



School Meals: Building Blocks for Healthy Children Institute of Medicine

Goal: To develop recommendations to improve the National School Lunch and School Breakfast Programs to align them with the latest Dietary Guidelines for Americans and promote children's health.

Major Findings:

The Food and Nutrition Service should adopt standards for menu planning that increase the amounts of fruits, vegetables and whole grains; increase the focus on reducing the amounts of saturated fat and sodium provided; and set a minimum and maximum level of calories.

Increases Both the Amount and Variety of Fruits and Vegetables in School Meals

- Doubles the amount of fruit in breakfast by increasing the amount from 1/2 cup to 1 cup/day
- Doubles the amount of fruits and vegetables in lunch by increasing the amount from 1 cup fruit/vegetable combination to 1 cup of fruit and 1 cup of vegetables/day
- Recommends an increase in the variety of vegetables, emphasizing dark green and orange vegetables on the menu each week
- Recommends whole fruit at breakfast
- Requires both fruit and vegetables on the lunch menu
- Recommends that students be must select at least one fruit at breakfast and at least one fruit or vegetable at lunch
- For breakfast, the greatest change is the increase in fruit, which doubles from the current requirement. If all students take only one fruit or fruit juice, the amount of fruit provided would still increase significantly from current practice
- For lunch, the largest change is the increased offerings of fruits and vegetables, an increase of four half-cut servings per week
- Notes that salad bar programs in public schools indicate positive effects on fruit and vegetable consumption

Increasing Federal Reimbursement for School Meals

- Measures to help school food programs meet *Dietary Guidelines* will increase costs, and the need for administrative support. Largely because on increases in the recommended amounts of fruits, vegetables and whole grains, menu costs are expected to increase, especially at breakfast.
- At current reimbursement levels, most school food authorities will be unable to absorb these increased food costs completely, even with better management. However, some might be able to do so if they have the capability to use fewer highly processed foods. Implementation of the recommended Meal Requirements likely will require some combination of higher federal meal reimbursement, a source of capital investment to cover initial costs of equipment, and additional money to train operators to prepare more food from basic ingredients.
- The level of federal reimbursement for school meals needs to be sufficient to cover the cost of improvements in the meals such as increased amounts of fruits, vegetables, and whole grain-rich foods.
- The food costs for breakfast may increase 20-25% and for 4%-9% for lunch

Need for Cafeteria Equipment

- Improving the quality of school meals by adding more fruits and vegetables, etc. may call for additional equipment and kitchen and storeroom space in many food service operations. To handle additional menu items, serving lines may need more refrigerated units and utility carts and additional equipment such as refrigerators, steamers, and freezers would be required for food production
- The initial need for cafeteria equipment and/or training would add to program costs in some school settings
- A possible approach to offering school meals that meet the recommended standards for menu planning is to introduce more on-site food preparation. This approach requires greater managerial skill, often requires substantial one-time investment in equipment, and most often would require more skilled labor and/or training

Training for School Food Service Staff

- Adequate training for school food service staff is also essential to successful implementation. In addition to learning the procedures to prepare the menu items, food service staff will need experiences to help them accept the new meal patterns and must be willing and able to give positive comments about the foods as the students pass through the cafeteria serving areas

Nutrition Education

- Nutrition education can promote behavior change.
- Some promotion or education will be needed because the new recommendations increase the fruit and vegetable offerings, emphasize vegetable subgroups to be offered, require that a fruit or vegetable be selected by the student, and increase the use of whole grain-rich products
- The acceptance of foods may be improved when the foods are served repeatedly and when children see their friends eat them.