133473 1920

The Commonwealth of Massachusetts DEPARTMENT OF PUBLIC HEALTH

THE SCHOOL LUNCH





REPRINTED FROM THE COMMONHEALTH, Vol. 7, No. 1, 1920.

LIBRARY OF CONGRESS

FEB 281921
DOCUMENTS DIVISION



PUBLICATION OF THIS DOCUMENT
APPROVED BY THE
SUPERVISOR OF ADMINISTRATION.

133

THE SCHOOL LUNCH.

By Alzira Wentworth Sandwall, S.B., Health Instructor on Foods, Department of Public Health.

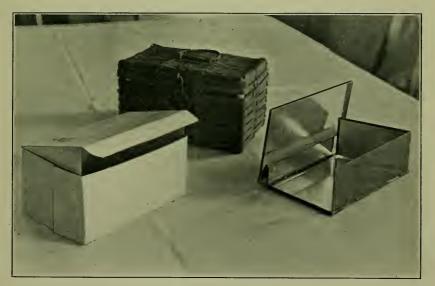
PRACTICALLY one hundred and eighty days each year hundreds of school children in Massachusetts leave home early in the morning carrying their luncheons under their arms. Most of these children have had an early breakfast, some a very inadequate one, and a great many none at all. Is it not, therefore, most important that the luncheon they carry, which is to help build their bodies and provide for their activity, should contain the right kind of food?

Too often it is hastily prepared and hurriedly eaten, cold, with little or no supervision, and does not furnish the best foundation for successful work, nor contain proper nourishment for the development of strong bodies.

A poorly nourished child cannot grow into a physically strong man or woman, nor can be develop mentally as he should.

THE CONTAINER.

A wise choice of the box itself and its accessories is important. The container should always be one that is convenient to carry, can be thoroughly cleaned and allows for ventilation.



Different types of lunch boxes.

Types of Containers.

The collapsible tin box, which can be obtained at the large department stores for 50 cents and folded when empty, affords one of the best containers. It is easily cleaned and provides for the necessary ventilation. If such a box cannot be secured, a square tin cracker box, or a small tin pail with holes punched in each side for ventilation, is convenient. A basket is very satisfactory; a covered one can be secured also for 50 cents. A basket should be lined with paraffin paper to prevent the food from drying in warm weather and to keep it dry in damp weather. The paper box, which is often used, absorbs odors quickly, and should be discarded after a few days' service.

PACKING THE LUNCHEON.

The luncheon should be carefully packed so that it will be tempting and palatable when the box is opened. Each article of food should be



Preparing accessories the night before.

separately wrapped, and all heavy articles should be packed in the bottom of the box.

The child can be taught to unpack and air the lunch box as soon as he returns from school, and to arrange it, as far as possible for the next morning by cutting the paraffin paper in convenient pieces, gathering together the paper napkins, cups and other equipment, wrapping the fruit, or filling the little jar with the canned fruit, etc. This will do away with much of the last-minute hurry and confusion in the morning.

Accessories.

The following accessories simplify the successful packing of the luncheon: —

- 1. A good supply of paraffin paper for wrapping food.
- 2. Paper napkins, one of which may be spread on the desk for a table cloth.
- 3. Paper cups and small paper containers for drinking purposes and to hold cooked foods.
- 4. Small knife, fork and spoon.
- 5. Small screw-top jar or bottle for milk or desserts.
 - (a) The half-pint Thermos bottle which can be obtained for \$2.50 is the most satisfactory container for the drink. It keeps the drink hot in winter and cold in summer.
 - (b) The bottle in which citrate of magnesia is sold (30 cents) makes an excellent container for drinks. It is so made that there is no danger from leakage.
- 6. Small, light-weight custard cup.

MENU FOR LUNCH.

In planning the basket luncheon the same rules should be followed as in planning other meals. Food should be provided to build and repair the body tissues, to give energy, to regulate the body processes, and to maintain health and promote growth. For convenience, the food may be grouped as follows:—

- 1. Protein or tissue-building food.
 - (a) Animal kingdom.

Lean meats.

Poultry.

Fish.

Milk.

Cheese.

Eggs.

(b) Vegetable kingdom.

Peas.

Beans.

Lentils.

Cereals.

Nuts.

- 2. Carbohydrates, heat and energy forming.
 - (a) Foods providing starch.

Potatoes.

Rice.

Hominy.

Cereals and their products, such as breads, macaroni and spaghetti.

(b) Foods providing sugars.

Sugars.

Syrups.

Honey.

Molasses.

Jellies.

Fruits.

Some vegetables, such as carrots, beets, parsnips, etc.

3. Fat and oils, heat and energy forming.

Butter.

Salt Pork.

Cream.

Oleomargarine.

Olive oil.
Bacon.

Peanut butter. Nut margarine.

Other edible fats and oils.

- 4. Mineral matter and water build bones and teeth and purify blood; regulate body processes.
 - (a) Mineral matter.

Vegetables, especially the green vegetables.

Fruits, both fresh and dried.

Milk.

Eggs.

Cereals.

(b) Water.

Water purifies body, regulates body temperature, and is needed in every cell and tissue of body.

5. Foods providing certain dietary essentials or vitamines.

Milk.

Eggs.

Fruits.

Vegetables, especially the leaf vegetables, such as spinach, celery, cabbage, onions, cauliflower.

6. Food providing bulk or cellulose helps to prevent constipation and aids in digestion.

Fruits.

Vegetables.

Cereals and coarse breads.

Some food from each group should find its place in the school lunch box.

The menu must necessarily be restricted, and generally resolves itself into sandwiches, fruit and a dessert, which should be simple in character and easily digested. Whenever possible, some surprise should be packed in the luncheon. This will give a pleasant anticipation for the luncheon, and create a happy atmosphere which will make for good digestion.

Since sandwiches form the most substantial part of the box luncheon, the bread must be of the best quality. It should be at least a day old, and the butter for spreading should be softened by creaming.

To avoid monotony, sandwiches should be varied often. This can be done by using different kinds of filling and by varying the kinds of bread used.

Raisin bread, nut bread, brown bread, the various kinds of dark breads, rolls, baking powder biscuits, muffins and corn bread may all be used to advantage.

Rolls hollowed out and filled with chopped meats or salads are especially tasty. Cutting the bread into different shapes often tempts the appetite, and makes acceptable something that otherwise might not meet with favor.

Pickles, olives, pimentos and condiments should be used in sandwiches for older children only.

Raisin or nut breads make good sandwiches when spread only with butter. These breads are also well liked when spread with brown sugar or honey. The following list of sandwich fillings may prove helpful.

Sandwich Fillings.

Meat.

Minced ham and tongue.

Minced ham and egg.

Minced corn beef.

Minced meat with celery or pickles.

Sliced meats.

Note. — Mustard, onion, Worcestershire sauce, tomato sauce and celery salt are good seasonings for meat sandwiches.

Fish.

Minced sardines with egg yolks.

Minced sardines with pickles (chopped).

Minced salmon with celery or parsley.

Minced tuna with celery or parsley.

Minced halibut with salad dressing.

Minced fish with chopped pepper.

Note. — Lemon juice, celery salt or chopped celery are good seasonings for fish sandwiches.

Cheese.

Creamed cheese for brown bread sandwiches.

Creamed cheese and raspberry jam.

Creamed cheese and jelly.

Creamed cheese and olives.

Creamed cheese and nuts.

Creamed cheese and green pepper.

Creamed cheese and pimento.

Creamed cheese and minced beets.

Note. — Cheese used may be cottage cheese, cream cheese or grated and creamed American cheese.



Packing the luncheon.

Lettuce.

Lettuce with salad dressing.
Lettuce with chopped nuts and salad dressing.
Lettuce with chopped olives.
Lettuce with minced sardines.

Sweet Sandwiches,

Stewed prunes with chopped nuts. Plain jelly or jam or marmalade. Chopped dried fruits stewed until soft. Chopped dried fruits with nuts. Chopped dates with ginger. Honey.

Egg.

Minced egg.
Minced egg with chopped pickles or olives.
Minced egg with spinach.
Minced egg with chopped celery.

Note. — Stuffed eggs or cold boiled egg with plain bread and butter sandwiches make a good combination.

Miscellaneous.

Peanut butter.
Chopped apple, nut and celery.
Baked beans.

Note. — When nuts are used they should be finely ground.

Fruits.

Fruits are welcomed with the dry sandwich, and their use is a most palatable method of introducing minerals into the diet. They are valuable, also, for their acids and indigestible fiber, which acts as a laxative. The dried fruits, canned fruits and sweet fruits are useful agents for supplying sugar in an easily digested form. The fruits divide themselves into three groups, as follows:—

- 1. Dried fruits such as dates, figs and raisins.
- 2. Fresh fruits of all kinds.
- 3. Canned fruits or stewed fruits.

Fruits should be selected that will contrast with the sandwiches to be used. All fresh or dried fruits should be thoroughly washed and dried.

Desserts Other than Fruits.

The child always delights in a sweet of some kind, and as it supplies him with material for energy, it has a real place in the diet. Care must be used in the selection of the sweet. It should be simple in character and easy to digest, and should always be eaten at the end of a meal.

Such sweets are simple cookies, plain unfrosted cake, sponge cake,

gingerbread or custard. Pies, rich cakes, doughnuts or oversweet desserts should be avoided. Simple candies or sweet chocolate may be given occasionally.

Dessert may form Main Part of Luncheon.

Two or three times a week it is wise to have the dessert form the main part of the luncheon, and in place of the simple cake, cooky or fruit, use one of the protein-rich desserts, such as custards, cornstarch, cereal, rice or tapioca pudding. When these desserts are chosen the sandwiches should, of course, be simple in character.

Liquid or Drink.

The luncheon is not complete without a drink of some kind. This may be pure water, milk, cocoa or a fruit drink, but never tea or coffee. When milk is carried in the summer, some arrangement should be made to keep it cold. The children should be encouraged to bring milk, or cocoa made with milk.

HOT LUNCHEON PLAN.

At best, however, the box luncheon must be regarded as a makeshift, and where there can be no regular school luncheon, it is often possible to make arrangements to have one hot dish prepared at school to supplement the regular luncheon.

Wherever a hot dish has been served at noon the physical condition of the children has improved and a higher grade of scholarship has been attained.

Advantage of the Hot Luncheon Plan.

- 1. Improved physical condition of pupils.
- 2. Improved power for learning.
- 3. Makes discipline in the afternoon much easier. (Restlessness, irritability, "nerves," etc., are often the result of faulty nutrition.)
 - 4. Does away with the hurried, haphazard method of eating.
- 5. Gives an opportunity to teach habits of cleanliness, good table manners, and proper eating habits.
- 6. Tends to draw the pupils and teacher together socially. Current events can be discussed and helpful conversation can be encouraged.
- 7. An opportunity is provided for the teacher to interest the pupils in food values and to inculcate a proper appreciation of food, especially when they help in its preparation.

Miss Alta Emerson tells us in her report of the William Whiting Canteen in Holyoke, which supplied soup for ten schools, that there was marked improvement in the physical condition of the children, and that "tangible results were seen in the quality of the work done by the children. In three instances children who were doing poor work in school improved rapidly after they began to take the soup, and these children attained a record of 100 per cent in their grade. One girl in the third grade was especially anemic, and was in the habit of falling asleep every afternoon. She became a regular patron of the canteen, and after two weeks she ceased to fall asleep. She was thought to be mentally deficient until the advent of the canteen, when she began to receive 100 per cent in some of her work."

Suggestions for the Hot Dish.

When the hot dish is to be prepared by the pupils and teachers, and is to supplement the box luncheon, it is well to serve only one hot dish, which should be varied daily, and be nourishing but simple in character and easy to prepare. Such dishes might include the following:—

- 1. Cocoa.
- 2. Cream of vegetable soups.
- 3. Dried vegetable soups.
- 4. Chowders.
- 5. Creamed dishes.
- 6. Scalloped dishes.

Table of Measurements.

- 3 teaspoonfuls (t) = 1 tablespoonful.
- 16 tablespoonfuls (T) = 1 cup.
- 2 cups (c) = 1 pint.
- 2 pints (pt.) = 1 quart.
- 4 quarts (qt.) = 1 gallon (gal.).

EQUIPMENT.

The list of equipment given below is a typical list which must be modified to fit the need of each school:—

- 1 kitchen table.
- 1 high stool.
- 1 blue flame oil stove, 3 to 4 holes (or electric plate).
- 1 oven.
- 3 enamel kettles (10, 8 and 6 quart sizes).
- 2 4-quart double boilers.
- 1 1-quart double boiler.
- 2 enamel sauce pans and cover (1 and 2 quart sizes).
- 2 earthen mixing bowls (4 and 6 quart sizes).



Corner of dressing room utilized for cooking equipment, Foxborough rural school.

- 3 earthen bowls (1 quart size).
- 2 earthen baking dishes (1 and 2 quart sizes).
- 6 tablespoons.
- 6 teaspoons.
- 1 long-handled cooking spoon.
- 2 steel case knives.
- 2 steel forks.
- 2 paring knives.
- 2 butcher knives.
- 2 salt and pepper shakers.
- 1 glass measuring cup.
- 1 tin measuring cup.
- 2 white enamel pitchers (1 quart size).
- 6 glass jars (1 quart size).
- 1 meat chopper.
- 6 2-quart glass jars.
- $2\ \mathrm{dozen}$ jelly glasses with covers.
- 1 enamel dish pan.
- 1 enamel rinsing pan.
- 1 butter jar (earthen).
- 1 egg beater.
- 1 flat grater.
- 1 bread tin.

1 flour sieve.

1 galvanized pail.

1 mop.

Dish cloths and towels.

INDIVIDUAL EQUIPMENT.

 1 soup bowl.
 1 cup.

 1 plate.
 1 spoon.

 1 knife.
 1 fork.

In some schools the children bring their own individual equipment, but if possible, and there is sufficient storeroom at the school, it is best to have this supplied by the school, that it may be uniform.

RECIPES.

Cocoa. (Will serve Twelve.)

9 T cocoa. 3 c boiling water. 12 T sugar. 9 c scalded milk.

Scald milk in double boiler. Put sugar and cocoa in same pan, and slowly pour on the hot water, stirring constantly. Boil five minutes and add scalded milk. Beat with egg beater and serve.

White Sauce.

White sauce is the foundation of all cream soups, creamed vegetables and scalloped dishes, and is composed of a liquid, fat and a thickening agent which is usually flour.

White Sauce No. 1.

1 to $1\frac{1}{4}$ T butter. 1 c liquid. 1 to $1\frac{1}{4}$ T flour. Seasoning.

Note. — This is a thin sauce, and is used for creamed toast, cream potato soups and creamed starchy vegetables.

White Sauce No. 2.

2 T flour.

2 T butter.

1 c milk.

Note. — Medium sauce used for cream soups, creamed vegetables and scalloped dishes.

White Sauce No. 3.

3 T flour.

3 T butter.

1 c milk.

Note. — Thick sauce used for croquettes.

Methods of Making.

- No. 1. Melt butter in double boiler, add flour, stir until smooth and add liquid gradually, stirring constantly until smooth. Cook at least twenty minutes over hot water.
- No. 2. Scald milk in double boiler, leaving out $\frac{1}{4}$ c. Mix flour and cold milk to a smooth paste and pour gradually into hot milk, stirring constantly until thick and smooth to prevent lumping. Allow it to cook for at least twenty minutes.

Cream of Vegetable Soups. (All Vegetables may be used.)

Make White Sauce No. 1 and add cooked and mashed vegetable pulp and seasoning. Let stand over boiling water at least one-half hour to blend flavors.

Cream of Potato Soup. (Will serve Twenty Children.)

4 qt. White Sauce No. 1.

1 qt. mashed potato, with water in which they were boiled.

 $1\frac{1}{2}$ T celery seeds.

2 slices of onion.

1 T chopped parsley.

Salt to taste.

Cream of Celery Soup. (Will serve Eighteen Children.)

1 bunch celery. $4\frac{1}{2}$ c boiling water.

9 T butter. 9 T flour.

Salt and pepper to taste. 9 c milk.

Wash and scrape celery and cut into small pieces. Add the water and cook until very soft and tender, being careful to renew water as it boils away. Mash in water in which it was cooked, and add to white sauce made from milk, butter and flour.

Cream of Pea Soup. (Will serve Eighteen Pupils.)

4 cans peas.

9 c milk.

3 T sugar.

9 T butter.

3 c cold water.

9 T flour.

Salt and pepper to taste.

Heat peas in their own water, add sugar and cold water, and cook twenty minutes. Rub through sieve, retaining water. Make white sauce from milk, butter and flour, and combine mixtures, stirring until thoroughly blended.

Cream of Tomato Soup. (Will serve Twelve Pupils generously.)

 $4\frac{1}{2}$ c tomato.

7 T flour.

 $\frac{1}{2}$ t soda.

9 c milk.

9 T butter.

Salt and pepper to taste.

Cook tomato until soft enough to strain. Strain, add soda and allow to stand five minutes. Make white sauce of milk, butter and flour, and combine mixtures. Serve immediately.

Dried Lima Bean Soup. (Will serve Eighteen Pupils.)

 $\begin{array}{lll} 2 \text{ qts. water.} & 2 \text{ T flour.} \\ 1 \text{ c dried beans.} & 1 \text{ t salt.} \\ 1 \text{ slice onion.} & \frac{1}{4} \text{ t pepper.} \end{array}$

2 T butter.

Soak beans over night in plenty of cold water, drain, add 2 quarts of water. Cook slowly till soft (about 2 hours), then rub through a sieve. Mix flour and seasonings with butter, add a little of bean pulp, blend thoroughly, add remainder of bean pulp, heat and serve.

Note. — Other varieties of dried beans or lentils may be used in place of lima beans.

Salt Codfish Chowder.

 $1\frac{1}{2}$ ounces salt pork. 1 qt. milk.

1 T chopped onion. $\frac{1}{2}$ lb. salt codfish.

3 c potatoes cut in small pieces.

Break fish into small pieces, soak it in lukewarm water until it is soft and salt has been removed. Cut pork into small pieces; cook until brown, adding onions last part of cooking; add potatoes; cover with water and boil until tender. Add milk and fish, reheat and serve.

Corn Chowder.

Use recipe for salt codfish chowder, substituting one can of corn for salt codfish.

SCALLOPED DISHES.

Macaroni and Cheese. (Will serve Six People.)

1 cup macaroni, broken into small pieces.

2 qts. boiling salted water.

1 c milk.

2 T flour.

 $\frac{1}{4}$ lb. cheese.

½ t salt.

Spk. cayenne pepper.

Cook macaroni in boiling water and drain. Make white sauce of flour, cheese, salt and milk. Mix with macaroni and serve, or put macaroni and cheese sauce in alternate layers in baking dish, cover with crumbs and brown in oven.

Note. — One cup rice may be used in place of macaroni.

Rice and Tomato.

6 c cooked rice.

3 c strained tomato.

6 T butter.

3 slices onion cut in pieces.

6 T flour.

Salt and pepper to taste.

Cook onion with tomato until soft. Make tomato sauce of tomato juice, butter and flour. Cook twenty minutes, mix with rice. Heat and serve.

Note. — Macaroni may be used in place of rice.

Creamed Vegetables.

Pare and cut vegetables in small cubes and cook in enough boiling salted water to cover. Strain and retain the water in which vegetables were cooked. Make White Sauce No. 2, using for liquid milk and water in which vegetables were cooked. Add vegetables and reheat.

Creamed Chipped Beef.

Make White Sauce No. 2, add chipped beef and reheat.

A very large number of our school children are suffering from malnutrition, and it is reasonable to suppose that this malnutrition may be partly due to the inadequate noon luncheon.

We must recognize that malnutrition and underweight are serious defects, and not only predispose the child to other diseases, but so handicap him that he is retarded in normal physical and mental development.

There are very few schools where it is absolutely impossible to serve at least one hot dish, and no better work can be done for the health of the school children than by making it possible for every one of them to have a hot, nourishing luncheon.

I am indebted to Miss Stella Simonds, home demonstration agent of Norfolk County, for the following report, which I feel will be helpful to those who are interested in establishing the hot school lunch plan in their community:—

REPORT OF WORK DONE ON WARM SCHOOL LUNCH PROJECT IN NORFOLK COUNTY.

Visits were made during the winter months to consolidated and outlying schools in the county for the purpose of observing lunch conditions. In the majority of the schools visited there were from 15 to 75 children eating a cold noon meal. The interest of school officials, local organizations and parents was solicited and steps taken to serve a warm dish with the lunch. Lack of finances made progress slow, but through the excellent assistance and co-operation given by local women's committees lunches were started in three towns.

In ten other schools where the lunch had previously been established assistance was given by the home demonstration agent in completing the organization and overcoming difficulties encountered.

Organization of New Lunches.

Each town presented an individual problem in organizing a warm school lunch, but no problem was so complex that it could not be overcome. In the towns where the lunches were started talks were given by the home demonstration agent before parent-teachers associations, women's clubs and granges to arouse local interest in the need for the lunch. Further assistance was given in furnishing lists of equipment needed for the lunch, providing recipes, and through conferences, to assist in the organization.

A survey of the conditions in the Randolph grammar schools showed that 75 children were eating a cold lunch daily. Sixty dollars were earned by the conservation department of the Women's Club through a moving-picture benefit. With this money equipment was purchased and gas piped into the school which made possible the serving of 75 children with cocoa.



Hot lunch, Russell Mountain School, Hampden County.

The initiative in starting the warm school lunch in the Franklin schools was taken by the district nurse. A plan was devised whereby the cocoa was prepared in the domestic science kitchen and sent out to four grammar schools in large covered milk cans. In order to make a c'aily cup of cocoa available to the many children who could not afford to pay for it a play was given, and a food and candy sale held, by the pupils and teachers, and \$109 raised.

The problem of serving cocoa to 75 children in two grammar schools in Foxborough was overcome by a committee of interested women who volunteered their services and the use of the thrift center for the preparation of the cocoa. Thirty dollars were earned by this committee through a food sale, and were spent in purchasing cups and equipment. Time was given to preparing the lunch each day by five women who were members of the committee. The Parent-Teachers' Association has co-operated with the women's committee this year, and a paid worker has been put in charge of the preparation of the lunch. Ninety children are served with cocoa daily at a rate of 3 cents per cup.

Plans for a warm lunch in the Nevins consolidated school in South Weymouth were started in the spring. The school superintendent and principal were taken by the home demonstration agent to visit a lunch operating under similar conditions. From the interest aroused, plans are under way for fitting up the Nevins school for a warm school lunch.

The civics committee of the Sharon Women's Club requested a conference with the home demonstration agent regarding the organization of a warm school lunch in the grammar school. Plans and equipment were discussed, recipes given and lunches in operation recommended for the committee to visit. A warm lunch in the Sharon school will be started as soon as arrangements are completed.

Assistance given to promote Lunch.

Assistance has been given ten schools where the lunch has been previously organized. The assistance varied, depending upon the local problems. In one rural school, where only cocoa had been prepared, a demonstration was given in the preparation of a cream vegetable soup. Following the demonstration a weekly menu was established, including a different soup each day, with cocoa served only once a week. Problems in the organization of the serving of the lunch were encountered in several towns and assistance has been given.

County Chairman of Warm School Lunch Project.

At the last annual meeting of the Farm Bureau a county project chairman for the warm school lunch was appointed to co-ordinate the work and assist the local project leaders and the home demonstration agent in furthering the project. Four lunches were visited by the county chairman and the home demonstration agent during the late spring, and it is hoped that the remaining schools in the county will be visited this coming year to note conditions and give assistance. A report of the work done in promoting the warm school lunch in the county was given by the project chairman at the sectional county conferences held in June.

Talks given to promote Warm School Lunches.

Nine lantern slides have been made from pictures taken of the warm school lunch work done in the county. These slides have been used by the home demonstration agent in giving an illustrated talk on the subject of warm school lunches for rural schools at the State conference of school superintendents and at a conference of Plymouth County women.

Summary of Work done.

That the warm school lunch has been of value in improving the physical, mental and moral conditions in the schools has been brought out in reports given the home demonstration agent from teachers in schools where the warm lunch has been introduced.

In one school where the janitor takes an active interest in the preparation and serving of the lunch we were told by him that before cocoa was served with the lunch quantities of good food were thrown in the wastebasket each noon. Since the introduction of the cocoa no food is thrown away.

The principal in one school said that previous to serving the cocoa with the lunch several of the boys had been buying their lunch at a near-by bakeshop; they are now bringing their lunch from home so that they can take advantage of the cocoa.

One teacher has noticed that a daily headache which one child had been experiencing has disappeared since the warm cocoa has been served at noon.

From several schools the report has come that with the serving of the warm lunch at noon the mental alertness of the pupils during the afternoon session has improved and a better co-operative school spirit has developed.

