

Today, the type of foodservice is not as much of a limiting factor for the menu planner, since differences among various kinds of facilities are becoming less evident. For example, most college foodservices offer menu choices similar to commercial restaurants. Hospital menus for general diet patients may be no different than those from any other segment of the foodservice industry. School foodservice menus reflect offerings similar to foods available in the commercial market. Philosophy and specific limitations

of individual foodservices provide direction for the menu writer more than the type of foodservice.

Financial Limitations

The budget plays a critical role in planning menus. The costs of food, labor, and supplies for menu items must be considered in relation to projected income and expenses. In some foodservices, a raw food cost allowance per meal or per day may be determined. Although the daily food cost may fluctuate, the cumulative average for a week or a month must stay within the daily allowance. Offering a high-priced item along with a popular low-cost item will help balance costs. This is especially true with buffets, or when food amounts are not restricted.

In commercial foodservices, the amount of money that can be spent on food is based on projected income from the sale of food. Food and labor costs are used in establishing the selling price, which often must be within a predetermined range, thus making the choice of menu items important. Forecasted need and menu mix in relation to cost must be considered.

Food Availability

While most foods are available year-round, there may be differences in quality and price. Peak seasons for fresh fruits and produce should be known when planning menus. Seasonal price differences occur also for non-produce food products, such as fresh fish and poultry. Locally grown food products, often available at farmers markets, should be considered; they are usually very fresh, good quality, and reasonably priced.

Production Capabilities

Available Equipment

The type, size, and amount of food preparation, holding, and transporting equipment available is an important factor in planning menus that can be produced. Special attention should be given to oven capacity, number of grills or fryers, refrigerator and freezer facilities, number and size of steam-jacketed kettles and steamers, and availability and capacity of mixers. Certain combinations of menu items often must be avoided because of lack of production equipment or serving pans and dishes.

Number and Experience of Employees

The person-hours of labor available and the efficiency and skill of employees are important factors to consider when deciding on the variety and complexity of the menu. Understanding the relationship between menu and personnel will help the planner develop menus that can be prepared with the available staff.

Distribution of Work

Menus should be planned to distribute the work evenly among the different areas of preparation. In determining a day's work load, the menu planner should consider not only one day's menu but also any preparation necessary for meals for the following day. Care should be exercised so menus are not planned that create an excessive work load for employees one day and underutilize them the next. To introduce variety in the menu, a limited number of foods requiring time-consuming processes may be included if combined with other food items that require minimum preparation. Some foods require last-minute cooking to ensure high quality. To avoid confusion and delayed meal service, the menu should be planned to balance items that may be prepared early and those that must be cooked just prior to serving.

MENU PLANNING PROCEDURES

Menu planning follows no absolute rules as long as the menu writer satisfies the needs and demands of the clientele and the policies of the foodservice. It is suggested that menu planning be done without interruptions and that the following materials be available:

1. Menu forms as dictated by type and needs of the foodservice.
2. Standardized recipe file.
3. Current trade periodicals and other foodservice publications.
4. Menu suggestions lists (Appendix A).
5. Previous menus (if available).
6. Summaries of menu evaluation data.

Key Points in Menu Planning

Plan for Variety and Good Nutrition

1. Include a wide variety of foods from day to day to ensure adequate nutrients. Unless you provide a choice, avoid the same form of food on consecutive days; for example, meat loaf on one day and spaghetti and meatballs the next.
2. Include foods that will allow clientele to meet the Dietary Guidelines for Americans as established by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services (see p. 689 for guidelines).

3. Avoid repeating the same food on the same day of the week. For this reason, a short cycle where the days are divisible by seven is undesirable.
4. Vary the method of preparation. For example, serve vegetables raw or cooked, seasoned, stir-fried, marinated, or with a sauce.
5. Introduce new foods regularly and, on a selective menu, pair a new food with a familiar well-liked food.

Plan for Eye Appeal

1. Try to visualize the appearance of the food on the plate.
2. Use at least one or two colorful foods on each menu.
3. Use colorful foods in combination with foods having little color.
4. When serving more than one vegetable, serve one green and one nongreeen vegetable. Avoid serving vegetables that are the same color as the entree.
5. Vary the shapes of food.

Plan for Contrast in Texture and Flavor

1. Offer crisp foods with soft foods.
2. Use strong- and mild-flavored foods together.
3. Balance light and heavy foods; for example, in a nonselective menu pair light desserts with hearty entrees.
4. Avoid repeating foods with similar cooking methods.
5. Avoid using the same herbs and spices in foods served together on the same plate.
6. Avoid serving very strong foods with delicate entrees.

Plan for Consumer Acceptance

1. Include food combinations most acceptable to the clientele.
2. The completed menu should, if possible, have a predominance of familiar and well-accepted menu items, with the introduction of new or less well-liked foods spaced throughout the menu period.
3. In nonselective menus, it is important that the less popular foods be accompanied by some that are well liked by the majority of the clientele.
4. Periodically assess the food preferences of the consumers.

Plan for Financial, Production, and Service Limitations

1. Include food combinations that can be prepared with available personnel and equipment.
2. Select menu items that will keep food costs within the budget allowance.

Steps in Menu Planning

Determine a Time Period

Plan menus for at least a week at a time, preferably longer. If a cycle menu is being planned, decide on the length of the cycle.

Proceed Systematically

Select menu items systematically. Entrees are selected first because they are the central focus of a meal and form the framework of the menu plan. Other foods are then chosen that complement the entree.

Entrees. Select meat and other entrees for the entire cycle or length of time for which menus are being planned. If planning a week's menus only, choose entrees for a month or longer, then complete the menus as needed. In this way, an entree cycle can be developed that would simplify planning each week's menus. Since entrees usually are the most expensive food on the menu, cost can be controlled to a great extent through careful planning at this point. A balance between high- and low-priced items will average out the cost over the week or period covered by the cycle.

On a selective menu, offer at least one meat and a meatless entree, along with poultry and fish to complete the number of entrees required.

Be specific about method of preparation when recording the menu; for example, show pork chops as baked, stuffed, barbecued, breaded, or whatever method of preparation is desired.

Soups and Sandwiches. Plan soups and sandwiches at the same time as entrees if they are to be offered as a main dish in lieu of meat or other entree. On a selective menu, offer a cream soup and a stock soup. In a cafeteria, a variety of sandwiches may be offered, and these may not change from day to day.

Vegetables. Select vegetables that are compatible with the entrees. Potatoes, rice, or pasta may be included as one choice. On a selective menu, pair a popular vegetable with one that is less well liked.

Salads. If only one salad is to be offered, select one that complements or is a contrast in texture to the other menu items. On a selective menu, include a green salad and fruit, vegetable, and gelatin salads to complete the desired number. Certain salad items may be offered daily such as tossed salad, cottage cheese, or cabbage slaw; or a salad bar may be a standard menu feature. See p. 720 for salad bar suggestions.

Breads. Vary the kinds of breads offered or provide a choice of white or whole grain bread and a hot bread.

Desserts. If no choice is offered, plan a light dessert with a hearty meal and a rich dessert when the rest of the meal is not too heavy. On a selective menu, include a two-crust pie, a soft pie, cake, pudding, and gelatin dessert. Ice cream, yogurt, baked custard, and fruit may be offered daily.

Breakfast Items. Certain breakfast foods such as cooked and cold cereal, toast, and fruit juices may be standard. Variety may be introduced through a choice of entrees, hot breads, and fresh fruits.

Beverages. A choice of beverages usually is provided. Coffee, decaffeinated coffee, tea, and milk, including lowfat, usually are offered. Lemonade, soft drinks, fruit punch, and a variety of juices may be included also.

Evaluate the Completed Menu

After the menu has been planned, check carefully to see if it has met the established criteria. Evaluate the menu again after the meals have been served. Make notations of satisfactory menus and difficulties encountered in production and service of the meals. If the cycle is to be repeated, desired alterations should be noted.

The responsibility of the menu planner does not end with the writing of the menu. The task is completed only when the food has been prepared and served and the reaction of the consumer noted.

MENU PLANNING FOR DIFFERENT TYPES OF FOODSERVICE

Elementary and Secondary Schools

National School Lunch Program

The National School Lunch Program (NSLP) is designed to provide nutritious, reasonably priced lunches to children in schools and residential child care centers, to contribute to a better understanding of good nutrition, and to foster good food habits. School foodservice is an integral part of the child's education.

The nutrition goals of the NSLP are designed to provide adequate calories and nutrients for specific age groups of children while reducing fat and saturated fat to recommended levels. The goals are based on the Recommended Dietary Allowances (RDA) (⅓ RDA for lunch, ¼ RDA for breakfast), children's calorie (energy) requirements, and the Dietary Guidelines for Americans (p. 689). USDA nutrient standards for the NSLP set target goals for calories, calcium, iron, protein, and vitamins A and C. Standards also specify that no more than 30 percent of calories come from fat and less than 10 percent of the fat calories come from saturated fat. States are required to establish their own nutrient standards for carbohydrates, cholesterol, fiber, and sodium.

Three menu planning systems that meet federal guidelines are compared in Table 16.2. Enhanced Food-Based Menu Planning requires specific food group components in specific amounts for different established age/grade groups. Nutrient Standard Menu Planning (NSMP) uses computerized nutrient analysis of menus. This planning system uses a simplified menu pattern which requires that lunches include an entree and milk. Other food items may be added to the menu. When averaged over a week, the menus must meet the nutrient standards and calorie requirements for specific age/grade groups. NSMP and Assisted Nutrient Standard Menu Planning (Assisted NSMP) are exactly alike except an outside consultant or other agency performs all functions of menu planning and nutrient analysis.

Not represented in Table 16.2 is the Traditional Food-Based Menu Planning system, used since the National School Lunch Program was established in 1946. Although the Traditional Food-Based Menu Planning system is still an option, it is used infrequently because of the difficulty in complying with the Dietary Guidelines. This system was designed to provide over time, the RDA for key nutrients but without consideration for calorie needs or dietary fat.

To qualify for reimbursement, a school is required to use the framework specified in this table and to meet the minimum nutrition standard requirements, Tables 16.4 and 16.5. Other foods may be added to improve acceptability and to satisfy students' appetites.

An "offer versus serve" provision allows students to choose less than all the food items offered. However, they must select a specified minimum amount of food in order for the lunch to be reimbursed. Schools are required to implement the "offer versus serve" provision for senior high school students. The implementation of this provision in middle, junior high, and elementary schools is left to the discretion of the local school food authorities.

The cycle menu is used to some extent in school foodservices, and many schools are using selective menus in which students may select from two items of comparable nutritional value for part of the menu; for example, a student may have a choice of two vegetables and two fruits. Some schools offer multiple menus in which more than one complete menu that meets federal requirements is offered, such as a chef's salad or soup and sandwich meal. À la carte items are also provided in many schools. The more menu choices provided to students, the better their participation in the school foodservice programs.

TABLE 16.2 Comparison of school foodservice menu planning systems

	Enhanced food-based menu planning	*Assisted nutrient standard menu planning ("Assisted NuMenus")*	*Nutrient standard menu planning ("NuMenus")*
Meals are planned based on . . .	Enhanced Meal Pattern (must meet nutritional standards)	Required nutrient levels averaged over a school week	Required nutrient levels averaged over a school week
Reimbursable lunch requirements under "offer vs. serve"	Offer a minimum of 5 food items: • 1 meat/meat alt. • 2 vegetables/fruits • 1 grain/bread • 1 milk Senior high students must accept 3 food items. Students below senior high must accept 3 or 4 food items at the discretion of the School Food Authority.	• Schools must offer students at least 3 menu items: an entree, fluid milk, and another menu item. • Students must select at least 2 of the 3 menu items; 1 of the 2 must be an entree. • If more than 3 menu items are offered as a meal unit, students may decline no more than 2 menu items of the meal unit (entree must be selected).	• Schools must offer students at least 3 menu items: an entree, fluid milk, and another menu item. • Students must select at least 2 of the 3 menu items; 1 of the 2 must be an entree. • If more than 3 menu items are offered as a meal unit, students may decline no more than 2 menu items of the meal unit (entree must be selected).
Reimbursable breakfast requirements under "offer vs. serve"	Offer a minimum of 4 food items: • 1 milk • 1 vegetable/fruit • 1 of the 3 following combinations: 1 meat/meat alt. AND 1 bread/bread alt. OR 2 meat/meat alt. OR 2 bread/bread alt. Students must accept 3 food items.	• Schools must offer fluid milk as a beverage or on cereal or both. Must offer at least 2 side dishes. • Student may decline a maximum of 1 menu item out of the 3 or more required menu items offered.	• Schools must offer fluid milk as a beverage or on cereal or both. Must offer at least 2 side dishes. • Student may decline a maximum of 1 menu item out of the 3 or more required menu items offered.
Menu items credited toward nutrient standard requirements	Only USDA-approved foods count toward meeting meal pattern.	All menu items count.	All menu items count.
Computer needs	Not required	Not required because nutrient analysis may be done by another school, a consultant, or a school food co-op.	Required—District must have computer hardware and USDA approved nutrient analysis software.
Recordkeeping	• Production records document quantities planned and served. • CN label or product analysis required for pre-prepared items. • Recipes and nutritional analysis of pre-prepared items.	• Production records document quantities planned and served. • Nutrient analysis required at school level.	• Production records document quantities planned and served. • Nutrient analysis required at school level.

continues

TABLE 16.2 ***continued***

	Enhanced food-based menu planning	*Assisted nutrient standard menu planning ("Assisted NuMenus")*	*Nutrient standard menu planning ("NuMenus")*
Age/grade groupings (lunch)	Three grade groups are required: • Preschool • K–6 • 7–12 Four grade groups are optional: • Preschool • K–3 • 4–6 • 7–12 *Brk Required* Preschool • K–12 • 7–12 (optional)	Opt. 1—Grade Groups: • Preschool • K–6 (optional: K–3 and 4–6) • 7–12 Opt. 2—Age Groups: • 3–6 • 7–10 • 11–13 • 14 and older Opt. 3—Create custom groups *Brk Required* • K–12 • 7–12 (optional)	Opt. 1—Grade Groups: • Preschool • K–6 (optional: K–3 and 4–6) • 7–12 Opt. 2—Age Groups: • 3–6 • 7–10 • 11–13 • 14 and older Opt. 3—Create custom groups *Brk Required* • K–12 • 7–12 (optional)
Meeting dietary guidelines	• Schools must meet Dietary Guidelines. Nutrient analysis is optional. • State educaton agency will conduct nutrient analysis to determine if Dietary Guidelines are met.	• Schools must meet Dietary Guidelines and are required to provide nutrient analysis at school level. Schools must document that they have served the recipes and menus used in the nutrient analysis. • State educaton agency will review nutrient analysis to determine if Dietary Guidelines are met.	• Schools must meet Dietary Guidelines and are required to do nutrient analysis at school level. • State educaton agency will review nutrient analysis to determine if Dietary Guidelines are met.
Advantages	Requires minimal training and change for local personnel.	Requires minimal training and change for local personnel. Menus will comply with the DGA.	Local district retains flexibility and control. Menus will comply with the DGA.
Disadvantages	School will not know if it is meeting the DGA until it is reviewed by state education agency. Length of education agency review will increase substantially to allow time to perform nutrient analysis. Due to length of time between reviews, problems could go uncorrected for long periods.	Costs may be incurred to have an outside party perform nutrient analysis. If a food vendor performs nutrient analysis, there may be financial implications. For example, schools might be required to use specified products. Schools will lose some control and flexibility.	Costs will be incurred for hardware and software. Personnel will need to spend time learning the software and setting up the system (i.e., entering local recipe and product data).

Source: Kansas State Department of Education (KSDE) and USDA

Notes:
- DGA - Dietary Guidelines for Americans.
- NSMP - Nutrient Standard Menu Planning, which means planning menus that provide adequate nutrients to meet the Dietary Guidelines for Americans.
- NuMenus —USDA's term for NSMP.
- Assisted NuMenus and Assisted NSMP—refers to nutrient analysis of school menus performed by another school, a consultant, or a school food co-op.
- Other menu planning systems may meet federal guidelines.

Many foods on the Suggested Menu Items listed in Appendix A are suitable for school lunches. Keep in mind the nutrition requirements, cost, labor and equipment restraints, and food preferences of the age group served. Adding options such as salad bars, special day celebrations, or ethnic and international food promotions allows the school foodservice operation to compete with the commercial food industry.

School Breakfast Program

The importance of students eating a nutritious breadfast cannot be overemphasized. Breakfast furnishes fuel for the morning, when students do most of their learning. In 1975, Congress passed an amendment which made the School Breakfast Program (SBP) a permanent part of the Child Nutrition Act. All public and nonprofit private schools may participate in the SBP.

The School Breakfast Pattern for the various age groups is found in Table 16.3 on p. 696. To qualify for reimbursement, a school is required to use this framework and to meet the minimum requirements, but other foods may be added to help improve acceptability and to satisfy students' appetites. Offer versus serve is also available to any school in the SBP, whereby students can refuse some items comprising a school breakfast. School breakfast requires little additional labor from the school foodservice operation.

Child and Adult Care Food Program

The Child and Adult Care Food Program (CACFP) is designed to provide nutritious meals for children 12 years of age and younger. Children need well-balanced meals to meet their daily energy and nutritional requirements. To meet the nutritional needs, specified meal patterns are followed. The required portion sizes for young children differ slightly between CACFP and school nutrition programs. CACFP Meal Pattern requirements can be found in Table 16.6.

In planning food for children, their total daily food requirements should be considered. The combination of meals and snacks will vary according to the age group, their time of arrival at the center, and their length of stay. It is important that the planner consider the nutritional needs of the children, their food preferences, regional food habits, equipment, personnel, and other management functions.

Young children need nutritious foods at frequent intervals, but it is important to schedule the service of food to allow sufficient time between meals and supplements. Young children enjoy food they can handle easily. Finger food, snacks, and bite-size pieces are most popular. Banana slices, berries, dried peaches or pears, fresh fruit wedges, carrot and celery sticks, cheese cubes, and crackers are examples of finger foods.

Those responsible for foodservice in child care centers should provide the opportunity for children to learn about the foods they eat so they can begin to make wise, nutritious choices.

Colleges and Universities

College and university foodservice menus are representative of the marked change in the college foodservice industry over the last decade. The college customer on most campuses has several menu options: board plan cafeterias, snack bars, specialty shops, food courts, convenience stores, vending operations, cash cafeterias, and fine dining restaurants. Commonplace, too, are catering operations that support social, athletic, and university events both on and off campus.

More than one menu type may be appropriate for these varied functions because the menu must support many objectives. For example, a serving area may provide traditional board, cash meals, and carry-out food options from a single location. The success of these complex operations is closely linked to the menu design and the ability of the menu writer to satisfy both facility and customer objectives.

The selective menu pattern in Table 16.1 may be used for designing a traditional cycle menu. With today's campus diner, however, the most successful menus offer extensive variety daily. Menus must be exciting and creative and reflect choices that parallel student preferences. Basing menu decisions on accurate food trend data is necessary.

Consideration for good nutrition is important for all menu writers but offers a special challenge when the customer is generally from a healthy population and often between 18 and 28 years old. Customers of this age are more apt to make choices based on impulse preference than are clientele from a population having health and dietary concerns. The menu, to be successful, must allow for customer satisfaction and at the same time reflect the principles of sound nutrition and quality nutritious food. Customer input is necessary for designing menus that allow this to happen. See p. 689 for the Dietary Guidelines for Americans.

The following section, "Commercial Foodservices," includes additional information appropriate to the college and university market.

Commercial Foodservices

Menu planning for commercial foodservices varies according to the type and size of operation, its goals, and the expected check average. Menus range from the fast-food concept of a limited menu for high volume

TABLE 16.3 Food-based menus meal plans

	Minimum quantities for enhanced food-based menus			
	Required			*Option*
	Ages 1–2	*Preschool*	*Grades K–12*	*Grades 7–12*
BREAKFAST				
Milk (Fluid) (As a beverage, on cereal or both)	½ cup	¾ cup	8 fl oz	8 fl oz
Juice/Fruit/Vegetable Fruit and/or vegetable; or full-strength fruit juice or vegetable juice	¼ cup	½ cup	½ cup	½ cup
Select *one* serving from each of the following components or *two* from one component:				
Grains/Breads[a] One of the following or an equivalent combination:				
Whole grain or enriched bread, whole grain or enriched biscuit/roll, muffin, etc.	½ serving	½ serving	1 serving	1 serving
Whole grain, enriched or fortified cereal	¼ cup or ⅓ oz	⅓ cup or ½ oz	¾ cup or 1 oz	¾ cup or 1 oz *Plus* an additional serving of one of the grains/breads above
Meat or Meat Alternates				
Meat/poultry or fish	½ oz	½ oz	1 oz	1 oz
Cheese	½ oz	½ oz	1 oz	1 oz
Egg (large)	½	½	½	½
Peanut butter or other nut or seed butters	1 Tbsp	1 Tbsp	2 Tbsp	2 Tbsp
Cooked dry beans and peas	2 Tbsp	2 Tbsp	4 Tbsp	4 Tbsp
Nut and/or seeds (as listed in program guidance)[b]	½ oz	½ oz	1 oz	1 oz
Yogurt (plain or flavored, sweetened or unsweetened)[c]	2 oz or ¼ cup	2 oz or ¼ cup	4 oz or ½ cup	4 oz or ½ cup

[a] Grain/bread requirements are based on the weight of the enriched flour or whole grain in the product.
[b] No more than 1 oz of nuts and/or seeds may be served in any one meal.
[c] Frozen yogurt may not be counted.

continues

TABLE 16.3 ***continued***

	Minimum quantities for enhanced food-based menus				
	Required				*Option*
	Ages 1–2	*Preschool*	*Grades K–6*	*Grades 7–12*	*Grades K–3*
LUNCH					
Milk (as a beverage)	6 fl oz	6 fl oz	8 fl oz	8 fl oz	8 fl oz
Meat or Meat Alternate (quantity of the edible portion as served)					
Lean meat, poultry, or fish	1 oz	1½ oz	2 oz	2 oz	1½ oz
Cheese	1 oz	1½ oz	2 oz	2 oz	1½ oz
Large egg	½	¾	1	1	¾
Cooked dry beans or peas	¼ cup	⅜ cup	½ cup	½ cup	⅜ cup
Peanut butter or other nut or seed butters	2 Tbsp	3 Tbsp	4 Tbsp	4 Tbsp	3 Tbsp
Yogurt (plain or flavored, unsweetened or sweetened)	4 oz or ½ cup	6 oz or ¾ cup	8 oz or 1 cup	8 oz or 1 cup	6 oz or ¾ cup
The following may be used to meet no more than 50% of the requirement and must be used in combination with any of the above:					
Peanuts, soynuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternate (l ounce of nuts/seeds = 1 ounce of cooked lean meat, poultry, or fish).	½ oz = 50%	¾ oz = 50%	1 oz = 50%	1 oz = 50%	¾ oz = 50%
Vegetables/Fruits (2 or more servings of vegetables or fruits or both)	½ cup	½ cup	¾ cup plus extra ½ cup over a week[d]	1 cup	¾ cup
Grains/Breads Must be enriched or whole grain. A serving is a slice of bread or an equivalent serving of biscuits, rolls, etc., or ½ cup of cooked rice, macaroni, noodles, other pasta products or cereal grains.[a]	5 servings per week[d] Minimum of ½ per day[e]	8 servings per week[d] Minimum of 1 per day[e]	12 servings per week[d] Minimum of 1 per day[e]	15 servings per week[d] Minimum of 1 per day[e]	10 servings per week[d] Minimum of 1 per day[e]

Source: U.S. Department of Agriculture

[d] For the purposes of this chart, a week equals five days.

[e] Up to one grains/breads serving per day may be a dessert.

TABLE 16.4 Age group nutrient standards for NuMenus and Assisted NuMenus (1)

Nutrients and energy allowances	*Ages 3–6*	*Ages 7–10*	*Ages 11–13*	*Ages 14 and above*
School Breakfast				
Energy allowances/calories	419	500	588	625
Total fat (as a percent of actual total food energy)	(2)	(2)	(2)	(2)
Saturated fat (as a percent of actual total food energy)	(3)	(3)	(3)	(3)
Protein (g)	5.50	7.00	11.25	12.50
Calcium (mg)	200	200	300	300
Iron (mg)	2.5	2.5	3.4	3.4
Vitamin A (RE)	119	175	225	225
Vitamin C (mg)	11.00	11.25	12.50	14.40
School Lunch				
Energy allowance/calories	558	667	783	846
Total fat (as a percent of actual total food energy)	(2)	(2)	(2)	(2)
Saturated fat (as a percent of actual total food energy)	(3)	(3)	(3)	(3)
Protein (g)	7.3	9.3	15.0	16.7
Calcium (mg)	267	267	400	400
Iron (mg)	2.5	2.5	3.4	3.4
Vitamin A (RE)	158	233	300	300
Vitamin C (mg)	14.6	15.0	16.7	19.2

Source: U.S. Department of Agriculture
(1) School week averages for age groups.
(2) Not to exceed 30 percent over a school week.
(3) Less than 10 percent over a school week. Grams of fat will vary depending on calories offered.

and quick service to the table d'hôte menu of a formal seated-service restaurant.

The basic rules of menu planning apply to commercial foodservices. Type of foodservice must be determined, financial goals decided, production and service capabilities analyzed, and labor needs addressed. Assessing clientele wants is especially important and should be assessed accurately, using proven research procedures.

Commercial customers make choices daily on what and where to eat and the amount of money they will spend. It is often not enough for the menu planner to follow all the rules that make production and service possible without special consideration for the role the menu plays in making the commercial foodservice operation successful. A few guidelines that should be followed in designing the commercial menu are:

- Decide what to serve and what to charge. Market research is necessary to assess accurately what customers will purchase.
- Design the presentation of the menu suitable to the operation. The layout and overall design should be readable and attractive, and should support marketing goals.
- Determine the sequence of food items on the menu. A generally accepted sequence is appetizers or foods eaten first, then soups, entrees, and desserts. Within this order, salads, side orders, and beverages must be placed. Foods listed first within each category are selected most often so consideration should be given to this placement.
- Write the menu names to describe the foods offered accurately and to merchandise the food item and the operation. The importance of the menu to create atmosphere and serve as a marketing and advertising tool cannot be overemphasized.

Hospitals

Although hospital menus may be more complex, the principles of meal planning for health care facilities are the same as those for other types of foodservices. Foods must be provided for many kinds of diets, ranging from liquid, ground, soft, or regular, to bland, low sodium,

TABLE 16.5 Grade group nutrient standards for NuMenus, Assisted NuMenus, and food-based menu planning (1)

Nutrients and energy allowances	*Preschool*	*Grades K–6*	*Grades 7–12*	*Option for Grades K–3*
School Breakfast				
Energy allowances/calories	388	554	618	
Total fat (as a percent of actual total food energy)	(2)	(2)	(2)	
Saturated fat (as a percent of actual total food energy)	(3)	(3)	(3)	
Protein (g)	5	10	12	
Calcium (mg)	200	257	300	
Iron (mg)	2.5	3.0	3.4	
Vitamin A (RE)	113	197	225	
Vitamin C (mg)	11	13	14	
School Lunch				
Energy allowance/calories	517	664	825	633
Total fat (as a percent of actual total food energy)	(2)	(2)	(2)	(2)
Saturated fat (as a percent of actual total food energy)	(3)	(3)	(3)	(3)
Protein (g)	7	10	16	9
Calcium (mg)	267	286	400	267
Iron (mg)	3.3	3.5	4.5	3.3
Vitamin A (RE)	150	224	300	200
Vitamin C (mg)	14	15	18	15

Source: U.S. Department of Agriculture

(1) School week averages for grade groups.

(2) Not to exceed 30 percent over a school week.

(3) Less than 10 percent over a school week. Grams of fat will vary depending on calories offered.

low carbohydrate, or fat restricted, with a wide range in caloric requirements. In addition, a cafeteria generally is available for hospital personnel and visitors.

Like college and university foodservices, hospitals are adopting more characteristics of the commercial foodservice. More emphasis is being placed on developing innovative menus and on offering new and creative food items. Many hospitals use catering and other services as revenue centers.

Cycle menus are widely used in health care facilities. The length of patient stay is an important factor in determining the length of the cycle. In an acute care hospital, where the average length of stay may be three to five days, a short cycle could be used. In an extended care facility a longer cycle would be more satisfactory. If a short cycle is used for patient meals, a longer cycle would be required for the employee cafeteria.

When developing a hospital meal pattern, the first step is to plan a regular or normal diet that will supply all food essentials necessary for good nutrition. This pattern then becomes the foundation for most diets required for therapeutic purposes and is the core of all meal planning in a hospital of any type or size. Patients requiring other than a normal diet will receive various modifications of the regular diet to fit their particular needs.

In planning a normal or regular diet, meals should be planned for each day as a unit. Each day's menu then can be checked to be sure that all essential foods have been included. A suggested three-meal-a-day menu pattern for a normal diet is given in Table 16.1.

The selective menu adds much to the satisfaction of patients and also helps to prevent waste. Choices that appeal to various patients usually can be made available with little extra work, if careful planning is used in pairing items on the menu. The main items on the selective menu are the same as those on the general menu. Some items, such as the choice of meat and vegetables, may be the same as foods prepared for one of the modified diets or for the cafeteria. Other choices may be soup or fruit juice, or fruit or ice cream in place of a prepared dessert. On the dinner menu, choices of light or more hearty foods may do much to promote patient acceptance. Some hospitals

TABLE 16.6 Child and adult care food program U.S. Department of Agriculture food chart

	Age		
	1–2	*3–5*	*6–12 Adults*
Breakfast			
Fluid milk	½ cup	¾ cup	1 cup
Juice or fruit or vegetable	¼ cup	½ cup	½ cup
Bread or bread alternate	½ slice[1] (or ½ oz)	½ slice[1] (or ½ oz)	1 slice[1] (or ½ oz)
or cold dry cereal	¼ cup (or ⅓ oz)	⅓ cup (or ½ oz)	¾ cup (or 1 oz)
or cooked cereal	¼ cup	¼ cup	½ cup
Snack: Select Two of the Following Four Components[2]			
Fluid mild	½ cup	½ cup	1 cup
Juice or fruit or vegetable	½ cup	½ cup	¾ cup
Meat or meat alternate	½ oz	½ oz	1 oz
or yogurt	2 oz (or ¼ cup)	2 oz (or ¼ cup)	4 oz (or ½ cup)
Bread, bread alternate, or cereal	½ slice[1]	½ slice[1]	1 slice[1]
Lunch/Supper			
Fluid milk	½ cup	¾ cup	1 cup
Meat or poultry or fish	1 oz	1½ oz	2 oz
or cheese	1 oz	1½ oz	2 oz
or cottage cheese, cheese food, or cheese spread	2 oz (¼ cup)	3 oz (⅜ cup)	4 oz (½ cup)
or egg	1	1	1
or cooked dry beans or peas	¼ cup	⅜ cup	½ cup
or peanut butter, soynuts, tree nuts, or seeds	2 Tbsp	3 Tbsp	4 Tbsp
or an equivalent quantity of any combination of the above meat/meat alternates	½ oz = 50%	¾ oz = 50%	1 oz = 50%
Vegetables and/or fruits (2 or more)	¼ cup total	½ cup total	¾ cup total
Bread or bread alternate	½ slice[1]	½ slice[1]	1 slice[1]

Adapted from material supplied by the Kansas State Board of Education Nutrition Services.

[1] Or an equivalent serving of an acceptable bread alternate such as corn bread, biscuits, rolls, muffins, etc., made of whole grain or enriched meal or flour, or a serving of cooked enriched or whole grain rice or macaroni or other pasta products.

[2] For snack, juice may not be served when milk is served as the only other component.

have adopted a selective menu similar to the table d'hôte menu of the commercial sector. The same menu is offered daily but with a wide enough variety of choices that the patient can select a different meal each day. Patients may order any food item on the menu unless it is restricted on their diets.

Extended Care Facilities and Retirement Communities

For people residing in extended health care facilities and retirement communities, food satisfies basic emotional and physical needs.

Those persons planning meals for older adults should be aware of the problems peculiar to this age group. Their fixed habits and food preferences developed through many years may influence but should not determine entirely the meals planned for them. Healthy adults, regardless of age, need a well-balanced diet and, in planning the day's food, the basic pattern for the normal diet should be followed. Individual problems of the group members, such as difficulty in chewing, special dietary requirements, and their limited mobility and activity, must also be considered.

At least three well-planned meals should be served daily, with a hot food at each meal. The menu pattern is similar to that of the regular hospital diet (p. 688), with adjustments in portions and some modification for residents with individual eating problems. The caloric intake or quantity of food eaten usually is smaller because of lessened activity.

The daily food plan should include the following:

1. At least one food of good-quality protein at each meal—fish, poultry, lean meat, eggs, or cheese.
2. Milk offered at mealtime, with at least two 8 oz glasses a day for each person.
3. Four or more servings of fruits and vegetables, including a green leafy or yellow vegetable and a citrus fruit, such as grapefruit, orange, or some other good source of vitamin C. Although chewing may be difficult for some, raw vegetables or fruits should be included.
4. Four or more servings from the bread/cereal group, which includes bread, breakfast cereals, pasta, rice, and baked goods made with whole grain or enriched flour.

Additional foods containing fat, sweets, and flavoring add to the acceptance of meals. The food pyramid, Figure 16.1, provides additional guidelines for menu planning.

If a nonselective menu is used, some modification will add to the residents' acceptance of the food. Choice may be provided by offering certain menu items daily in addition to a set menu or through a choice of two items in each menu category for the dinner meal. Foodservice in this type of long-term facility offers opportunity for use of the eight-week or longer cycle.