School Lunch and Nutrition Education

Some Questions and Answers

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Prepared by
Interdivisional Committee on Nutrition Education and School Lunch of the Office of Education
Under the direction of Edna P. Amidon, Chairman
Chief, Home Economics Education Service

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FEDERAL SECURITY AGENCY
Oscar R. Ewing, Administrator

Office of Education
Earl James McGrath, Commissioner
FOREWORD

INTEREST in the school lunch program and nutrition education has been growing throughout the Nation over a period of years, especially since the enactment of the National School Lunch Act in 1945.

School administrators, teachers, members of school boards, school lunch managers, parents, and others are asking the Office of Education pertinent questions about various phases of these programs. Some of them are working in schools that are considering, for the first time, the setting up of a school lunch program, whereas others are desirous of improving their present procedures.

The Interdivisional Committee on Nutrition Education and School Lunch of the Office of Education believed that a compact publication, answering those pertinent questions about school lunch and nutrition education, which are most frequently asked, would be helpful to the many people concerned. Such a publication would highlight the more detailed statements on these subjects.

Under the direction of Edna P. Amidon, chairman of the Interdivisional Committee, a subcommittee consisting of Helen K. Mackintosh, H. F. Kilander, and Erick L. Lindman has prepared this material. Other members of the Interdivisional Committee on Nutrition Education and School Lunch, as well as a number of persons outside the Office of Education, have made helpful suggestions to the subcommittee.

The publication answers briefly 21 questions which deal with the relation of the school lunch to nutrition education, health aspects of the school lunch, and certain administrative and financial matters.

It is hoped that this publication will serve as a helpful guide to those concerned with school lunch programs and nutrition education as they affect children and youth in the United States.

GALEN JONES,
Director, Division of Elementary and Secondary Schools.
NO PHASE of the school lunch program comes more directly from community initiative than the school lunch program. Long before State legislatures enacted laws pertaining to school lunches, parents, teachers, and other community leaders organized on a voluntary basis to provide hot meals for children at school. Recognition by State legislatures and the United States Congress came after the people in thousands of communities throughout the Nation had decided that their children should receive a nutritious lunch at school and had made some provision for it.

The extent of participation by the local public-school system at present ranges from granting permission to use a schoolroom in which to serve lunches to providing modern cafeteria facilities, employing cooks, dietitians, and other school lunch personnel, and accepting full responsibility for the operation of the school lunch program. In communities where the school system operates the lunch program, the extent to which tax funds are used to supplement receipts from the sale of lunches varies greatly from one school system to another, reflecting different concepts of public responsibility for the program.

In some communities the school lunch is regarded as a quasi public service in which the school accepts responsibility for management and for
custody of funds for a lunch program operated on a self-sustaining basis but accepts little responsibility beyond efficient discharge of managerial service. In other communities the school lunch is regarded as an essential part of the instructional program, through which (1) children may become more efficient learners by having a nutritious noonday meal, and (2) children may learn about nutrition and develop desirable eating habits. In such communities the partial support of the school lunch program from public educational funds is justified as a means of increasing educational opportunity and making educational programs more effective. In still other communities the school lunch is regarded as a means of achieving a broad social objective of improving the health of children.

The responsibility of the Office of Education, Federal Security Agency, to school lunch programs is the same as its responsibility to all other educational services and activities which are a part of the school system. It is an obligation of this office, in cooperation with State departments of education, to study and emphasize the program in its educational aspects—selection, preparation and serving of foods, consumer education, existing food patterns, integration with other educational activities, training and certification of managers and other school lunch workers, planning layouts and equipment for school lunch departments, and other related activities.

The Office of Education receives many inquiries concerning the school lunch and nutrition education. The following statements are based upon these inquiries. They are intended to give information about present practices and to suggest desirable policies for the school lunch program and for nutrition education.

1. To what extent are school lunches available in the United States?

Reports indicate that more communities each year are providing school lunch service. But there are still too many communities, perhaps half of them, where children must bring their lunches or buy them outside the school. Small schools, especially those in low economy areas, provide school lunch services less frequently than larger schools. Usually, when the cost of school lunches is high, a small proportion of children buy them. Of course, where convenience and custom permit all children to go home at noon, school lunch programs may not be needed.

2. What are the health implications of the school lunch program?

The school lunch contributes to the health of a child to the extent that it bridges the gap between what that child needs in his diet and what he obtains in his diet at home. Food at school and food at home should meet body needs for growth, vigor, and resistance. When children and youth do not have adequate diets, varying degrees of nutritional deficiencies may develop. Although some of these deficiencies may not be apparent, they are nevertheless real. Malnutrition may hinder school work because it may interfere with the child's ability to carry on normal activities.
3. What should be the relation of the school lunch program to the school health program?

The school lunch program should play an important role in the health education of the child. It should be a vital part of the school health services and of the nutrition education learned in the classroom. Recommendations from the school health service concerning the school lunch program are basic to a good program. The school lunchroom should be a laboratory for pupil experiences in nutrition, health, and related fields.

4. How can nutrition education experiences occurring in the classroom be related to the school lunch?

A sound program of health education includes nutrition education for all. The school lunch should be a laboratory for the total program of instruction in nutrition. It should afford the school child or youth the opportunity to apply, through choice of food or willingness to eat a complete lunch, what he has learned in nutrition education in the classroom.

The effectiveness of the nutrition education program is evidenced by the children's choices and acceptance of foods served in the school cafeteria and in the home.

In the elementary school the regular classroom teacher is in a strategic position to tie together nutrition education and school lunch practice. In the secondary school nutrition education occurring in courses such as health education, home economics, and biology should be related to the school lunch program.

Depending upon the age of the group, the teacher should discuss, simply and informally with the elementary children and more technically with high-school students, the total food needs for the day and those to be provided by the school lunch. When teachers and children know in advance what foods are to be served at school during a given day or week, class instruction can be related to this information in many situations. When such information is not available in advance, the nutrition instruction needs to be sufficiently broad to enable the children to exercise wise choice in selecting their own meals. In schools in which a single plate lunch is available, the classroom instruction can, on occasion, be used to show how well balanced such meals are. In this way greater acceptance of the plate lunch can be obtained where that plan is the policy of the school.

5. What education can be carried on during the school lunch period?

Teachers and school lunch managers can capitalize on the school lunch to provide a variety of learning experiences for children in nutrition, social behavior, and proper handling of food. When the children help in planning and preparing the lunch, there are valuable opportunities to discuss what constitutes a well-balanced meal and to practice making choices and giving reasons for them. In cafeterias permitting selection, guidance in choosing balanced diets is helpful. Children can be encouraged to taste new foods and become familiar with foods prepared in new ways.
There needs to be emphasis on social development as related to table manners and group behavior. Children learn together. Desirable learning takes place when there are good meal patterns and examples of good social behavior. In some schools teachers eat with pupils in order to help point up valuable learnings. In addition, ways should be found to stress sanitation and proper handling of food.

6. What should be the relationship of the school and the home in the school lunch program?

Since the responsibility for a child's nutrition and nutrition education is shared by the home and the school, close cooperation between the two is necessary if the child's needs are to be met. The importance of the child's lunch is seen in the fact that any child who receives lunch at school will have at least 5 meals out of 21 in every week in the school. If he eats a complete meal at school, it will represent approximately one-third of his daily food intake, and the 5 meals will represent about one-fourth of his total food intake for the week.

Effective classroom programs in nutrition education coupled with nutrition education through the school lunch should be favorably reflected in the food practices in the home. A child or youth who has learned what constitutes good nutrition will be more willing to eat balanced meals served at home. When the meals served at home are not satisfactory, it is also to be expected that the information and favorable attitudes developed in school will cause the child to wish to improve the meal planning in the home. Where parents are receptive to such information received from the children, worthwhile improvements can be brought about. When parents and teachers meet in community nutrition study, a good basis for home-school cooperation can be established.

It is important that parents should know the kinds and quantities of foods served in the school lunch—at least what types of meals are served—so that they can provide their children a balanced diet and avoid repetition of foods. Schools should be encouraged to work out plans for sending to parents copies of school lunch menus and recipes for dishes which children enjoy at school. However, school lunch people report that children stay away from the lunchroom on days when less popular foods are to be served. School people in each individual school will have to use their ingenuity to solve this problem. In small schools parents should be invited to participate from time to time in planning and serving food so that they may observe their own children's food habits and attitudes.

7. When should food be served at school during the day?

In providing food for children, schools should be guided by the needs of the group they serve. Length of time between meals should be an important factor in deciding whether to serve midmorning or midafternoon snacks. The desirability of serving milk in midmorning instead of with meals needs consideration.
Where children have an inadequate breakfast or a very early breakfast in order to reach school on time, food served before the beginning of the school day may be desirable. Food served toward the end of the afternoon session may be needed by children who have a long bus trip home. Whatever plan is adopted should not be inflexible, but should permit adaptation to meet individual problems and changing situations.

8. What part of the child’s food needs should be met by the school lunch program?

Authorities in nutrition generally suggest that approximately one-third of the day’s food needs should be supplied by the noon meal. This statement is made on the assumption that the other two meals are supplying their share of the day’s nutritional needs.

Studies of diets of school children show that many are not eating adequate amounts and varieties of foods in the other two meals. Therefore it may be desirable, in such instances, for the school lunch to supply more than one-third of the day’s needs in general, or in those nutrients most often lacking in the children’s regular diets. In any community youth, children and their parents, other adults, and the educational agencies, in addition to the schools, need to work together on ways to improve the food practices of all people of the community.

9. To what extent can the school lunch program be adapted to meet the special dietary needs of some children?

Sometimes there are children in school who require special diets which have been prescribed by doctors. When the special diets can be selected from the usual foods (assuming that there is the opportunity of choice), it is advisable that teachers and parents, in cooperation with the school health service, help the children to make the desired selections. In schools in which only a plate lunch is available, it not only will cost more but will be more difficult to provide for the extra foods needed for the special diets. Such a situation raises the question of the extent to which schools should undertake this phase of the program. A special plan of cooperation between the home and the school lunch personnel may be arranged. However, any plan for handling special diets usually entails added personnel and therefore added costs.

Supplementary feeding, provided in the middle of the morning, the middle of the afternoon, or both, has been instituted in some schools for children in primary grades and for those who are malnourished. Such additional feeding usually consists of milk, orange juice, fruit, or sandwiches. Objections to this practice have been raised by persons who believe that food served at midmorning interferes with the children’s appetites for the noon meal. The question must be decided in each individual school, and often in the classroom in terms of individual children. There is need for additional research on this problem, particularly regarding the time of serving as well as the quantity of food.
10. What are some of the ways in which children and youth can participate in planning for and contributing to the preparation and serving of school lunches?

There are many ways in which pupils can have valuable experiences in connection with the school lunch. What can be provided depends on the size of the school, the age of the pupils, and other factors in the organization and set-up of the school lunch. Some ways which are quite extensively used follow.

In many schools, pupils help to plan and raise a school garden which contributes to the school lunch. In schools where all food is purchased, pupils in a committee or in a study group may make a survey of the food choices made in the school lunch and determine how such choices are influenced by the ways in which food is prepared, by family and community habits, and in other ways. They may also measure food waste, determine the causes, and discuss these problems with all groups who participate in the school lunch. Home economics students may have experience with quantity food preparation. Pupils may help in setting up tables and chairs, in serving, in clearing away dishes, and in cleaning up the lunchroom. Responsibility for such work should be rotated so as to give as many pupils as possible the opportunity of participating. Teachers and children should recognize the difference between educational activities and "chores," realizing that chores are a part of everyday living.

11. What should be the policy in regard to the school lunch program in communities where some parents want their children to come home for lunch at noon?

The school has a twofold interest in relation to lunches: (1) To see to it that every child has the best possible lunch every day, and (2) to be sure that he learns desirable food habits through practice in choosing food or by eating a plate lunch that provides a well-balanced meal. It may be possible for the home to meet both these needs adequately. However, if a child does not get a good lunch because his parents are not at home, this problem may become the legitimate concern of the school. If the child's nutrition education is neglected or distorted by the home, this also may become the concern of the school. Each school must develop its own policy with regard to children going home or staying at school for lunch at noon, based upon the needs of its children as individuals and in groups, and with parents participating in the decision. The areas of nutrition and well-being are so closely related to family customs that the school must work in close cooperation with mothers and fathers on these problems.

12. How does the teacher in small schools carry on a school lunch program?

The teacher in the small school has a better opportunity than the teacher in the larger school to relate the school lunch closely with other activities...
of the school. To make the most of this relationship calls for resourcefulness on the teacher's part and more participation and cooperation on the part of pupils and parents. One hot dish may be prepared that will supplement the lunch brought from home. Plans may be made for starting by serving one hot dish; then through talking with pupils and parents the teacher can learn what they are able to bring to school to supplement it and what other dishes may be prepared from food supplies contributed by the families of the children. The teacher will work out with the pupils the planning; the budgeting; the assigning of responsibilities; the purchasing, the preparing, and serving of foods; the making and using of place mats; the arranging of tables and chairs; the cleaning up; and the evaluating of the activity. As children eat together informally, discussion of food likes and dislikes may go on together with other conversation and may be used as a basis for further discussions of good nutrition.

13. Under what conditions should the school lunch be served and what are some suggestions for making this arrangement satisfactory?

In one-room schools the classroom must serve all purposes, including that of the school dining room. In larger schools with no special room in which to seat children for lunch, lunch carts can be used to distribute food to the classrooms, and the children can take the responsibility for arranging the furniture, doing the serving, and cleaning up afterwards. In situations in which young children are to be served in their classrooms, older children can help the teacher do the necessary jobs which young children cannot do. The older children can be helped to see that they are performing a school-community service. Teachers who have the responsibility for handling the school lunch in their classrooms as a part of their regular duties should be given a break during their day in school. At least, a teacher should know at the time she is employed that she will have some school lunch responsibilities.

14. What should be the responsibility of the school in the management and supervision of the school lunch program?

The school lunch program is a part of the total school program, whether in city, county, or one-room school, and it should be administered under the direction of the superintendent of schools. If the school board contracts with a concessionaire for the operation of the school lunch, there should be necessary provisions to insure the serving of nutritious meals, reasonably priced.

In large schools it is necessary to employ specialized school lunch personnel. In small schools in which the employment of specialized professional personnel is not practicable, the responsibility should be shared among the various school departments. The home economics teacher or the teacher best suited to the job may be responsible for planning menus and possibly for general supervision of the program. Other school depart-
ments should make the kind of contribution they are qualified to make. For example, the commercial department may well supervise the work at the cash register, keep the financial records, and make the deposits. The art department can contribute by helping to make the dining room attractive and by making necessary signs. Still other staff members will eat with the children. In some schools upper-grade or older pupils may take some special responsibilities. An active school lunch committee representing staff, parents, and students is an asset to any school lunch program.

15. How should school lunch personnel be selected and trained?

The educational authorities should be responsible for the selection of the school lunch manager and other personnel. The school lunch manager is responsible for achieving a program (1) which is an integral part of the school's curriculum and health services; and (2) which operates efficiently to provide an adequate and nutritious lunch under sanitary, attractive, and friendly conditions and at the lowest possible cost. The manager must also be able to train and supervise the other school lunch personnel that she has helped to select. With these responsibilities, the manager must have an understanding of nutrition, of food buying, and of food preparation. She should also have the ability to work with all other personnel in the school.

The size of the program determines the kind of school lunch manager to be employed. For a large school lunch program in a school system or in an individual school, the manager should have completed a 4-year college curriculum with emphasis on food, health and nutrition, quantity food preparation, and school lunch management.

If it is financially impracticable to employ a full-time school lunch manager, an appropriately trained graduate of a vocational high school or technical institute may function satisfactorily as a cook-manager: (1) Under the supervision of a qualified State, district, city, or county school lunch supervisor; (2) under the direction of the home economics teacher whose schedule allows for this; or (3) under the principal of the school in which there is no one with professional training in school lunch management. Necessary additional training should be given to such cook-managers through in-service training programs, workshops, or similar type of training experience, directed by supervisors who are well trained in quantity food methods and lunchroom management.

In small schools in which the home economics or other teachers have general supervision of the school lunch program, the qualifications of such a teacher should include preparation for this assignment, and it should be recognized in her schedule.

16. How should standards of sanitation for the school lunch program be developed and maintained?

Standards of sanitation should first of all meet the State and local public health requirements. These are ordinarily minimum requirements. There
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fore, it may be desirable for the school authorities, working with the school health services where available, to set higher and more detailed standards in these matters. Such regulations should apply both to the physical environment and to the food handlers. Close cooperation of the school lunch personnel and the school administration with the local health department authorities is necessary in order to maintain such standards.

17. What are suggested policies concerning the sale of candy and soft drinks in schools?

Authoritative statements concerning this matter have come from the Council on Food and Nutrition of the American Medical Association and from other responsible groups.

The Council on Foods and Nutrition of the American Medical Association has stated:

It is obvious that a school lunch suffers gross deterioration when the beverage chosen in place of milk is a solution of sugar in flavored water. It also is generally conceded that excessive sugar eaten between meals, or sugar eaten in smaller amounts within an hour of the regular mealtime, impairs the appetite for foods at meals.\(^1\)

The council has also stated:

The council believes that one of the valuable functions of a school lunch program is to provide training in sound food habits. Of considerable significance in the adoption of such a program is the sale of food, confections or drinks on the school premises; opportunities to purchase food and drink at nonlunchroom concessions bear directly on the food habits established in the child. School children generally have a limited sum of money for the purchase of their daily lunch. If a portion of this money is spent on substances of limited nutritional value, the value of the lunch which a child may obtain with the remaining money obviously is reduced. The availability of carbonated beverages on school premises may induce a child to spend lunch money for these and allow him to develop poor dietary habits. This is especially true for the younger children. Expenditure for carbonated beverages yields a nutritional return much inferior to that from a similar sum spent for milk or other staple foodstuff. Furthermore, when given a choice between carbonated beverages and milk to accompany a meal, a child may frequently choose the less nutritious beverage. In view of facts, the Council believes that carbonated beverages should not be sold on school premises.\(^2\)

The council further believes:

- It would be in the interest of the public health for all practical means to be taken to limit consumption of sugar in any form in which it fails to be combined with significant proportions of other foods of high nutritive quality.\(^3\)

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\(^1\) Some Nutritional Aspects of Sugar, Candy and Sweetened Carbonated Beverages. The Journal of the American Medical Association, November 7, 1942.


\(^3\) Some Nutritional Aspects of Sugar, Candy and Sweetened Carbonated Beverages. The Journal of the American Medical Association, November 7, 1942.
The Food and Nutrition Board of the National Research Council has taken the position\(^3\) that:

- very considerable reduction of sugar in products which carry no other nutrients in considerable amounts, such as candy and soft drinks, would certainly not be deleterious to the nutrition of the public.

The American Dental Association reports\(^4\) that sugar affects the teeth adversely by increasing the incidence of caries.

18. How are school lunch programs financed?

There are five principal sources of school lunch funds: (1) Local tax funds, (2) State aid, (3) Federal assistance through the Department of Agriculture, (4) receipts from sale of lunches, and (5) donations from local groups. In addition to these funds, a substantial additional aid is provided through donations of agricultural commodities and other foods purchased by the Department of Agriculture in connection with the farm price support program. State aid earmarked for school lunches is provided in some States. Many school boards limit the contribution from school district general funds to provision of equipment and personnel, since the cost of food is generally paid from receipts from sales of lunches and funds from the Federal Government. Many school lunch programs are operated without Federal assistance.

19. How are Federal funds made available to the States for school lunch purposes?

On the Federal level it is basically the responsibility of the Department of Agriculture to administer the National School Lunch Act and to distribute expeditiously such abundant and other agricultural commodities as may become available from time to time. In fulfilling this responsibility, the Department of Agriculture is required to work through State departments of education—with a view to making Federal school lunch funds available in schools where they are most needed. This provision also aims at insuring maximum educational values from school lunch programs.

20. To what extent are school lunches served free or at low cost?

The general practice is to charge pupils for their lunch at school but with such charges fixed on a nonprofit basis. However, partial support for the program from taxation or donations frequently permits the price of the lunch to be substantially below its actual cost. This reduced cost makes it possible for more children to buy the lunch.

21. What can be done about children unable to pay for their lunches?

Most schools have made some plan through which children unable to pay the full cost receive their lunches free or at little cost without having attention called to the fact that they have so received them. Hungry children learn with difficulty. No child should go without lunch because

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\(^4\) American Dental Association. Dental Caries, 2d. ed. 1940.
he cannot pay for it. The administrative difficulties and the cost are more than offset by the gains in the health and learning ability of such children when an adequate lunch is made available to them. Schools receiving Federal funds under the National School Lunch Act agree to serve free those children who are unable to pay for the lunch.

SOME SUGGESTED REFERENCES


Gives information on planning, preparing, buying, and storing foods for families with adolescent and younger children.


Offers suggestions for food planning for a family of four with preschool children and for food for mothers during pregnancy and while nursing the baby.


Deals with buying, storing, and preparing food, and gives suggestions on the formation of good feeding habits as well as other aspects of the group care program.


Leaflet giving basic information about food needs for children.


Lists the goals as expressed in terms of attitudes and understandings which are desirable for various age groups from kindergarten through grade 12.


Suggests ways of establishing good habits of food selection through the school lunch as provided in the school cafeteria or lunchroom, and through the noon lunch when teacher and pupils prepare a supplementary dish, and the packed lunch. Attention is given also to evaluating the educational aspects of the school lunch program.


A fact sheet.


Suggests ways of making nutrition education in the elementary school more effective.


Considers the nutritional needs of individuals, nutrition instruction, the school lunch, the home packed lunch, and supplemental feeding.
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Gives the amounts of 10 nutrients needed by individuals of differing age, sex, and physical activity.

Children's Bureau Publication No. 270.
Deals with a child's nutritional needs at various stages of life.

Indicates how the school lunch can be made a part of the school program and gives some illustrations of functioning school lunch organizations.

Yardstick for School Lunches. PA-50. Prepared by the Interagency Committee on School Lunches. Washington, D. C., Production and Marketing Administration, revised 1948. 30 p. Free. (Also available from your State school lunch agency.)
Gives guidance in evaluating a school lunch program, including appraisal forms.