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THE NATIONAL SCHOOL LUNCH PROGRAM

by

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of

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In 1946, President Harry Truman signed the National School Lunch Act which recently celebrated its 50th anniversary (1). It was established by congress "to safeguard the health and well-being of the nation's children" (2). The National School Lunch Program (NSLP) is a federally assisted meal program that is functioning in more than 94,000 public and nonprofit private schools. Lunches through the NSLP are served to more than 25 million school children each day.

At the time that the school lunch program was established, the main nutritional concerns were that of nutrient deficiencies and under consumption (2). Because of these concerns, meal requirements for the NSLP were required to provide foods that meet approximately one third of the recommended dietary allowances (RDA). The meals served were to focus on certain amounts of foods, such as meat/meat alternatives, vegetables, fruits, bread/bread alternatives and milk instead of focusing on nutrient content of the meal served.

Today, the nutritional concerns of our country have moved away from deficiencies and focus more on over consumption. More and more evidence is supporting the fact that over consumption and diets high in fat, saturated fat, and sodium can contribute to many health problems and chronic diseases.

Many studies have shown that school meals do not meet the U.S. Dietary Guidelines (3). The School Nutrition Dietary Assessment Study (SNDAS), which took place in 1993, found that students eating school lunch received 38% of calories from fat, 15% of calories from saturated fat, and an average of 1500 mg of sodium which was nearly two times the NRC recommendation of 800 mg per lunch (4).

This study found that on an average, school lunches provide the program goal of at least one third of the RDA for most nutrients. As previously mentioned, the average amounts of total

fat and saturated fat as a percentage of calories exceeded the Dietary Guidelines' goals. The amount of sodium in lunches was also found to be excessive exceeding the National Research Council recommendations (5). The amount of cholesterol was within the recommended range.

With current knowledge of diet and health and after findings of the SNDA study, the USDA realized that school meals are not up to date with scientific knowledge about diet and that it was necessary that regulations needed to be updated. Before the Department made any decisions, they announced public hearings in which any person could speak. There was a total of 363 witnesses who testified at these meetings, as well as 2,013 written comments (2). The comments received and witnessed who testified were represented by: medical professionals, nutritionists or dietitians, public health, nutrition or food organizations (21%); the general public (21%); parents and students (21%); school food service personnel, school food service organizations and state education/child nutrition agencies (16%); and teachers, school officials and school associations (11%) (2).

The Department developed Guiding Principles and a Framework for Action to improve school meals, based on the testimony and written comments (2). The five principles are:

- **Healthy Children:** This is the ultimate goal of the reform of the NSLP. Children's health, prevention of disease, and meeting the Dietary Guidelines for Americans should be promoted through school meals.
- **Customer Appeal:** Children will not eat the food prepared if it does not look good or taste good. An effort must be made to emphasize good quality food to children, parents, and community.
- **Flexibility:** The USDA realizes that all schools are very different in regards to economic and regional differences. The approach to menu design must be flexible to allow schools

to meet Dietary Guidelines in their best possible way.

- Investing in People: The USDA needs to educate schools and food service workers with training, education, and technical assistance about nutrition which will further improve children's health.
- Building Partnerships: Partnerships need to be made throughout the private and public sectors to further improve the education and health of the nation's children.

Using these five principles, USDA developed an integrated framework for action:

- Eating For Health: Nutrition standards of school meals will be updated to meet the Dietary Guidelines for Americans.
- Making Food Choices: Nutrition education, training, and technical assistance are essential to provide knowledge and skills to help children make nutritious choices which lead to improved health. This training and education is also essential to the meal providers.
- Maximizing Resources: Getting the best value is important and can be achieved through partnerships with state and local cooperators. The USDA will also provide assistance to help in the training of school administrators to manage meal programs in a more cost-effective way.
- Managing for the Future: Minimization of paperwork and burdens of local administrators must be made by emphasizing flexibility so that managers can focus on nutrition.

In 1994, the Food and Consumer Service started the School Meals Initiative for Healthy Children, in an effort to improve the nutritional quality of the meals eaten in school. Since the school lunch program was established in 1946, this was the first major reform of the program. The goal of this initiative was to meet current regulations by adopting Dietary Guidelines for Americans in all schools.

In 1995, the U.S. Department of Agriculture and the U.S. Department of Health and Human Services came out with the fourth edition of Dietary Guidelines for Americans. These guidelines were designed to guide Americans on what they should eat to stay healthy (6). The dietary guidelines that are applicable to the school lunch program are:

- Choose a diet with plenty of grain products, vegetables, and fruits
- Choose a diet low in fat, saturated fat, and cholesterol
- Eat a variety of foods
- Choose a diet moderate in salt and sodium
- Choose a diet moderate in sugars

A study from the Journal of the American Dietetic Association in the September 1996 issue, sent a survey to food service directors of 1,063 public school districts (7). The survey contained questions regarding the implementation of the U.S. Dietary Guidelines into the school lunch programs. They found that there was a correlation found between district size and mean composite score. Those districts with less than 1,000 students scored lower than larger school districts (7). There seemed to be a lack of knowledge of Dietary Guidelines with some food service workers. The study reported that 76% of directors know of the Dietary Guidelines, but only 59% could name at least two. Some other data of interest from this study included: deep fat fryers were used in 90% of the school districts; only 3% of the districts offered whole-grain breads; and only 11% of districts served meatless meals (7).

The nutrition goals for USDA's School Meals Initiative are: 1. To meet one third of the RDA for lunch. 2. Have age appropriate calorie goals. 3. To comply with Dietary Guidelines for Americans (8).

Congress further supported USDA's School Meals Initiative by passing the Healthy Meals

for Healthy Americans Act. This act requires all school meals conform to the Dietary Guidelines by the school year 1996-97. Congress then passed the Healthy Meals for Children Act in May of 1996. This act allowed a more expanded form of menu planning options for schools as well as reinforcing the requirement that all school meals must meet the dietary guidelines.

With USDA's School Meals Initiative regulations schools have 3 major menu planning options to choose from. Meals for each menu planning option are measured for compliance by taking an average of the school week. This is considered five consecutive days. Production and menu records must also be kept in order to show that each school is complying with their individual menu planning system.

The first menu planning option is Food Based Menus. This option is an enhancement of the traditional meal pattern in which it required minimum quantities of four specific food components, meat/meat alternate, fruits/vegetables, grains/breads, and milk be offered to students at each meal. In the enhanced method calories are increased while proportionately decreasing the amount of calories from fat, by increasing the minimum serving sizes of fruits/vegetables and grains/breads. Students are still able to use the "offer vs. serve" option under the enhanced program. Under this plan, students must be offered all five required food items (two servings of vegetables/fruits). Senior high students can decline two of the five required food items. Students below the senior high level are allowed to decline one and sometimes two of the required food items. The food based menus require less training and have no need for hardware or software (team folder).

Another menu planning option which is a new plan is called NuMenus. This is different from Food Based Menus in that any foods in any quantities can be used to meet requirements of the nutrition goals rather than needing specific foods and specific quantities. NuMenus also will

have a nutrient analysis of the menus done by computer. The software must be approved by USDA. Recipes must all be standardized when using NuMenus. Milk is the only food component that is required to be served under this option. Again, the menus will be analyzed over a school week average but with NuMenus it uses a weighted nutrient analysis based on the projected servings of each menu item. Schools using the NuMenus plan are encouraged to display their nutrition information to increase support for school meals and to promote an increased awareness of specific kinds of nutrients in different kinds of foods. NuMenus also has an offer vs. serve program. Students must select at least two items with one being an entree. The school must have at least three menu items to serve. There is much more flexibility in the NuMenu option vs. the Food Based plan.

The third menu planning option is called Assisted NuMenus. This plan is very similar to NuMenus except for menus are developed by companies or individuals outside the school. This is usually because the school does not have the technical resources to analyze their menus. The outside groups develop cycle menus which must be approved by local and state agencies.

When schools comply with the regulations chosen for each planning system, USDA provides a cash reimbursement for each meal served. The current cash reimbursement rates are:

Paid meals: \$0.1775

Reduced-price meals: \$1.4375

Free meals: \$1.8375 (9).

In addition to reimbursements, schools also receive commodity foods at a value of 15 cents for each meal served. Examples of commodity foods include meats, shortening, peanut butter, flour, fresh, canned and frozen fruits and vegetables and other food products.

USDA and Food and Consumer Service have nutrient standards for school lunches for

calories, fat, saturated fat, protein, calcium, iron, vitamin A, and vitamin C. Table 1 (appendix A) shows the minimum requirements for nutrient and calorie levels for school lunch.

In 1993, The American Dietetic Association recommended to the USDA that school programs adopt recipes and prepared foods lower in fat and sodium than the recipes they were currently using (10). USDA then contracted with Pennsylvania State University to develop new USDA school recipes. There were 57 total recipes including breads, salads, salad dressings, soups, sauces, vegetables, main dishes and desserts (11). Borja et al had four of the low-fat dessert recipes developed by Pennsylvania State University tested for acceptability by children (11). The dessert items chosen for this study were chocolate cake, spice cake, oatmeal raisin cookies, and brownies. The results showed that there was no significant differences between the higher-fat recipes and the lower-fat recipes for chocolate cake, spice cake, and oatmeal raisin cookies. The children rated the lower-fat brownies better than the higher-fat brownies (11). These recipes were well accepted by the children in this study. These recipes are now given to schools by the USDA for their use. These recipes will help the schools to meet the goals of the dietary guidelines and at the same time provide students with popular desserts that are acceptable to them.

Under the Healthy Meals for Children Act, the health of school children is promoted by updating nutrition standards. State and local school districts are also given technical assistance and materials to meet the outlined standards.

Change is difficult in any setting and USDA realized that just giving policies and regulations would not accomplish this change in a smooth manner. So, USDA developed Team Nutrition, a program used nationwide to help implement the School Meals Initiative for Healthy Children. The mission of Team Nutrition is: To improve the health and education of children by

creating innovative public and private partnerships that promote food choices for a healthful diet through media, schools, families, and the community (12).

Team Nutrition is a program that teaches children the importance of making healthy food choices through public and private partnerships. Team Nutrition also help give school food service professionals the tools and skills they need to produce nutritious meals. Materials to show the nutrition regulation changes are developed by USDA's Food and Consumer Service and USDA's Cooperative State Research, Education, and Extension Service and other agencies to educate and make parents, educators, students, and food service professionals aware of the new policies.

Training and technical assistance are also given to schools through Team Nutrition. USDA developed a Team Nutrition Healthy School Meals training manual that is given to each school district. It contains detailed information about menu planning options, dietary guidelines, food procurement, standardized recipe techniques, nutrient databases and software, nutrient analysis, and marketing. There are also training videos on different ways of preparing more healthy school meals.

Team Nutrition has also made partnerships with the Walt Disney Company and with Scholastic, Inc. (12). Through the Disney partnership, healthy eating messages are able to be used on television as well as on posters featuring Disney characters. Scholastic and Team Nutrition work together to give nutrition information to children in school and also to their parents.

With more than 25 million children getting their lunch through the National School Lunch Program each day, it is important that they be served foods that promote the health of these children (1). Eating patterns are established while children are young and school lunch is one area

that can make an impact on the types of foods that children will choose to eat. The new regulations updated by the USDA mandates that school meals follow the US Dietary Guidelines for Americans which promotes healthy eating to improve health and avoid chronic diseases. The new regulations also aim at educating food service directors and personnel which should be a continuous process so that healthy meals and nutrition will continue to be served and encouraged to children.

Appendix A

CALORIE AND NUTRIENT LEVELS FOR SCHOOL LUNCH

	Grades	Grades
	K-6	7-12
Energy Allowances (calories)	664	825
Total Fat (As a percentage of total cal)	(1)	(1)
Total Saturated Fat	(2)	(2)
Protein (g)	10	16
Calcium (mg)	286	400
Iron (mg)	3.5	4.5
Vitamin A (RE)	224	300
Vitamin C (mg)	15	18

(1) Not to exceed 30% over a school week

(2) Not to exceed 10% over a school week

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