

Manual 4

Food Service Guide

Harvard School of Public Health
Baltimore City Public Schools

This guide outlines the multifaceted food service component of the *Eat Well & Keep Moving* program. For school principals and other nonfood service administrators, this guide provides a comprehensive overview of the food service component of *Eat Well & Keep Moving* and explains how food service integrates with other school components to promote nutrition and physical activity. For food service administrators, this guide provides the information necessary to implement and promote a cafeteria menu in line with the *Dietary Guidelines for Americans* and with specific *Eat Well & Keep Moving* goals. The guide includes detailed information on menu planning, recipe modification, program recipes, promotional activities, plate waste assessment, and personnel training. This manual was developed through a collaboration between the Harvard School of Public Health and Baltimore Public Schools.

To find files for the writers, contributors, and acknowledgments for this manual—and all three other manuals—on this CD-ROM, go to the Manuals folder.

Introduction

You can use the materials on the *Eat Well & Keep Moving* CD-ROM to make nutrition and physical activity a school-wide and community-wide priority. The classroom activities and physical education lessons are powerful teaching tools in their own right, but when the *Eat Well & Keep Moving* messages are expanded to the wider school community—as suggested by the Centers for Disease Control and Prevention—their effect on students becomes even greater.

Food Services

Outside of physical education, there is no clearer tie-in to *Eat Well & Keep Moving* than school food services. Every school day, students eat at least one meal at school, and this meal provides an excellent opportunity to reinforce the messages of *Eat Well & Keep Moving*. This reinforcement can be as simple as teachers getting a cafeteria menu in advance and integrating it into their lessons or as involved as teachers working with the principal and food service manager to make permanent healthful changes to the school breakfast and lunch menus.

The CD-ROM provides detailed information for food service managers interested in making healthful changes to their school menus, including recipes, preparation tips, promotional materials, classroom tie-ins, a staff training guide, and links to Web resources. When implemented

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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to its fullest, the food service component works very closely with the classroom component, as explained in the promotions section in manual 2 of the CD-ROM.

The link between the classroom and the food service components of *Eat Well & Keep Moving* can be strengthened if teachers and the cafeteria manager openly discuss promoting the messages of the program. Teachers can invite the food service manager to give presentations in the classroom (such as an Eat Well card), and the cafeteria manager can provide the teachers with regular updates on scheduled lunch menus and periodically display on the serving line the various Eat Well cards complementing the lunch items served.

Parent Involvement

Parent involvement in *Eat Well & Keep Moving* greatly bolsters the program's effectiveness. Encourage parents and family members to become involved in activities that complement the program messages the students learn in school. This reinforcement increases the probability that the dietary and lifestyle changes students make will become a regular part of family and daily life.

Teachers can volunteer some of their time to organize parent activities around *Eat Well & Keep Moving* messages, or they can locate a parent volunteer or other teacher to spearhead such activities. The Parent and Community Involvement Guide (Manual 3) details different approaches to getting parents and family members involved in *Eat Well & Keep Moving*. As with all the other components of the program, your level of involvement can be as little as or as great as you like. The separate components of *Eat Well & Keep Moving* stand alone very well but become even stronger when brought together.

When implemented to its fullest, the parent involvement component takes a unique approach: identifying community-based health organizations to offer nutrition, physical activity, and wellness programs to parents. Additional *Eat Well & Keep Moving* activities to involve parents include publishing nutrition and physical activity information in parent newsletters (see Parent Newsletters folder on this CD-ROM); sending home fact sheets (see Fact Sheets folder on this CD-ROM) on key nutrition and physical activity topics of the *Eat Well & Keep Moving* curriculum; and hosting program-related family activities, such as Parent Fun Nights, that allow families to see exactly what their children are learning through the *Eat Well & Keep Moving* program.

Through these *Eat Well & Keep Moving* activities, parents and guardians will hopefully become models for their children and encourage healthy eating and active lifestyles for the entire family.

Other CD-ROM Materials

In addition to food service and parent involvement materials, the CD-ROM also includes

- nutrition, physical activity, and wellness training sessions for teachers that also provide a comprehensive introduction to the curriculum, as well as a shorter version of the teacher training (Training 3);
- the complete fourth- and fifth-grade classroom and physical education lessons from the *Eat Well & Keep Moving, 2nd Edition* book;
- Web sites for developing, implementing, and measuring school wellness policies and for improving the school food and physical activity environment;
- a list of Web sites (see the Web Sites folder on this CD-ROM) on nutrition, physical activity, and other topics related to the *Eat Well & Keep Moving* program; and
- information for school administrators interested in *Eat Well & Keep Moving*.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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The Vision of *Eat Well & Keep Moving* in Food Services

A Future of Healthy Choices and Positive Decision Making

The fifth-grade class stands anxiously in the cafeteria line. Students have already decided what to choose for lunch that day. Their teacher has just finished a brief discussion on primavera. Bernard first saw this word earlier in the week under the special promotions spotlight in the cafeteria. Though it followed his favorite word, *pizza*, on Tuesday he had told Tomika that *primavera* was probably something weird.

Today (Friday) their teacher, Mr. Armstrong, presented the class with information from an Eat Well card. This card vividly described the strange new word and added clarity to the menu item. Bernard no longer felt uneasy about what he saw as he rounded the corner and picked up his tray. He knew what to expect and was pleased when he saw the new entree, pizza primavera. Bernard noticed Tomika picking up her half pint of 1% milk and followed suit. Just 2 weeks earlier their class had talked about the advantages of drinking nonfat or 1% milk.

Schools where healthy eating and active lifestyles are practiced can provide a positive vision for their community. The *Eat Well & Keep Moving* program creates an opportunity for students to become more aware of their food choices and physical activity patterns so they can make positive lifestyle choices. Such choices are increasingly important, as numerous studies report increasing rates of obesity and inactivity in school-aged children. Moreover, 4 of the top 10 leading causes of death in the United States—heart disease, cancer, stroke, and diabetes—are associated with poor dietary habits and sedentary lifestyles.

Eat Well & Keep Moving delivers unique and exciting ways to encourage healthy food and fitness behaviors for students. These behaviors can also extend into the community. The program has six main components—staff wellness, food services, classroom education, physical education, school-wide campaigns, and parent and community involvement—and meets the Centers for Disease Control and Prevention guidelines for school health programs that promote lifelong healthy eating.

This multicomponent program promotes environmental changes within schools. These changes support healthful eating and physical activity and improve the knowledge and practice of nutrition and fitness among those involved in the program. In particular, the food service component is integrated with nutrition education and other parts of the comprehensive school health program to reinforce messages on healthy eating.

The *Eat Well & Keep Moving* vision for school food services is

- to empower students to make healthy food choices that reflect the *Dietary Guidelines for Americans*;
- to encourage food service employees to make available the best possible foods that reflect the *Dietary Guidelines for Americans*; and
- to raise awareness among students, teachers, and parents about the existence of these tasty and healthy choices.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Moving Toward Healthy People 2010

The *Eat Well & Keep Moving* goals are consistent with the Healthy People 2010 objective of the Department of Health and Human Services (DHHS) to increase the proportion of school menus that are consistent with the *Dietary Guidelines for Americans*.

Team Nutrition in Action

Team Nutrition is the U.S. Department of Agriculture's (USDA's) implementation tool for the School Meals Initiative for Healthy Children. Team Nutrition promotes food choices through schools, families, the community, and the media. Sharing many goals with Team Nutrition, *Eat Well & Keep Moving* is a manifestation of Team Nutrition in action. Throughout this manual, numerous references and links are made to Team Nutrition programs and materials.

More Demand, Better Supply

Public demand, federal programs for utilizing the *Dietary Guidelines for Americans* (www.nal.usda.gov/fnic/dga/index.html), and the addition of trans fat information to the Nutrition Facts label (www.cfsan.fda.gov/~dms/qatrans2.html) have led the food industry to increase its variety of healthy food choices. Local distributors, vendors, and manufacturers should be made aware of the goals for *Eat Well & Keep Moving* and that your schools plan to participate in the program.

Food Service Component of *Eat Well & Keep Moving*

Most schools throughout the United States are in charge of providing not only a good education but also one or more daily nutritious meals for students. The food service component of *Eat Well & Keep Moving* ensures that healthy food choices are available and promoted in the school cafeteria.

Specifically, the program's nutrition goals are

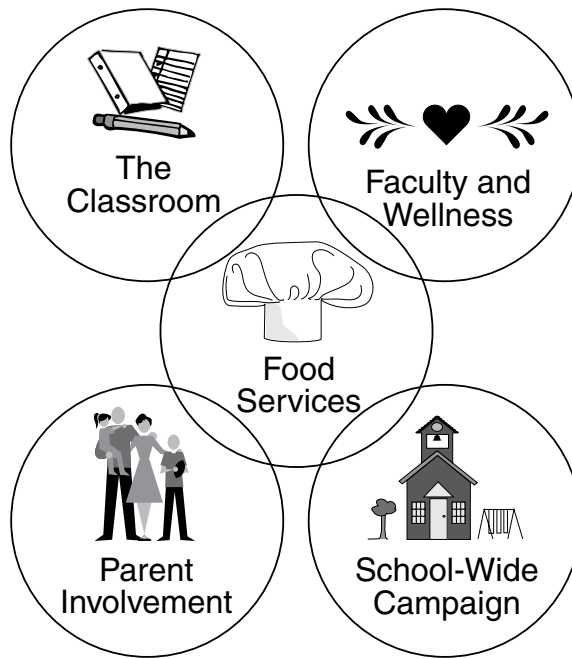
- to increase student consumption of fruits and vegetables;
- to encourage students to choose whole grains and limit foods and beverages with added sugar;
- to encourage students to choose healthy fat, limit saturated fat, and avoid trans fat; and
- to encourage students to eat breakfast.

To reach these goals, *Eat Well & Keep Moving* developed a food service component complete with menu modification guidelines, preparation suggestions, healthful recipes (recipes that emphasize fruits, vegetables, and whole grains, are low in saturated fat and added sugars, and avoid trans fat; see Recipes folder on this CD-ROM), personnel training protocols, and materials for promoting healthful foods to students.

The *Eat Well & Keep Moving* food service component does not exist on its own. Rather, it is an integral part of the *Eat Well & Keep Moving* school program (see figure 4.1). Food services play a critical role in educating students in *Eat Well & Keep Moving*. The food service component is actively linked to most of the other components of the program—classroom education, parent involvement, school-wide promotional campaign, and staff wellness. This approach reinforces the messages of *Eat Well & Keep Moving* in numerous aspects of students' lives and allows students to practice healthy behaviors through a variety of fun, participatory activities.

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► FIGURE 4.1 The food service component.

Links to Classroom Education, Physical Education, and School-Wide Promotional Campaigns

The cafeteria serves as a learning laboratory for the classroom. It is one place where students can practice the skills they learn from the *Eat Well & Keep Moving* classroom lessons and promotions. Toward this end, encourage the food service manager to share menu information with classroom and physical education teachers, and have teachers share their curricula with the food service manager to ensure that food services can assist the learning process. This helps teachers coordinate classroom promotions and lessons with food items from the *Eat Well & Keep Moving* menu.

Links to Parent Involvement

Wherever possible, *Eat Well & Keep Moving* links its messages to students' homes. To help parents and guardians become involved in what their children eat, food services are encouraged to regularly share menu information with parents. Managers may even ask parent volunteers to speak with students about what they are eating during breakfast and lunch in the cafeteria.

Links to Staff Wellness

Familiarizing food service personnel with the different dimensions of wellness and empowering them to take action regarding their own health can help them become motivated and informed role models for students. Sessions on staff wellness (see Module 2 in the Training 1 folder on this CD-ROM) are integrated into the food service training. A separate stress management wellness session can be found in Additional Resources.

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Establishing *Eat Well & Keep Moving* Menus and Recipes

Eat Well & Keep Moving works best when everyone within the school community works together. Students, teachers, food service staff, and parents are all invited to be involved in the program.

Whenever possible, the food service department should consider suggestions from each of these groups when modifying the cafeteria menu. To this end, the school improvement team at each school may want to form a nutrition task force that seeks input on nutrition and food service issues from all sectors of the school population. The task force should include food service staff members, administrators, nutrition teachers, nurses, students, parents, and a school committee member. Suggestions should be solicited 3 to 4 times a year due to the difficulty in getting such a diverse group together.

Different approaches will work in different schools. The key point is that it takes teachers, parents, food service staff members, and administrators working together to encourage students to make healthful food choices.

Changing a current food service system into an *Eat Well & Keep Moving* program is a developmental process. It takes time to establish recipe and menu modifications. Start with changes that are easy and quick to make. Then tackle the more involved tasks.

Team Nutrition, a school-based nutrition promotion program organized by the USDA, is a valuable resource that complements *Eat Well & Keep Moving*. Team Nutrition materials contain detailed information on recipes and training manuals to help food service staff members modify school meals to reflect the *Dietary Guidelines for Americans*. You can contact Team Nutrition by phone at 703-305-1624 or visit the Web site at www.fns.usda.gov/tn.

As much as possible, this manual takes into account the local, state, and federal government requirements with which school food services must comply.

Planning an *Eat Well & Keep Moving* Menu

To begin, use the approach outlined in the Planning Process for Establishing *Eat Well & Keep Moving* Menus. The sections that follow will guide you through this process. Initial modifications are meant to be minor and do not involve drastic changes or introduce new menu items. These modifications focus on changing the purchasing and preparation practices of your current system. For instance, a tuna sandwich on white bread may become tuna in a whole wheat pita pocket, or whole milk may become 1% or nonfat milk.

Making these initial purchasing and preparation changes introduces quick modifications to the current menu. These changes not only immediately increase the healthful choices available to students but also help you assess student acceptance of such changes before you proceed to major menu modifications.

The next steps in establishing an *Eat Well & Keep Moving* menu involve introducing new recipes to your menu and are addressed in Developing the *Eat Well & Keep Moving* Menu.

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Planning Process for Establishing *Eat Well & Keep Moving* Menus

The following steps will guide you through the process of changing your current menu into an *Eat Well & Keep Moving* menu. Keep in mind that this is a developmental process. Change can take place incrementally and can be as slow or as fast as your system allows.

Step 1: Modifying the Current Menu

Evaluate your menu using the *Eat Well & Keep Moving* guidelines, and make desired modifications.

1. Use the *Eat Well & Keep Moving* Menu Modification Guidelines (table 4.1) to identify changes.
2. Use the latest Nutrition Facts labels or nutrient data to make sure that your menu meets the current guidelines.
3. Plan menu changes according to Putting Principles Into Practice (table 4.2).
4. Analyze the modified menu.
5. Implement the modified menu.

Step 2: Developing the *Eat Well & Keep Moving* Menu*

1. Review the Manager Identified Food Waste Checklist (Food Waste) in Additional Resources.
2. Select new menu items using the following criteria: social and cultural food acceptance, food appeal, and production values.
3. Identify student food preferences by taste testing, surveying, or monitoring plate waste.
4. Evaluate nutrient content of purchased food items or new recipes.

Step 3: Implementing the *Eat Well & Keep Moving* Menu*

1. Add new food items to the current menu.
2. Train the food service staff in preparing and presenting the new menu.
3. Promote the new *Eat Well & Keep Moving* menu to students.

*See Team Nutrition's Healthy Meals Resource System for additional recipes and training tips: http://healthymeals.nal.usda.gov/nal_display/index.php?info_center=14&tax_level=1.

Guidelines for Modifying the Current Menu

Begin with what you have and make it better. Assess your current menu using the *Eat Well & Keep Moving* Menu Modification Guidelines (table 4.1).

Circle the answer to each question. If you circle the answer in the left-hand column, you've met your goal. If you circle the answer in the right-hand column (i.e., can be improved), you may need to modify that aspect of your menu. This will help you identify the changes you can make almost immediately to provide a healthier menu.

In addition to using the *Eat Well & Keep Moving* Menu Modification Guidelines to assess the healthfulness of your current menu, you can use nutrient analysis, Nutrition Facts labels (food labels), and vendor nutrient information sheets, as available.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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► **TABLE 4.1 Menu Modification Guidelines**

USE THIS CHECKLIST TO DETERMINE WHICH ASPECTS OF YOUR CURRENT MENU MAY BE IMPROVED.		
Goal	Can be improved	
Increase fruits and vegetables in menu.		
<i>Fruits</i>		
Yes	No	Are fresh fruits served at least 2 times per week?
Yes	No	Are fresh fruits cut up when appropriate?
Yes	No	Are citrus fruits made available at least 2 times per week?
Yes	No	Are canned fruits packed in their own juice?
Yes	No	Are fruits served daily as a choice?
<i>Vegetables</i>		
No	Yes	Are potatoes served more than 2 times per week?
Yes	No	Are cruciferous vegetables (cabbage, broccoli, cauliflower) served at least 1 time per week?
Yes	No	Are raw fresh vegetables served at least 2 times per week?
No salt	Salt	How are vegetables seasoned?
No	Yes	Is butter or margarine used with vegetables?
Yes	No	Are frozen vegetables used?
Yes	No	Are canned vegetables low in sodium?
Goal	Can be improved	
Increase whole grains and limit foods and beverages with added sugar.		
Yes	No	Are whole-grain breads, rolls, buns, pitas, and tortillas purchased? (Whole-grain breads that offer at least 2 g of fiber per serving are best.)
Yes	No	Are whole grains such as brown rice, bulgur, rolled oats, and barley purchased?
Yes	No	Are whole-grain breakfast cereals with little or no added sugar, such as plain oatmeal or shredded wheat, purchased? (Breakfast cereals with 5g or less of sugar per serving are best, unless the cereal provides 3g or more of fiber per serving.)
No	Yes	Are sugar-sweetened beverages (soft drinks, fruit punches, sweetened juice drinks, lemonades, and sports drinks) offered for sale during the school day anywhere on the school campus?
Choose healthy fat, decrease saturated fat, and avoid trans fat.		
Identify the type of milk served and purchased most frequently.		
Yes	No	Are nonfat and 1% milk offered?
Identify the types of meats or meat alternatives served.		
Yes	No	Are beans and peas served at least 1 time per week?
Yes	No	Are only low-fat cuts of meat purchased?
Yes	No	Are processed meats such as lunch meat 95% lean?
Yes	No	Are chicken and turkey prepared without skin?
Yes	No	Is low-fat cheese used whenever possible?

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From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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► **TABLE 4.1 Menu Modification Guidelines** (continued)

Goal	Can be improved	
Identify the types of fat used in food preparation.		
Yes	No	Are healthy oils such as olive, canola, vegetable, or other trans fat-free plant oils (e.g., products that do not contain partially hydrogenated oils) used in preparing food?
No	Yes	Is butter or hard stick margarine used in preparing food?
Yes	No	Is margarine free from trans fat (e.g., soft or liquid margarine that does not contain partially hydrogenated oils) used in preparing food?
No	Yes	Is shortening that contains partially hydrogenated oils or trans fat used in preparing food?
Identify the types of fat found in prepared foods.		
No	Yes	Do products contain trans fat?
No	Yes	Do products list partially hydrogenated oil, margarine, or shortening in the ingredients list?
Decrease sodium.		
Identify major sources of sodium on the menu.		
Yes	No	Are canned and processed food labels checked for sodium content?
No	Yes	Are salt shakers available in the cafeteria?
Yes	No	Is salt measured in cooking with the recipe?

Federal Recommendations and Eat Well & Keep Moving

The *Eat Well & Keep Moving* dietary goals are based on federal recommendations. Pursuant to federal regulations, the National School Lunch Program must comply with the *Dietary Guidelines for Americans* and provide one third of the Recommended Dietary Allowances (RDAs) averaged over 5 days (a usual U.S. school week). The School Breakfast Program must also comply with the *Dietary Guidelines for Americans* and provide 25% of the RDAs for protein, vitamins A and C, iron, calcium, and calories.

Putting Principles Into Practice

Once you have identified the changes you would like to make to your current menu, use the following sections to help implement these changes. For example, if you would like to reduce the amount of saturated and trans fat in your recipes, use some of the numerous preparation tips that follow to do so.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Purchasing Pointers

- ▶ Develop *Eat Well & Keep Moving* specifications (see table 4.2, Putting Principles Into Practice, on page 13).
- ▶ Ask vendors for nutrient information.
- ▶ Specify whole wheat or whole-grain breads, rolls, buns, crackers, pitas, tortillas, pizza dough, and other grain products.
- ▶ Specify brown rice.
- ▶ Specify whole-grain pasta products (or enriched pasta products if whole-grain pasta is unavailable).
- ▶ Specify low-fat cheese products and lean meats.
- ▶ Specify products that contain 0 grams of trans fat per serving and that do not contain any partially hydrogenated oils or shortenings in their ingredients.
- ▶ Plan meat alternatives such as beans and peas.

Putting Principles Into Practice (table 4.2 on page 13) details the planning, purchasing, and preparation practices for making various menu changes.

Purchasing Procedures: Prepared Food While purchasing prepared foods from vendors can greatly reduce labor cost and staff time, these prepared foods are sometimes high in saturated and trans fat and sodium and offer limited fruit, vegetable, and whole-grain selections. The nutrient content of a product can vary tremendously because products such as spaghetti sauce can be made by different manufacturers with different recipes. Read the food labels and make the nutrient content a major part of the criteria for selecting a prepared food.

Let vendors and sales representatives know that you are planning an *Eat Well & Keep Moving* menu. Share the goals and guidelines of the program with them. You may use the Sample Letter to Vendors and Sales Representatives (Vendor Letter) in Additional Resources to inform them about the program. They are frequently willing to let you know of ways they can help.

Purchasing Procedures: USDA Commodities The USDA commodity foods play an integral role in balancing nutrition and budgets for school nutrition administrators. The nutrient contents of commodity foods can be found in Commodity Food Fact Sheets for Schools and Institutions (available at www.fns.usda.gov/FDD/facts/schfacts/cats.htm). Use the *Eat Well & Keep Moving* program guidelines in selecting commodities.

Preparation Practice Changing certain preparation practices can help bring current menus in line with *Eat Well & Keep Moving* food service goals. The following methods describe ways to

- to use more fruits, vegetables, and whole grains;
- to choose healthy fat, reduce saturated fat, and avoid trans fat; and
- to reduce sodium.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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To use more fruits, vegetables, and whole grains, do the following:*

*Adapted from The Eat Smart School Nutrition Program Guide, CATCH, USDA/NIH/NHLBI, 1996.

1. Use more fresh fruits and vegetables. Serve them raw or steamed with their skins on.
2. Add raw red cabbage and spinach to green salads; mix melon or citrus slices with fruit cocktail.
3. Offer tomatoes with sandwiches; put green pepper on pizza; and add carrots to cole-slaw.
4. Serve sweet potatoes in place of white potatoes.
5. Add broccoli and other dark-green vegetables (bok choy, romaine lettuce, collards, kale, spinach), orange vegetables (carrots, sweet potatoes, winter squash, pumpkin), turnips, cabbage, or cauliflower to salad bars, soups, or main dishes.
6. Use whole fruit for frozen fruit bars.
7. Mix plain gelatin with fruit juices, juice from canned fruit, or fruit.
8. When fresh vegetables are not in season, use frozen. When fresh fruits are not in season, use canned fruits packed in juice.
9. Use more whole grains (brown rice, bulgur, oats, whole wheat flour) and whole-grain products (breads, cereals, crackers, pitas, tortillas, pastas). Use taste tests and promotions to increase student interest in whole-grain foods.
10. Gradually add whole wheat flour to baked goods (muffins, rolls, breads, pancakes, pizza crusts) until whole wheat flour is substituted for half or more of the white enriched flour.
11. Purchase whole-grain breads that have at least 2 grams of fiber per serving.

To choose healthy fat, reduce saturated fat, and avoid trans fat, do the following:*

*Adapted from The Eat Smart School Nutrition Program Guide, CATCH, USDA/NIH/NHLBI, 1996.

1. Replace butter with olive, canola, vegetable, or other nonhydrogenated plant oils. Eliminate the use of margarines that contain trans fat or partially hydrogenated oil. Eliminate the use of shortening.
2. Remove the skin and fat from chicken and turkey.
3. Bake, broil, roast, or stew beef, pork, chicken, turkey and fish, or use olive, canola, vegetable, or other nonhydrogenated oil for stir-frying or frying. Try poaching fish in nonfat milk, tomato juice, or water flavored with a little lemon juice.
4. Drain fat from cooked meat. Bake or roast meat or meat loaf on a rack or on crumpled foil so that the fat drips off and can be discarded.
5. Trim all visible fat from beef or pork before cooking it or using it in soups or stews.
6. Defat broth to be used in recipes. The method for defatting poultry broth is as follows:
 - a. Separate broth from chicken or turkey after cooking, and refrigerate both.
 - b. Remove the skin and fat from the cooked chicken or turkey.
 - c. Skim the hardened fat from the top of the broth.
 - d. The defatted broth is now ready to use in recipes or to refrigerate for later use.
7. Reduce or eliminate butter and animal fat added to vegetables, pasta, and rice; eliminate the use of margarines made with partially hydrogenated oil. Use olive, canola, vegetable, or other nonhydrogenated plant oils instead.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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8. Use a vegetable oil or nonhydrogenated oil, nonstick coating spray, or pan liners instead of shortening, margarine, or butter for greasing pans (for foods such as eggs, French toast, pancakes, and baked goods) or for browning meats.
9. Rinse drained, cooked ground meat with hot water and drain. The method for defatting ground meats is as follows:
 - a. Cook ground meat on a moderate to high setting in a steam kettle, tilting kettle, steamer, or oven until it is no longer pink. While cooking, use a kettle whip or birdcage whip to break meat into 1/4- or 1/2-inch (1/2- or 1-centimeter) crumbles.
 - b. Turn off the heat. Drain the fat and liquid into a pan. Stir meat while draining the fat by pulling the whip through the meat along the edge, and then zigzag stir though all sections (this method is called the *zigzag stir method*, and it helps the fat and liquid surface). Repeat the zigzag stir method two more times.
 - c. Add enough hot tap water to cover the ground meat, about 1 gallon (4 liters) of water for every 10 pounds (5 kilograms) of meat. Stir the meat and water using the zigzag stir method two more times.
 - d. Drain the fat and liquid into a pan. While draining, stir the meat using the zigzag stir method. Repeat the zigzag stir method two more times.
 - e. The ground meat is now ready to use in recipes or to refrigerate for later use.

To reduce sodium, do the following:*

*Adapted from The Eat Smart School Nutrition Program Guide, CATCH, USDA/NIH/NHLBI, 1996.

1. Drain high-sodium foods such as canned meat, poultry, seafood, and vegetables in a colander.
2. Use more garlic, onion powder, herbs, and other spices instead of salt in cooking.
3. Reduce or eliminate salt added to vegetables, pasta, and rice.
4. Use low-sodium soup bases, and use them for gravy or as seasoning instead of canned soup stock, bouillon, or consommé.

Modifying and Standardizing Recipes** Any recipe can be modified to reflect new tastes or changing needs. As you modify your existing recipes to bring them in line with the *Eat Well & Keep Moving* food service goals, use these guidelines for developing a consistent, standardized recipe that your students will be able to enjoy repeatedly. As you make changes, modify first and then standardize.

**Adapted from *A Tool Kit for Healthy School Meals*, Team Nutrition, 1995.

Team Nutrition's Healthy Meals Resource System for Child Nutrition Professionals Web site includes a food service education and training materials database as well as food safety resources. For more information, visit http://healthymeals.nal.usda.gov/nal_display/index.php?info_center=14&tax_level=1.

A standardized recipe is one that has been tried, adapted, and retried several times for use by a given food service operation. It produces the same good results 95% of the time when the exact procedures are used with the same type of equipment and the same quantity and quality of ingredients.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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► **TABLE 4.2 Putting Principles Into Practice**

Principles	Menu planning practices	Food purchasing practices	Food preparation practices
Use healthy fat in food preparation, and serve foods that contain healthy fat.	<ul style="list-style-type: none"> • Serve foods prepared with olive, canola, vegetable, or other nonhydrogenated plant oils. • Serve fish (e.g., salmon and catfish) instead of fatty meats. 	<ul style="list-style-type: none"> • Specify soft or liquid margarines that contain 0g of trans fat and do not contain partially hydrogenated oils. • Specify prepared foods that contain 0 g of trans fat per serving and do not contain partially hydrogenated oils. 	<ul style="list-style-type: none"> • See Preparation Practices on pages 11-12
Use meats and poultry that are lean or low in saturated fat.	<ul style="list-style-type: none"> • In sandwiches, use 95% fat-free ham, turkey, or chicken products. Use lunch meats that are lower saturated fat and have reduced sodium. 	<ul style="list-style-type: none"> • Specify 95% fat-free lunch meats and, if possible, specify reduced-sodium meats. • Specify ground beef with no more than 15% fat. • Specify that meats be trimmed, and purchase leaner cuts (round, flank, leg, or arm roast). 	<ul style="list-style-type: none"> • See Preparation Practices on pages 11-12
Reduce saturated fat and avoid trans fat while cooking.	<ul style="list-style-type: none"> • Serve baked, broiled, stir-fried, or oven-fried meat prepared with nonhydrogenated vegetable oils instead of meat prepared with hard stick margarine, partially hydrogenated oil, or shortening. 		<ul style="list-style-type: none"> • See Preparation Practices on pages 11-12
Use low-fat or nonfat milk products.		<ul style="list-style-type: none"> • Specify low-fat mozzarella cheese, low-fat or nonfat yogurt, and low-fat or nonfat cottage cheese. 	<ul style="list-style-type: none"> • Use part-skim (nonfat) mozzarella cheese in sandwiches, in lasagna, on pizza, or on the salad bar. • Use low-fat (1%) or nonfat cottage cheese on the salad bar or in cheese casseroles. • Mix plain low-fat yogurt or nonfat with low-fat sour cream (1/2 yogurt and 1/2 sour cream).
Use more cooked beans and peas.	<ul style="list-style-type: none"> • Serve lean ground beef or ground turkey in combination dishes with cooked dry beans or peas. • Serve bean soups with meat dishes as a protein extender; combine beans with whole grains (such as brown rice or bulgur) as an entree. • Serve hummus in sandwiches or with salads. 	<ul style="list-style-type: none"> • Order USDA dry peas and beans more frequently. 	<ul style="list-style-type: none"> • In tacos, burritos, and chili, substitute cooked dry beans for half of ground beef or turkey. • Make sure a serving meets USDA meal requirements. • Make salads and soups with dry peas and beans.

(continued)

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

▶ TABLE 4.1 Putting Principles Into Practice (continued)

Principles	Menu planning practices	Food purchasing practices	Food preparation practices
Use more fruits and vegetables.	<ul style="list-style-type: none"> • Serve a variety of raw fruits and vegetables in meals and on salad bars daily. • Serve fruits daily as a choice for dessert. • When serving fruit juice, make sure it is 100% fruit juice and serve it in small 4 oz., or 125 ml, portions. 	<ul style="list-style-type: none"> • Specify canned fruits packed in juice. • Specify 100% fruit juice (in small 4 oz., or 125 ml, portions). 	<ul style="list-style-type: none"> • Use fruit juice for frozen fruit bars. • Mix plain gelatin with fruit juices, juice from canned fruit, or fruit.
Use healthy fat when preparing vegetables, reduce the saturated fat added to vegetables, and avoid adding trans fat to vegetables.	<ul style="list-style-type: none"> • Serve salads with dressings made from olive, canola, vegetable, or other plant oils that have not been partially hydrogenated. • Serve plain vegetables without butter or margarine, or serve vegetables prepared with olive, canola, vegetable, or other plant oils that have not been partially hydrogenated. 		<ul style="list-style-type: none"> • See Preparation Practices on pages 11-12
Reduce salt in vegetables.		<ul style="list-style-type: none"> • Specify canned vegetables with no added salt. 	<ul style="list-style-type: none"> • Use more fresh and frozen vegetables; limit canned or preserved ones with added salt.
Serve at least one fruit or vegetable high in vitamin C or A daily.	<ul style="list-style-type: none"> • Provide vegetables and fruits that are rich in vitamin A and C either by themselves or in salads, sandwiches, soups, or casseroles. 		<ul style="list-style-type: none"> • Add raw red cabbage and spinach to green salads; mix melon or citrus slices with fruit cocktail. • Offer tomatoes with sandwiches; put green pepper on pizza; add carrots to coleslaw. • Serve sweet potatoes in place of white potatoes.
Serve cruciferous vegetables (i.e., vegetables from the cabbage family).	<ul style="list-style-type: none"> • Provide main dishes or salads that include broccoli, cabbage, cauliflower, turnips, or kohlrabi. 		<ul style="list-style-type: none"> • Add broccoli, turnips, cabbage, or cauliflower to salad bars, soups, or main dishes.
Serve dark-green and orange vegetables.	<ul style="list-style-type: none"> • Provide main dishes, side dishes, or salads that include dark-green vegetables (e.g., bok choy, collard greens, romaine lettuce, spinach) and orange vegetables (e.g., sweet potatoes, carrots, winter squash, pumpkin). 		<ul style="list-style-type: none"> • Add bok choy, collard greens, romaine lettuce, and spinach to salad bars, soups, or main dishes. • Serve sweet potatoes instead of white potatoes (e.g., serve baked sweet potato fries). • Add grated carrots to salads and sandwiches.

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► **TABLE 4.1** **Putting Principles Into Practice** *(continued)*

Principles	Menu planning practices	Food purchasing practices	Food preparation practices
Use more products made with whole-grain flour or whole grains.	<ul style="list-style-type: none"> • Add whole-grain foods to the menu gradually, and use promotions and taste tests to spark interest. • Serve pizza crusts and pasta dishes made with 1/2 whole grains. • Serve brown rice with stir-fries or other entrees. • Serve bulgur in salads and pilafs. 	<ul style="list-style-type: none"> • Order whole-grain USDA commodities such as bulgur, brown rice, rolled oats, and whole wheat flour (if it is available on the allocation order sheets). 	<ul style="list-style-type: none"> • Make sandwiches with whole wheat bread. • Make casseroles and pilafs with brown rice, bulgur, or other whole grains. • Mix whole wheat pasta with enriched white pasta. • Gradually add increasing percentages of whole wheat flour to baked goods (e.g., muffins, rolls, breads, pancakes).
Limit bakery products high in saturated fat and added sugars, and avoid bakery products with trans fat.	<ul style="list-style-type: none"> • Serve whole wheat bagels, whole wheat English muffins, whole wheat raisin bread, whole wheat bread, or whole-grain fruit or bran muffins in place of Danish pastry, cinnamon rolls, biscuits, hushpuppies, or doughnuts. Use pie crust as a bread alternative less often, and avoid pie crusts made with partially hydrogenated oils or shortening. 		<ul style="list-style-type: none"> • Replace margarine, butter, and shortening with healthy plant oils (those that are not partially hydrogenated) in recipes for muffins and quick breads. • Reduce sugar in recipes for muffins and quick breads. Moisten and sweeten baked goods with dried fruits, fruit juices, or apple sauce.
Reduce salt in bread and bread alternates.			<ul style="list-style-type: none"> • Reduce salt in recipes and do not add salt to noodles when cooking.
Encourage use of nonfat milk or 1% milk.	<ul style="list-style-type: none"> • Offer nonfat or 1% milk. 	<ul style="list-style-type: none"> • Specify 1% or nonfat milk. 	
If desserts are served à la carte, use healthy oils in their preparation, and reduce saturated fat and avoid trans fat. Reduce sugar and increase fiber.	<ul style="list-style-type: none"> • Serve desserts that are lower in saturated fat and have no trans fat (and contain no partially hydrogenated oil, margarine, or shortening). • Serve desserts that include whole grains and fruit, such as fruit crumble with granola topping. 		<ul style="list-style-type: none"> • Offer fruits as dessert daily. Make plain gelatin with fruit juice and whole fruit. Make cookies with oatmeal, low in sugar, and low in saturated fat; avoid shortenings and margarines made with partially hydrogenated oils.

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Using a standardized recipe ensures that

- the same amount of product is produced each time, and
- the same portion size is provided each time.

Menu planning can be more consistent because

- there is a predictable yield,
- costs are easier to control, and
- inventory is easier to control.

In addition, when the same good results can be produced time after time,

- food service workers have more confidence in what they are doing and need less supervision, and
- managers can be sure the nutrient analysis of a recipe is accurate as long as ingredients and preparation methods remain the same.

When you decide to modify a recipe, start by making 25 portions. In addition, do the following:

- Change only one ingredient at a time. Keep other ingredients the same as in the original recipe.
- Record clear descriptions of foods substituted in exact amounts.
- When increasing or decreasing an ingredient, do so in increments of 1/4 to 1/2 of the amount called for in the original recipe.
- Follow preparation instructions closely and record any changes you make.
- Do not make further changes or a larger batch until the first modifications have produced a high-quality product.

Once you have successfully prepared 25 portions of a recipe you are modifying, do the following:

- Set up taste panels to evaluate the product for appearance, consistency, texture, flavor, and overall acceptability.
- Reproduce 50 and 100 servings before increasing the recipe to the number needed for your meal service.
- Instruct food service personnel about how and why recipes have been modified.

Also, you should

- weigh the total volume of recipes at 50 and 100 servings and record the weight, and
- weigh each serving and record the weight.

The weight of the total recipe and the weight of each serving are important for nutrient analysis.

Recipe Standardization* After you have altered a recipe to your satisfaction, you need to standardize it. To adjust the yield of a USDA standardized recipe, use the following method.

*Adapted from *A Tool Kit for Healthy School Meals*, Team Nutrition, 1995.

Adjusting Recipe Yields

Step 1. Determine the total yield of the original recipe. To do this, multiply the original number of portions by the original portion size.

$$\frac{\text{_____}}{\text{(original number of portions)}} \times \frac{\text{_____}}{\text{(original portion size)}} = \frac{\text{_____}}{\text{(original yield)}}$$

Step 2. Determine the total new yield. Multiply the total number of portions you want by the desired portion size.

$$\frac{\text{_____}}{\text{(desired number of portions)}} \times \frac{\text{_____}}{\text{(desired portion size)}} = \frac{\text{_____}}{\text{(total new yield)}}$$

Step 3. Determine the multiplying factor. Divide the total new yield by the original total yield.

$$\frac{\text{_____}}{\text{(new yield)}} / \frac{\text{_____}}{\text{(original yield)}} = \frac{\text{_____}}{\text{(multiplying factor)}}$$

Step 4. Determine the new quantity of each ingredient. Multiply each ingredient by the multiplying factor.

$$\frac{\text{_____}}{\text{(multiplying factor)}} \times \frac{\text{_____}}{\text{(original quantity of each ingredient)}} = \frac{\text{_____}}{\text{(new quantity)}}$$

Use the new quantity for each ingredient when making the recipe with the new yield. The For ___ servings column in each *Eat Well & Keep Moving* recipe provides blank spaces for adjusting ingredient quantities when you change the yield of a recipe (see following examples).

Two Examples

Example 1: Reducing a Standardized Recipe

Using the recipe for chicken stir-fry with vegetables on brown rice (see Recipes folder on this CD-ROM), reduce the yield from 50 to 40 servings. The individual portion size will remain 1 cup. The following calculation uses chicken breasts as a sample ingredient. The original recipe calls for 9 pounds (4.5 kilograms) of chicken for 50 servings.

1. What is the total yield of the original recipe?

$$\frac{50}{\text{(original number of portions)}} \times \frac{1 \text{ cup}}{\text{(original portion size)}} = \frac{50 \text{ cups}}{\text{(original yield)}}$$

2. What is the total new yield?

$$\frac{40}{\text{(desired number of portions)}} \times \frac{1 \text{ cup}}{\text{(desired portion size)}} = \frac{40 \text{ cups}}{\text{(total new yield)}}$$

3. What is the multiplying factor?

$$\frac{40}{\text{(new yield)}} / \frac{50}{\text{(original yield)}} = \frac{0.80}{\text{(multiplying factor)}}$$

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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4. What is the quantity needed for 40 servings?

$$\frac{0.80}{\text{(multiplying factor)}} \times \frac{9 \text{ pounds chicken}}{\text{(original quantity of each ingredient)}} = \frac{7.2 \text{ pounds chicken}}{\text{(new quantity)}}$$

Use 7.2 pounds (3.6 kilograms) of chicken breast when making the recipe for 40 servings. Place this quantity in the For ___ servings column on the recipe (see example recipe in table 4.3). Adjust the other ingredients in the same way.

Certain foods will shrink or expand in weight during the cooking process. Beef shrinks 30% after cooking. Dry pasta doubles and sometimes triples in weight after cooking. Dry rice yields 2.45 times the amount used. Frozen vegetables shrink due to water loss.

► **TABLE 4.3 Chicken Stir-Fry Recipe Adjustment**

Chicken stir-fry with vegetables on brown rice						
VEGETABLES, MEAT				MAIN DISHES		
Ingredients	50 servings		100 servings		For 40 servings	Directions
	Weight	Measure	Weight	Measure		
Low-sodium soy sauce	4 oz. (120g)	1 cup	8 oz. (240g)	2 cup		<ol style="list-style-type: none"> Dissolve cornstarch in soy sauce. Add spices. Heat chicken stock to a boil and slowly stir in cornstarch mixture. Cook for 3 to 5 min., until thickened. Remove from heat. Prepare no more than 50 portions per batch. Sauté sliced carrots in oil for 4 min. Add onions; cook for 1 more min. Add broccoli, and cook for 2 more min. Remove to steam table pan. Keep warm. Sauté chicken in oil for 3 to 5 min. until no sign of pink remains. Add chicken to vegetables in steam table pan. Add sauce and mix to coat chicken and vegetables. Heat to serving temperature. Serve with 1/2 cup brown rice.
Cornstarch		3/4 cup, 2 tbsp.		1 3/4 cup		
Ground ginger		1/2 tsp.		1 tsp.		
Granulated garlic		3 tbsp.		6 tbsp.		
White pepper		2 tsp.		1 tbsp., 1 tsp.		
Low-sodium chicken stock, non-MSG		2 qt. (2 L)		1 gal. (8 L)		
Fresh mixed vegetables: broccoli, chopped	5 lb., 10 oz. (2.8 kg)	2 gal. (8 L)	11 lb., 4 oz. (5.6 kg)	4 gal. (16 L)		
Carrots, peeled and sliced (1/4" slices)	5 lb., 10 oz. (2.8 kg)	1 gal., 2 cups (8.5 L)	11 lb., 4 oz. (5.6 kg)	2 gal., 1 qt. (9 L)		
Onions, diced	1 lb., 4 oz. (620g)	1 qt. (1 L)	2 lb., 8 oz. (1.2 kg)	2 qt. (2 L)		
OR frozen mixed oriental vegetables	12 lb., 8 oz. (6.2 kg)	3 gal., 2 qt. (14 L)	25 lb. (12.5 kg)			
Vegetable oil		1/2 cup		1 cup		
Skinless, boneless chicken breasts (cut 2" x 2")	9 lb. (4.5 kg)		18 lb. (9 kg)		7.2 lb. (3.6 kg)	
Vegetable oil		1 cup		2 cup		
Serving: 1 cup Provides 2 oz. (60g) of meat and 5/8 cup of vegetables			Yield: 50 servings: about 23 lb. (12 kg) 100 servings: about 46 lb. (23 kg)			

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Example 2: Increasing a Standardized Recipe

Now, increase the recipe yield from 50 to 75 servings. The portion size remains 1 cup. Once again, use the chicken as a sample ingredient.

1. What is the total yield of the original recipe?

$$\frac{50}{\text{(original number of portions)}} \times \frac{1 \text{ cup}}{\text{(original portion size)}} = \frac{50 \text{ cups}}{\text{(original yield)}}$$

2. What is the total new yield?

$$\frac{75}{\text{(desired number of portions)}} \times \frac{1 \text{ cup}}{\text{(desired portion size)}} = \frac{75 \text{ cups}}{\text{(total new yield)}}$$

3. What is the multiplying factor?

$$\frac{75}{\text{(new yield)}} / \frac{50}{\text{(original yield)}} = \frac{1.5}{\text{(multiplying factor)}}$$

4. What is the quantity needed for 75 servings?

$$\frac{1.5}{\text{(multiplying factor)}} \times \frac{9 \text{ pounds chicken}}{\text{(original quantity of each ingredient)}} = \frac{13.5 \text{ pounds chicken}}{\text{(new quantity)}}$$

Use 13.5 pounds (6.8 kilograms) of chicken breast when making the recipe for 75 servings. Place this quantity in the For ____ servings column on the recipe. Adjust the other ingredients in the same way.

Working With Nonstandardized Recipes The total yield of each of the recipes in this packet has already been calculated and is indicated on the recipe. However, there may be times when you want to adjust the yield of recipes that are not standardized. In these instances, you may need to do some extra calculations. For example, in working with nonstandardized recipes, it's a good idea to confirm the total yield by adding the quantities of all the ingredients used. In addition, you may need to convert all of the quantities to ounces before you can calculate the total yield. For your convenience, please see the information in Additional Resources on the different kinds of basic cuts (Basic Cuts) and on the basic units of weights and measures (Weights and Measures) and their equivalents.

Developing an Eat Well & Keep Moving Menu

Now that you have modified your current menu and recipes, your final step in creating an *Eat Well & Keep Moving* menu is to add new food items or recipes. The Recipes folder of this CD-ROM contains several recipes that have been tested with students and food service managers in the pilot schools in Baltimore as well as new school food service recipes from the USDA. You may want to adopt the recipes exactly as they are, or you may want to modify them to better fit the tastes of your student population.

In deciding which items on the current menu you want to replace with new recipes, you should identify the food waste and preference patterns of the population you serve. You should also

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consider the production requirements, equipment, staffing, and costs of the food service department to ensure that new recipes can be feasibly prepared with available resources.

Food Waste Observations When students accept a food choice, their action indicates that the food is being consumed and that it is preferred to other items being served at that time. Nonetheless, determining if it was actually eaten usually requires looking at the food that remains on the plate. The foods most often wasted in the cafeteria predict those foods that need a recipe or menu item modification or replacement.

The Manager Identified Food Waste Checklist (see Food Waste) in Additional Resources is a starting point for planning a menu with preferred food. This checklist provides a quick estimate of which items students like and dislike. To corroborate the checklist findings, an actual plate waste study might be completed randomly at some point in the year.

Using a food waste checklist, food service managers in Baltimore identified vegetables as the most frequently wasted foods in their schools.

The following are the vegetable dishes wasted most often:

- ▶ Peas and carrots
- ▶ Cooked carrots
- ▶ Vegetarian beans
- ▶ Mexican corn

Food Acceptance Within a region, state, city, or district in the United States, there are various reasons to explain the types of food accepted by people. While humans require similar nutrients, the foods they select to provide these nutrients are often quite different.*

*Sanjur, D. (1982) *Social and cultural perspectives in nutrition*. Englewood Cliffs, NJ: Prentice Hall.

Factors Influencing What We Eat

Social and cultural: The effect of living together in communities and sharing ideas and methods related to food.

Economic: The money required to obtain food.

Political: The laws that govern the food.

Social, cultural, political, and economic factors largely influence what we eat. A knowledge of the foods generally eaten in the area you serve is invaluable in menu planning. Consider the following:

1. Note the foods that restaurants and fast-food chains serve.
2. Identify foods served in your region that may not be available in other areas. Are these foods well accepted or are they just tradition?
3. Talk with the kitchen managers and cooks to find out what types of foods they prepare for their families. In many cases the school staff is composed of parents, grandparents, and relatives of the students in your region.
4. Talk to students, and conduct surveys.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Production Values Your food preparation techniques must yield a product that has appeal. Food, especially unfamiliar items, must have a good appearance, smell, and taste. People, especially kids, eat with their eyes.

Eat Well & Keep Moving Menu Recipe Package Recipes and sample menus developed and modified for *Eat Well & Keep Moving* can be found in the Recipes folder on this CD-ROM. These recipes are adaptable to different regions of the country. You may want to prepare these recipes exactly as they are, or you may want to modify them to better fit the preferences of your customers (students, school staff, and parents).

Team Nutrition's Healthy Meals Resource System for Child Nutrition Professionals Web site also provides links to well-tested, healthful recipes for school food services: http://healthymeals.nal.usda.gov/nal_display/index.php?info_center=14&tax_level=1.

Your final *Eat Well & Keep Moving* menu and recipe package may look very different from what's included in this manual. Your menu will reflect the likes of your students and their cultural and environmental influences. The important point is that your school population is offered a healthful menu that meets the *Dietary Guidelines for Americans* and fulfills state, local, and federal food service requirements.

Implementing *Eat Well & Keep Moving* Menus

Now that you have planned a new *Eat Well & Keep Moving* menu, your next step is to implement your changes. Successful implementation involves a mix of training personnel and promoting healthy choices to students.

Training 1: Nutrition Education and Wellness Training

Back-to-school training is required for most school systems. There are state, local, and federal rules, regulations, and requirements that need to be followed. The food service training included with the *Eat Well & Keep Moving* CD-ROM comprises six modules that can be taught over several days or completed in a seminar format with the participants attending all the sessions in 1 day.

The six training modules provide a comprehensive overview of the latest topics in nutrition education as well as a detailed introduction to the *Eat Well & Keep Moving* program.

Module 1 provides an overview of the *Eat Well & Keep Moving* program. Module 2 introduces wellness and the concept of overall health and teaches staff members that personal wellness is important to promoting student wellness. Module 3 and module 4 focus on nutrition education, covering topics such as the *Dietary Guidelines for Americans*, the *Eat Well & Keep Moving* Principles of Healthy Living, and the Nutrition Facts food label. Module 5 and module 6 focus on the role of food services in *Eat Well & Keep Moving*, linking to the classroom lessons and school-wide promotional campaigns. Finally, there is a Lunch Break (Training 1) highlighting a number of *Eat Well & Keep Moving* food dishes.

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Promoting Eat Well & Keep Moving Menu Items: Linking the Cafeteria and the Classroom

Once the new menus are being used and *Eat Well & Keep Moving* lessons are being taught in the classroom, the two efforts can be linked to maximize the students' awareness of food and nutrition. In the cafeteria the students have an opportunity to utilize the information learned in the classroom. This is an exciting and unique aspect of *Eat Well & Keep Moving* because it reinforces nutrition lessons, provides information about the actual foods in the cafeteria, and gets students involved in learning about and trying healthy foods.

Promotions come in many forms: contests, bulletin boards, posters, announcements, and songs, to name a few. *Eat Well & Keep Moving* provides several promotional activities that not only advertise the new menu but also highlight nutrition messages for students, staff, and parents. The key to the success of these promotions is marketing; most people do not know much about the food service department. Try to identify someone on the staff who has strong marketing skills to take on the task of promotions marketing.

Eat Well & Keep Moving Promotional Days During the *Eat Well & Keep Moving* Promotional Days the entire school participates in *Eat Well & Keep Moving* activities. The focus of a given day is to promote a specific menu or food item as a healthy choice.

The Baltimore system chose each Friday to highlight the *Eat Well & Keep Moving* menu items. These *Eat Well & Keep Moving* days helped focus the promotional efforts of both the cafeteria and the classroom. For example, the cafeteria served an *Eat Well & Keep Moving* menu item, and the related Eat Well card was used in both the classroom and the cafeteria. When classroom activities and cafeteria promotions work together, students receive positive reinforcement in multiple areas to try the healthful food items offered on the school's menu. For your Promotional Days, pick the day of the week that works best for your system or school.

The following components make up the *Eat Well & Keep Moving* Promotional Day activities. While each is an effective promotional tool on its own, the components achieve the greatest effect when used in concert.

Eat Well Cards Eat Well cards serve as important links between the classroom and food services. Each card contains a mix of text and graphics that teachers can review with students in as little as 3 minutes. Although brief, Eat Well cards effectively reinforce the nutrition messages of the classroom lessons and excite students about healthful choices on the cafeteria lunch menus.

The cards present intriguing information that piques the interest of students. Students learn, for example, that the average American eats about 6 pounds (3 kilograms) of broccoli each year and that the peach is a symbol of life and renewal. You can also put this information on the menus.

With their direct relationship to the cafeteria, Eat Well cards play an integral part in both the *Eat Well & Keep Moving* Promotional Days and the Get 3 At School and 5+ A Day activity (described later).

For the *Eat Well & Keep Moving* Fridays in Baltimore, a healthful food dish was highlighted each week in both the cafeteria and the classroom. The dish was promoted to students in the cafeteria through table tents and posters in the early part of the week; on the Friday when it was prepared, teachers presented the appropriate Eat Well card (see figure 4.2) just before the students went to lunch. This two-way promotion motivated students to try the healthful Friday dish.

Eat Well cards can be used in a variety of ways in the cafeteria. Try them as table tents, posters on the serving line, or even place mats.

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Stir-Fry With Healthy Fat!

Stir-fry means to cook over high heat while briskly stirring the ingredients so that they cook evenly. Because the vegetables are cut into small pieces, they cook quickly, stay crisp and delicious, and retain most of their nutrients and fresh flavor.

Unlike foods fried in butter, which is high in saturated (unhealthy) fat, stir-fry dishes often have healthy fat, because they are often cooked in vegetable oil and sometimes with another liquids like chicken broth.



► FIGURE 4.2 Example Eat Well card—Stir-Fry With Healthy Fat!

There are several different Eat Well cards for certain menu items and food items (see table 4.4). Multiple cards are provided so that the same item may be promoted again during another rotation of the menu cycle.

Cafeteria Menu Board In Baltimore, the *Eat Well & Keep Moving* menu board was posted on the cafeteria line and helped promote the upcoming Friday special menu item to students. The board depicted two spotlights that focused on a featured item (see the menu board example in the Art folder). To achieve the greatest effect, post the featured item approximately 5 days before the scheduled promotional day. This allows students to read the information and anticipate what will happen on the day of the promotion.

Letter-size originals of the Menu Board (one for each weekday) and food items (Food Ovals) appear in Additional Resources. In the Baltimore pilot schools, the cafeterias hung laminated poster-size (approximately 3' × 4') enlargements of this board and used Velcro to hang the menu items. This made the board reusable. Whether a school system uses the enlarged version or the letter-size version depends on manager preference and resource availability. There is a small cost involved in creating the menu boards.

School Newsletter Articles Menu items can be promoted to parents and guardians through features in school newsletters, Web sites, and e-mails. In Baltimore, parent newsletter articles (see Parent Newsletter in Parent Newsletters folder on this CD-ROM) were written that discussed a specific menu item and provided a meal-size recipe of the dish. The articles gave parents a flavor of what their students were learning and eating in school, making important links among the cafeteria, the classroom, and the home.

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► **TABLE 4.4 Eat Well Cards***

Topic	Title
Chicken stir-fry and vegetables on brown rice	Stir Fry With Healthy Fat!
Chunky vegetable stew	What's the New Food? It's Chunky Vegetable Stew
Fruits and vegetables	To Nourish Your Body as Well as Your Soul . . . At Least 5+ A Day Should Be Your Goal
Low-fat milk	Calcium Is Right for Pearly Whites!
Oranges	Oranges for Each Day's Journey
Oranges	Punch Out Fruit Punch—Pick Whole Fruit
Oranges	Have You Ever Heard of Pineapple Oranges?
Pizza primavera	Have a Little Slice of Spring
Peach Salsa	What a Treat to Eat a Sweet Peach!
Peppers	Pick Peppers
Steamed broccoli	A Message From Bobby Broccoli
Sweet potatoes and orange juice	What's the New Food? It's Sweet Potatoes and Orange Juice
Sweet potatoes and orange juice	That's One Sweet Potato!
Vegetable chili	Cool Beans
Marinated black bean salad	Great Ways to Eat Beans
Hummus	
Tabbouleh	Bulgur Facts What's the New Food? Tabbouleh
Brown rice pilaf	The Power of Whole Grains
Whole wheat bread	Whole Wheat vs. White Bread
Whole wheat bread	Amber Waves of Grain

*Go to the Art folder to find these cards.

Other Classroom Activities Linking to the Cafeteria

In addition to the *Eat Well & Keep Moving* Promotional Day activities, there are four classroom promotions that are an integral part of the *Eat Well & Keep Moving* program. These promotions build on the classroom lessons and provide students with the opportunity to put their nutrition and physical activity knowledge into practice.

Freeze My TV During the Freeze My TV week the students keep track of and try to limit their television and other screen time. The Freeze My TV activity ties directly to classroom lessons 9 (fourth grade) and 21 (fifth grade). In addition to keeping track of their screen time pursuits (e.g., watching TV, playing video games, surfing the Web), students also create graphs, answer questions based on their graphs, and write entries each day in the Freeze My TV Journal (see lesson 27).

Watching television and playing video games are the main contributors to a sedentary lifestyle. Getting students to limit the amount of television they watch frees up more of their time for being physically active (such as riding their bikes or dancing) or working on more worthwhile projects (such as drawing or reading).

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

(continued)

The cafeteria manager can have the food service staff members go through their own Freeze My TV promotion. This will help the staff members understand what students are working on in class and will give them a chance to assess their own viewing practices.

Get 3 At School and 5+ A Day The Get 3 At School and 5+ A Day activity, found in lesson 28, has students put their knowledge of healthful eating into practice by having them try to consume at least 3 servings of fruits and vegetables while at school. This activity, which runs for a week at a time, has students track on a large class graph their at-school fruit and vegetable consumption. In addition to encouraging students to eat 3 servings of fruits and vegetables while at school, the promotion encourages students to eat 5 or more servings for the entire day. To help reach this goal, students take home materials that reinforce this message, such as tasty recipes for fruits and vegetables and the Go for 5+ Tracking Chart.

Food service staff members can also participate in Get 3 At School and 5+ A Day by tracking their fruit and vegetable consumption along with students and teachers.

Eat Well cards (discussed in table 4.4 in this manual) also motivate students to eat their fruits and vegetables during Get 3 At School and 5+ A Day. During the week of the Get 3 At School and 5+ A Day promotion, teachers are encouraged to review with students the Eat Well cards that address fruits and vegetables and the importance of eating 5 or more servings each day.

Cafeteria employees must know when their schools are running the Get 3 At School and 5+ A Day activity. This will help them plan promotions and menus for that week.

Schools may want to run the Get 3 At School and 5+ A Day activity 2 or 3 times each year.

Class Walking Clubs The class walking clubs run throughout the school year and arise directly from the classroom lessons on fitness walking. Classes are encouraged to chart walking routes around their school and to go on weekly (or more frequent) walks with their teacher (see lesson 29). To add interest to the club, classes are encouraged to pretend to walk across a part of the world. Each time they walk they can accrue a certain number of miles (for example, 100 miles, or 161 kilometers, for every 5 minutes walked or for every 500 steps on a pedometer) and mark their progress on a map. Classes can walk around the world, walk across America, walk across Africa, or even “walk” the circulatory system of the body.

As part of staff wellness, invite the food service staff members to form their own walking club or to participate in the class walking clubs (with the teacher’s permission).

Tour de Health Tour de Health turns the *Eat Well & Keep Moving* Principles of Healthy Living (Additional Resources) into a fun and edifying game. Played in groups or as an entire class, the Tour de Health can serve as a daily review for the classroom and physical education lessons as well as an occasional refresher of the *Eat Well & Keep Moving* messages. The game consists of game cards that ask questions related to the six healthy living messages covered throughout the *Eat Well & Keep Moving* lessons; students also get a Tour de Health scorecard (which emphasizes the healthy living messages) and an Answer Cube (see lesson 30). When students answer the nutrition and physical activity questions correctly, they receive points. The first student or group to reach 20 points (or the student or group with the highest point total) wins the game.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Staff Synergy

The links between the food service and the classroom components of *Eat Well & Keep Moving* are strengthened when the teachers and cafeteria employees work together to assure that all parts of the promotion are in place.

Refer to the sample Menu Confirmation Card (Menu Card) in Additional Resources to facilitate communication between teachers and cafeteria managers. This card was used in the Baltimore pilot schools to ensure that the *Eat Well & Keep Moving* menu items would be available in the cafeteria on the day of a food promotion. It is helpful if cafeteria managers provide classroom teachers with copies of the menu each month. Some teachers may want to discuss the nutrient information for the menu with their class.

Other ideas to link food services to nutrition education include the following:

Tour the kitchen. Invite students to see your kitchen in action from the loading dock to refrigeration. Show them the equipment and food.

Develop a menu. Have students develop a menu following the governmental guidelines and money and nutrition constraints. Food services will offer the menu in the cafeteria.

Make a pizza. Have students follow the federal guidelines and make a pizza they can eat; have them use whole wheat pizza dough or make the pizza on top of whole-grain pitas or English muffins.

Monitoring and Reevaluation

There are several ways to determine whether students are accepting cafeteria meals.

Participation Records

The best way to find out whether students are accepting the cafeteria meals is to monitor the garbage cans and to compile surveys of food waste (students can take food but do not always eat it). While there are many reasons why participation in the lunch or breakfast programs may fluctuate, it is important for food services to collect this information. Over time, it may be possible to draw conclusions about the food from these data. A charting process makes an interesting project that can be placed in the cafeteria and maintained by student helpers.

Student Lunch Surveys

The student lunch survey, found in Additional Resources (Student Survey), is a quick and easy tool to help determine food acceptance and consumption. This survey is administered in the classroom immediately after students return from lunch.

Other Monitoring and Reevaluation Methods

Here are additional ways to monitor the students' acceptance of the meals:

Go to student council meetings.

Survey the whole school (ask 10 questions such as "What are your three favorite meals?" and "What are your three least favorite?").

Form an advisory committee.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).

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Putting It All Together

See table 4.5 for a summary of food service menu planning.

► **TABLE 4.5 Putting It All Together**

Menu planning	What needs to happen	When to begin
School nutrition task force	Set up meeting to organize it; set up subsequent meetings	September; meets 4 times a year
Menu goals	Review and modify	Spring or summer
New menu items	Update and modify	Ongoing process
Training	Hold workshop and meetings	Late summer; continued monthly
Staff wellness and nutrition education	Conduct back-to-school training	August
Updates	Monitor reports and nutrition education	Quarterly
Promotion	Make use of promotion materials	Weekly
Monitoring	Review implementation and make changes	After each new change in the menu
Reevaluation	Implement	Month following each marking period

For a list of Web sites with school food service information and recipes, see Food Service in the Web Sites folder on this CD-ROM.

From L.W.Y. Cheung, H. Dart, S. Kalin, and S.L. Gortmaker, 2007, *Eat Well & Keep Moving*, 2nd ed. (Champaign, IL: Human Kinetics).