

The
SCHOOL LUNCH

**ITS ORGANIZATION
AND MANAGEMENT
IN PHILADELPHIA**

By **EMMA SMEDLEY**



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IN PHILADELPHIA

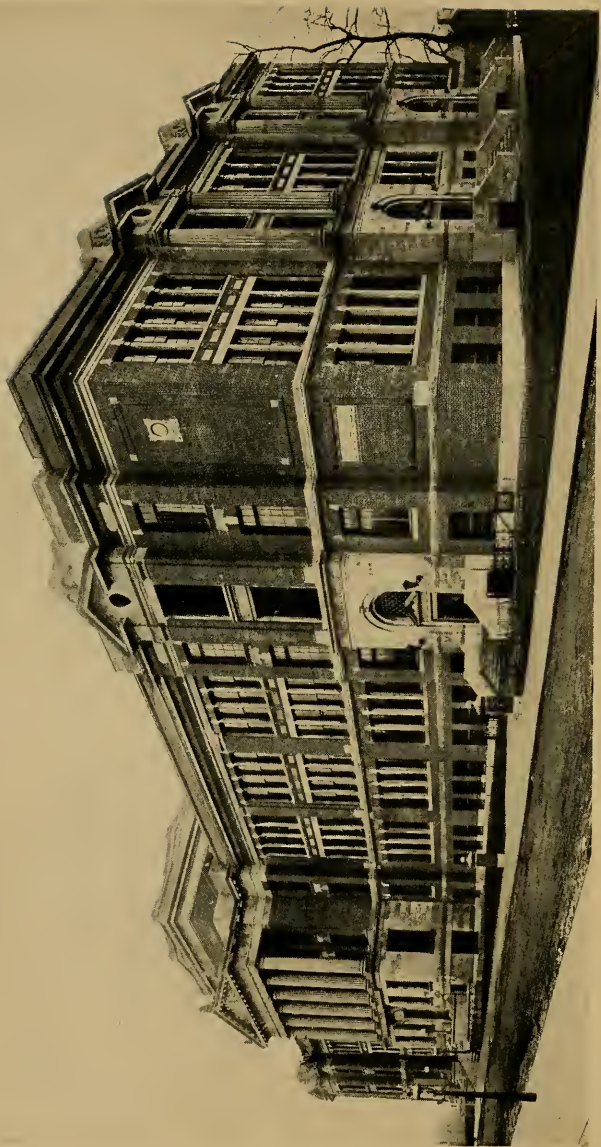


PLATE 0—GERMANTOWN HIGH SCHOOL. A TYPICAL SCHOOL BUILDING.

The School Lunch

Its Organization and Management
in Philadelphia

BY

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Published by
EMMA SMEDLEY
6 East Front Street
Media, Pa.

LB3479
.U656

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DEC -2 1920

Press of
INNES & SONS
Philadelphia

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FOREWORD

THE material in this book does not attempt to cover the whole subject of the school lunch, but is the summing up of the author's eleven years of experience in directing the school lunches in the city of Philadelphia. It has been written in response to innumerable inquiries that have come into the office of the director in regard to the Philadelphia system.

As school lunches in this country are still in the developing and, to a degree, experimental stage, no word on the subject can be final, and especially while conditions are still fluctuating as a result of the war, all statements bearing upon labor, equipment and cost must be subject to a margin of change. Those of us who have served as early volunteers in the work need frequently to share and compare our experience and pass it on to the newcomers in the field. It is with the hope that this material may serve such purpose of comparison that it is presented.

The reader must bear in mind that the system in Philadelphia differs from most others in that though a part of the school system, the Department of School Lunches functions separately, having full power and responsibility within itself. The committee of the Board of Public Education

under which it operates acts chiefly in an advisory and co-operative capacity. To this method of operation is largely due the rapid development of the school lunch, but it must be taken into account that in such a system the personnel is of great importance, whether or not the whole corps of workers is imbued with the spirit of the work. In that particular Philadelphia has been peculiarly fortunate, and the author wishes to express here her gratitude to her assistants and co-workers who, from the highest to the lowest, have reflected in every duty the ideal of the work—to build up the health of a city's children.

Emma Smedley

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Chapter One

HISTORY AND AIM OF THE
SCHOOL LUNCH

HISTORY AND AIM OF THE SCHOOL LUNCH

THE introduction of the school lunch into the educational systems of large cities marks a milestone in our social progress. Education within the school, once interpreted merely as "book learning" and intended to supplement the varied training which a child of earlier days got in the home, has gradually expanded to meet new conditions arising from rapidly changing industrial developments and from the growth and extension of cities.

Our educational plan is still in a state of expansion. American public schools today include not only academic teaching but physical training, manual and technical courses, and medical supervision. They also provide for the exceptional as well as for the normal child, with special classes for the subnormal, the tubercular, the blind and the crippled.

It is natural that the school should in time extend its function to include feeding, once exclusively the business of the home. The need for school feeding first arose through recognition of the fact that many children were receiving little benefit from the education offered because they

THE SCHOOL LUNCH

were not properly fed. Benevolent organizations in our large cities from time to time concerned themselves with this subject of school feeding. The school lunch, or the penny lunch, as it has most frequently been termed, has become more or less familiar in most of our large cities during the past twenty-five years. In Europe school feeding became a recognized part of the school systems as long ago as a century or more.

Most of the early efforts at school feeding in this country were directed towards special groups of children, those who showed signs of under-nourishment. The need to provide food for all children in schools has only gradually emerged and is not yet fully recognized.

Various conditions have brought about this need: the increasing distance of the school from the home; the abolishing of the old two-session system, which gave the children time to go home for a leisurely noon meal; and the large number of mothers who have gone into the factory or other kinds of work. Many children were accustomed to eating cold and frequently unwholesome lunches brought from home, to going hungry, or attempting to satisfy their appetites with the wares of street vendors.

School authorities, recognizing this need of the children for some kind of food, during school hours, allowed street vendors access to school

HISTORY AND AIM

premises and even in some cases sold concessions to them. Janitors or other individuals whose chief concern was profits, with little regard for the stomachs of their patrons, reaped large sums by catering to the appetites of school children. The food sold was rarely wholesome and often actually unclean.

The beneficial results to the children who received wholesome food provided by reliable agencies, and the general focusing of public attention on the subject of malnutrition in children, gradually awakened school boards to the fact that feeding was a legitimate part of the educational plan. From a mere standpoint of economics vast sums of money were wasted through the inability of many children to assimilate knowledge on an empty or discomforted stomach.

Nothing has given a greater impetus to school feeding than the glaring physical defects of many of the boys examined for the draft in 1917. It was proven at that time that if we are to expect a sturdy nation, the function of our schools must be extended to the care of bodies as well as minds.

AIM OF THE SCHOOL LUNCH

The aim of the school lunch is two-fold: to meet the food requirements of the child, helping to lay a foundation of physical vigor upon which the structure of mental training can be effectively

THE SCHOOL LUNCH

built; and to serve as an educational factor, instilling wise food habits, offering an opportunity for lessons in courtesy and consideration, and providing a laboratory for the practical demonstration of allied subjects of study such as cooking, hygiene, buying.

The school lunch should supplement home feeding to whatever extent that may be needed. The plan must therefore be flexible enough to meet varied conditions. In the high school where the hours are from nine to two or two-thirty, and where many of the pupils live at some distance from the school, the school lunch must be so planned as to offer a hot noon meal which may be the substantial meal of the day; or merely to supplement the lunch brought from home. In the elementary schools it must provide a few wholesome things, soup, cocoa or sweets, which a child wants in addition to home meals; or a noon meal must be provided for those who for some reason cannot get that meal at home. The school lunch system also should be elastic enough to supply breakfasts to special groups of children and to serve suppers to night school classes.

X The food provided in the school must be wholesome and assembled with an understanding of the needs of the particular group served. It must be well prepared and attractively presented, appealing to the eye and yielding a good return in energy and health. It must stand for something much

HISTORY AND AIM

more than a mere satisfaction to eye and appetite. It must represent an ideal in food selection and preparation and in cleanliness of surroundings, utensils and service, thus subtly implanting in the child's mind a liking for good food properly served and a distaste for any other kind. The school lunch must also be considered from the angle of a practice school in buying. The lunch room is a business venture in which pupils have the important rôle of principal patrons, and since, within the limits set, they have freedom of choice, they gain valuable daily lessons in how to buy for values, self-restraint in buying, and responsibility of selection, as well as getting an understanding of the factors that enter into the selling price of the food purchased.

SCHOOL LUNCHESES A VAST BUSINESS

The importance of the school lunch as a factor for either good or ill in the future of the child may be realized from the vast volume of business which the daily pennies spent on school lunches represent. According to a report of the United States Commission of Education, high school pupils in eight American cities spend a million and a half dollars each school year for lunches. That million and a half dollars may be a medium for laying the foundations of good health, or of undermining the digestions of the future generation. It may be the means of accumulating impres-

THE SCHOOL LUNCH

sions of carelessness, dirt and poor values from the push cart vender, or impressions of cleanliness, attractiveness and good values in the properly conducted school lunch room. Is it not an important job to direct that million and a half dollars and the unestimated other millions which school children spend, into channels of health and education?

The school lunch system is as yet in a formative stage in this country. Each city is trying out its own experiment to fit its own needs and no two have exactly the same plan. Many cities have not yet attempted school feeding on any considerable scale. It is safe to predict, however, that with the general tendency of the functions of the school to broaden and extend, the school lunch will become an integral part of the educational systems of all large cities, if not of smaller cities and of many rural communities. One can picture the day not too far distant when each school building will include in its plans the equipment for kitchen and lunch rooms, and the school lunch will be an important and assured adjunct to school work, correlated with the educational scheme in many ways as yet undeveloped.

Chapter Two

DEVELOPMENT OF THE SCHOOL
LUNCH IN PHILADELPHIA

DEVELOPMENT OF THE SCHOOL LUNCH IN PHILADELPHIA

THE school lunch first came into existence in Philadelphia much as it has all over the country, as an effort on the part of a philanthropic organization to meet the problem of malnutrition among school children. Philadelphia was one of the pioneer cities to serve school lunches. As early as 1894 the Starr Center Association, a benevolent organization, started penny lunches at one school in a poor district of the city, and later extended the service to another school. Out of this work developed in time a Lunch Committee of the Home and School League, which gradually enlarged upon the experiment of school feeding until penny lunches were being served in nine schools of the city.

In this way ground was broken for the school lunch system, although it was from a different impetus that school lunches on the plan they are now organized came into existence.

In 1909 when the William Penn High School for girls, one of the largest schools in the city, was completed, the principal, Dr. Cheesman A. Herrick, now president of Girard College, voiced a

THE SCHOOL LUNCH

protest against the old form of lunch room which had prevailed in the high schools, that of allowing concession to the janitor or a caterer. He wanted a different type of lunch room and finally won the consent of the Board of Education to try what was considered an experiment. The Board made the condition, however, that it should not be called upon for any expense beyond that of the original equipment. Thus the first school lunch on the present plan was started and the condition of the Board struck the keynote of the present lunch system, laying the foundation of the self-supporting policy which has been maintained from the beginning.

RAPID GROWTH OF THE PLAN

Dr. Herrick's plan was to have a home economics graduate as director of the lunch room and to serve lunches planned on sound food principles. The present director of the school lunch system was asked to take charge of the lunch room. Light, heat, gas for cooking and the original equipment were provided by the Board of Education. Otherwise, the lunch room was to be self-sustaining, all assistants and helpers to be employed by the director, with prices for food fixed at such a scale that the receipts should cover overhead charges.

Within a year Dr. Herrick's experiment was vindicated and the corner-stone of school lunches

DEVELOPMENT IN PHILADELPHIA

was laid in Philadelphia. The next fall the committee on Boys' High Schools of the Board of Education asked that a similar school lunch service be opened for what was then the Southern Manual Training School. Shortly after that was installed, the service was extended to three high school annexes, two of the William Penn and one of the Southern Manual Training. By the spring of 1912, the Board of Education voted to establish a Department of High School Lunches and authorized the extension of the system to all high schools in the city, under the supervision of the director who had operated the other lunch rooms.

The School Lunch Committee of the Home and School League had in the meantime continued serving lunches in nine of the elementary schools. In May of 1915 it reported to the Board of Education that it had demonstrated the need of a lunch system but that such a system could not successfully be carried on by an organization apart from the school management. The Board, in consequence, authorized the continuation of the work started by the Committee and its extension to other elementary schools, the system for both high and elementary schools to be consolidated under the direction of the head of the High School Lunch System.

The school lunch has thoroughly proved itself in Philadelphia and the system is developing as rapidly as physical conditions will permit. At the

THE SCHOOL LUNCH

present time uniform school lunches are being served in all of the sixteen secondary schools of the city, including the ten high schools and three annexes to high schools, the Philadelphia Normal School, Trade School for Girls and the Junior High School; and in thirty elementary schools; or, in forty-six out of the total of two hundred and thirteen public schools of the city. To operate the lunch rooms there is a staff of three hundred workers, and the lunch system caters to fifty thousand school children, who spend about two thousand dollars a day.

Chapter Three

PLAN OF ORGANIZATION

PLAN OF ORGANIZATION

THE school lunch system in Philadelphia operates from one central office, with a director in charge, who is empowered to employ all workers necessary for the department, to buy all supplies, fix and pay all salaries out of the receipts of the lunch room and in general to direct and supervise the work.

She has under her a corps of workers including:

One general assistant.

One assistant in charge of elementary lunch rooms.

A secretary and two clerical assistants.

Dietitians in charge of high school lunch rooms.

Assistant dietitians in larger high school lunch rooms.

Helpers in high schools.

Helpers in elementary schools.

Student aids.

RELATION TO THE BOARD OF PUBLIC EDUCATION

The Department of School Lunches is a branch of the Department of Education operating under a sub-committee on School Lunches, which has

THE SCHOOL LUNCH

supervisory powers. The director of school lunches is appointed by the Board of Public Education and her salary is fixed by the Board, but paid out of the receipts of the lunch rooms.

The Board of Education is responsible for:

All initial equipment.

Space for lunch room.

Heat, light, gas and steam for cooking.

This connection with the Board gives prestige to the Department of School Lunches in the schools, in the community and in the markets.

RELATION TO THE SUPERINTENDENT OF SCHOOLS

The Department of School Lunches is subject to the superintendent of schools to the extent that the initiative for lunch service in a new school comes from the superintendent or must have his approval, and any extension of the service involving additional expenditure also must receive his approval before being passed upon by the Board of Education. His sanction of the department greatly facilitates its successful operation.

RELATION TO THE INDIVIDUAL SCHOOL

The benefit to be derived from the school lunch depends to a great extent upon the co-operation of the school itself and consequently upon the attitude of the principal, teachers and students. The principal is largely responsible for stimulat-

PLAN OF ORGANIZATION

ing co-operation. Through his or her interest and good will the activities of the lunch room may be linked with the activities of the domestic science department, with manual training classes or shops and with other branches of the school. Also, the principal and teachers may do much to mould the attitude and behavior of the students.

By winning the help and interest of the students the lunch service becomes a co-operative venture. Where student government is in operation, the students take over much of the discipline and the work of keeping the lunch room in order.

In inaugurating a lunch service in a school, the director of School Lunches presents to the pupils the whole plan and invites their co-operation. She explains to them the business principles on which the system operates, acquainting them with the factors that enter into overhead charges and showing ways in which the pupils can help to keep down labor costs as a means of making the food cheaper. Thus the pupils get a sense of values in relation to the food they daily purchase which is much more effective than any mere class room study.

RELATION TO PRIVATE AGENCIES

It is not the policy of the school lunch system to receive money directly from any private agencies, although it co-operates with organizations in several instances in providing for the need of

THE SCHOOL LUNCH

individuals or groups of children who cannot afford to buy lunches. In one or two instances, in schools where the school lunch has not yet been authorized by the Board, organizations which in the past had served lunches to the children, continue the work either independently or in conjunction with the school lunch system. One organization, for instance, pays for breakfasts and lunches served by the School Lunch Department to the pupils in an open air class, and another for lunches served to children in an orthopedic class. The policy, either where there are individual children or whole classes to be provided for, is to have the benefactors give the money to the principal who pays the School Lunch Department for providing and serving the food.

The general plan of the system is that it is better for children of parents who can afford to pay for lunches not to learn to expect unreasonable returns for their expenditure, but that it is unfair to make the prices of food higher to these children in order to provide for the less fortunate.

GENERAL SYSTEM OF MANAGEMENT

The system of school lunches in Philadelphia operates as any business would, all costs of materials, labor, renewal and upkeep of equipment being covered by the receipts of the sales. The scale of prices must cover these items, but as there are no profits to be made and as rent, heat,

PLAN OF ORGANIZATION

light and the original equipment are provided by the Board of Education, the prices can be made much lower than prices in other eating places. If these items provided by the Board had to be paid out of the school lunch receipts, prices would have to be increased.

* The whole system is centralized under one office, which is the buying and administrative center, acting as a clearing house for all records and accounts and offering constant supervision and direction of the work. The benefits to be gained from this system of centralization are:

Economy and better values through large scale buying.

Advantageous prices through reduced service costs to firm.

Higher food standards maintained.

Uniformity of food and service in all schools.

Lower prices of food possible to students through advantageous buying and reduction of labor costs.

Reduction of clerical help.

Saving of dietitian's time.

Checking of waste through central records.

Stimulus of competition among workers.

Under this system of management all buying is done wholesale by the central office except for perishable supplies which have to be delivered daily and which the dietitian can best control.

THE SCHOOL LUNCH

This periodical and large scale buying is an important factor in obtaining the best prices from dealers and in upholding a standard of quality. Delivery service by the dealer is thereby greatly reduced and also his salesmanship costs, additional factors in securing better prices. The dietitian's time is saved for her more specific duties through not having to meet and deal with salesmen nor check prices, this all being attended to by the central office.

Through the system of records and accounting maintained in the central office the inventory of supplies in each school is shown from week to week and any leakage is soon revealed. Also, where one school becomes overstocked with a commodity part of it can be transferred to another school whose supply is diminished.

Another very decided advantage of the unified system of management is that the small school which may not be self-supporting gets the benefits of the profits of the large school and receives the same service and food.

Though the system is uniform, a judicious measure of elasticity is permitted. Menus in the various high schools differ at the discretion of the dietitian and she has a large degree of authority within her school, while relying upon the central office for advice and help.

All labor is employed by the director's office, that burden being lifted from the workers in

PLAN OF ORGANIZATION

charge of schools, yet all employees are made responsible to their immediate superiors.

Through this general centralization of the work, clerical help is very greatly reduced and duplication of effort is eliminated. Being fitted with labor-saving devices the director's office can reduce work to a minimum.

ARGUMENTS FOR AND AGAINST THE CENTRAL KITCHEN PLAN

The practicability of the central kitchen plan with food distributed from one or more centers to the different schools is frequently argued. Points in favor of this are:

- Uniformly prepared food.
- Saving of labor.
- Slight saving on cost of food.

The arguments against the plan, on the other hand, are:

- More limited menu.
- Food less appetizing, because of the necessity of reheating.
- Expense of distribution.
- Uncertainty of delivery through mishaps and labor difficulties.
- More difficult to take care of special needs.

The arguments pro and con have been considered in Philadelphia and it has been decided that the individual school kitchen is more feasible.

Chapter Four

THE HIGH SCHOOL LUNCH PLAN
OF SERVICE

THE HIGH SCHOOL LUNCH PLAN OF SERVICE

THE school lunch in the high school is served at the noon lunch hour, usually in two periods of a half hour each, with an intermission of fifteen minutes between. In the large schools lunch is served during the fourth recitation period. In order to do this the fourth period is made a half hour longer than any other period of the day. At the beginning of the period one-half of the pupils go to the lunch room and the other half to their fourth period recitations. The designation whether a pupil goes to early or late lunch, therefore, is made by dividing the teachers into two luncheon shifts. The pupil goes to late or early lunch on any given day according to the lunch period of his fourth period teacher. At the end of thirty minutes the early lunch pupils go to their fourth period classes. For the next fifteen minutes the entire school is in fourth period recitations. This gives opportunity for the lunch room workers to prepare for the second shift. Then those who went to their classes at the beginning of the period will have completed their forty-five minutes in class and go to lunch, the members

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of the first shift remaining in class for the thirty minutes while the second shift has lunch.

In three of the largest high schools as a result of overcrowded conditions a three-period lunch system has been tried out successfully and has resulted in increased sales and increased satisfaction on the part of the students. In the Germantown High School where this is in operation there are six recitation periods a day for the sixteen hundred pupils served in the girls' section, each period forty-five minutes in length. The lunch period cuts into the fourth and fifth recitation periods. Each lunch period is twenty-five minutes long, and the twenty minutes between is used by the lunch room department to remove soiled dishes and prepare for the next shift. The first lunch period comes at the end of the third recitation period; the second at the end of the fourth; and the third at the end of the fifth period.

THE PLAN

	<i>1st Lunch</i>	<i>4th Period</i>	<i>5th Period</i>
Girls having 1st			
Lunch	11.35-12.00	12.00-12.45	12.45-1.30
	<i>4th Period</i>	<i>2nd Lunch</i>	<i>5th Period</i>
Girls having 2nd			
Lunch	11.35-12.20	12.20-12.45	12.45-1.30
	<i>4th Period</i>	<i>5th Period</i>	<i>3rd Lunch</i>
Girls having 3rd			
Lunch	11.35-12.20	12.20- 1.05	1.05-1.30



PLATE 1—EXACT REPRODUCTION OF ALUMINUM COINS,
USED FOR LUNCHEON CHECKS.

PLAN OF SERVICE

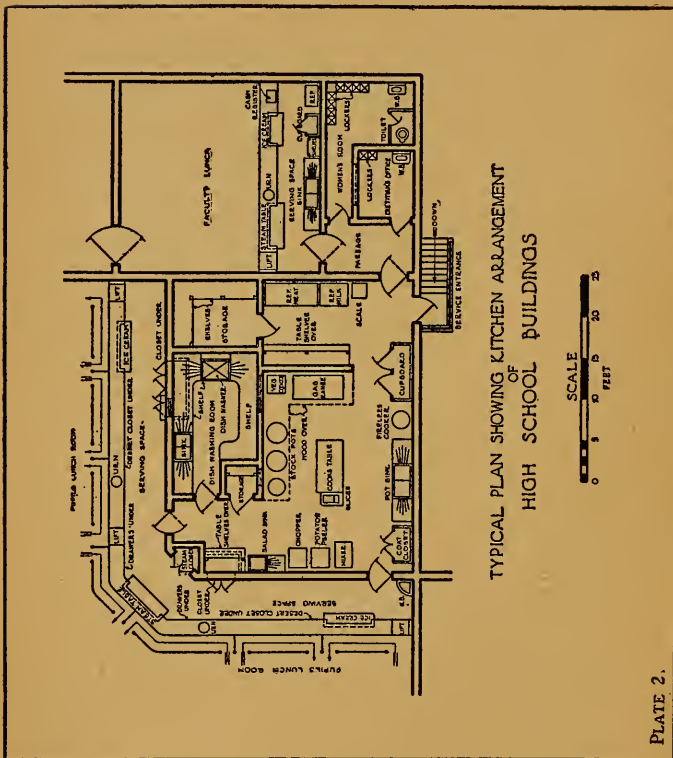
Because of roster conditions it is necessary to arrange the lunch period so that it varies from day to day with different teachers and classes but there is no objection to this variation on the part of pupils or teachers. The number of individuals to a lunch period is almost constant. The last lunch, which is at 1.05 o'clock, is not inordinately late.

WAYS OF FACILITATING SERVICE

Various means are used to quicken and facilitate service. A system of prepayment has been established whereby the pupils buy aluminum coins either before school in the morning or before entering the lunch room. For this purpose cash booths are placed outside the entrances to the lunch room. The coins are in three denominations, one, three and five cents. Plate 1 is a reproduction of the exact size, and shows the marking on both sides of the coin. They are usually sold in paper bags containing twenty-five cents' worth, but pupils may purchase them singly. The use of this coin system has many advantages; the making of change is eliminated, the coins are easier to handle than paper checks, the persons serving behind the counter quickly getting used to the feel of the different sizes, and they also are economical, as they can be used over and over.

The pupils pay for each article as purchased, with the coins, which prevents the holding up of

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TYPICAL PLAN SHOWING KITCHEN ARRANGEMENT
OF
HIGH SCHOOL BUILDINGS

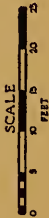


PLATE 2.

PLAN OF SERVICE

the line for calculation at the end. Service is likewise facilitated by pupils eating the substantial part of their lunch first and returning for desserts and sweets. The uniform location of foods on the counter and the arrangement of the counter rails, with entrance and exit at each section, also facilitate the service.

MENU

The high school lunch must offer a sufficient variety of food to serve either as a full noon meal or merely to supplement the lunch brought from home. The service is à la carte and consists usually of a soup and two hot dishes, cocoa with whipped cream, two or three varieties of sandwiches, milk, two or more home-made desserts, individual bricks of ice cream, fresh fruit, sweet chocolate and a variety of cookies. Sometimes there is home-made cake as one of the desserts.

The menu is planned to meet the needs of growing children and is made up of foods easily digested and simple enough not to tax the digestive system and divert to the stomach the blood supply needed by the brain for study. Coffee, pastry, doughnuts, cinnamon buns and rich iced cakes are never served in the school lunch room, although they were the principal articles served in the old type lunch. Sufficient variety is maintained to prevent monotony, menus never being repeated on the same days of consecutive weeks.

THE SCHOOL LUNCH

In addition to the lunch service to students, there is in each school a lunch service to teachers. Here the lunch is both à la carte and table d'hôte, the menu furnishes a greater variety than is offered in the students' lunch room and the scale of prices is slightly higher.

The basis of the prices in the high school lunch was formerly five cents for soup or substantial dish, but since the cost of food materials has so greatly increased the price of the latter has had to be raised to six cents. Cocoa with whipped cream is five cents. Ice cream is seven cents a brick and home-made desserts five cents. Crackers and cookies are one cent a portion, milk nine cents a pint bottle, served with straws, so that no glass is necessary, and five cents for a serving in a paper cup. Formerly all milk was served in bottles of pint and half-pint sizes, but the increased price has made it necessary to serve the smaller quantity in paper cups in order to keep it within the reach of a large number of the children who have less money to spend.

The reason it has been possible to maintain such a low scale of prices in the school lunches in Philadelphia in spite of the great increase of all food prices is due to the increased volume of business and the systematizing of the work of the department. Only with the steady increase in the amount of the business and the uniformity of service that has been established could this be done.



PLATE 3—ONE SIDE OF HIGH SCHOOL KITCHEN, SHOWING VENTILATING HOOD OVER STOVE AND STEAM COOKERS.

PLAN OF SERVICE

PUPILS' MENUS

A daily menu in the pupils' lunch room always includes the following items:

Bread or Roll.....	.02
Cocoa, cup, with Whipped Cream.....	.05
Milk, pint bottle.....	.09
Milk, glass05
Fresh Fruit in season.....	.02 .03 .05
Canned Fruit.....	.05
Sweet Chocolate.....	.01 .02 .03 .05
Chocolate Almond Bar.....	.06
Crackers, Cookies, Pretzels, etc.....	.01
Ice Cream.....	.07

In addition to the above, typical menus served are:*

Monday

Turkish Soup.....	.05
Baked Beans.....	.06
Scalloped Corn.....	.06
Ham Sandwich.....	.06
Egg Sandwich.....	.06
Lettuce Sandwich.....	.06
Fruit Tapioca Pudding.....	.05
Junket05

Tuesday

Vegetable Soup.....	.05
Hot Roast Beef Sandwich.....	.07

* These were the prices charged in September, 1920.

THE SCHOOL LUNCH

Creamed Asparagus.....	.06
Tongue Sandwich.....	.06
Cheese and Nut Sandwich.....	.06
Lettuce Sandwich.....	.06
Floating Island.....	.05
Chocolate Pudding.....	.05

Wednesday

Pea and Potato Soup.....	.05
Baked Hash.....	.06
Spaghetti and Tomato Sauce.....	.06
Minced Ham Sandwich.....	.06
Salmon Sandwich.....	.06
Peanut Butter Sandwich.....	.06
Lettuce Sandwich.....	.06
Fruit Macedoine.....	.05
Cottage Pudding.....	.05

Thursday

Bean Soup.....	.05
Macaroni with Cheese.....	.06
Peas and Carrots.....	.06
Tongue Sandwich.....	.06
Cheese Sandwich.....	.06
Lettuce Sandwich.....	.06
Gingerbread05
Apple Meringue Pudding.....	.05

Friday

Oyster Soup.....	.05
Scalloped Salmon.....	.06

PLAN OF SERVICE

Mexican Rice.....	.06
Sardine Sandwich.....	.06
Lettuce Sandwich.....	.06
Peanut Butter Sandwich.....	.06
Fruit Jelly.....	.05
Mocha Tart.....	.05

Monday

Corn Chowder.....	.05
Baked Beans.....	.06
Rice and Tomato Sauce.....	.06
Tongue Sandwich.....	.06
Lettuce Sandwich.....	.06
Salmon Sandwich.....	.06
Baked Apple.....	.05
"Wm. Penn" Pudding.....	.05

Tuesday

Creole Soup.....	.05
Mashed Potatoes with Gravy.....	.06
Creamed Carrots.....	.06
Ham Sandwich.....	.06
Lettuce Sandwich.....	.06
Egg Sandwich.....	.06
Rice Pudding.....	.05
Coffee Jelly.....	.05

Wednesday

Pea Soup.....	.05
Scalloped Tuna.....	.06

THE SCHOOL LUNCH

String Beans.....	.06
Ham Sandwich.....	.06
Cheese Sandwich.....	.06
Lettuce Sandwich.....	.06
Sardine Sandwich.....	.06
Orange Puffs.....	.05
Cream Tapioca Pudding.....	.05

Thursday

Barley Soup.....	.05
Creamed Dried Beef.....	.06
Turkish Pilaf.....	.06
Tongue Sandwich.....	.06
Peanut and Cheese Sandwich.....	.06
Lettuce Sandwich.....	.06
Lemon Butter Sandwich.....	.06
Snow Pudding.....	.05
Scalloped Apples.....	.05

Friday

Oyster Soup.....	.05
Fish Omelet.....	.06
Spaghetti and Sauce.....	.06
Sardine Sandwich.....	.06
Lettuce Sandwich.....	.06
Minced Ham Sandwich.....	.06
Chocolate Cake.....	.05
Cup Custard.....	.05

PLAN OF SERVICE

FACULTY MENUS

The daily menu for the faculty lunch room always includes the following items:

Roll or Bread.....	.02
Butter02
Tea, Coffee or Cocoa (cup).....	.05
Tea, pot.....	.10
Milk, pint bottle.....	.09
Milk, glass05
Buttermilk, pint bottle.....	.06
Fresh Fruit in season.....	.02 .03 .05
Canned Fruit.....	.06
Sweet Chocolate.....	.02 .03 .05
Sandwiches (Ham, Tongue, Cheese, Salmon, Peanut Butter, Egg or Lettuce).....	.07
Crackers, Cookies, Pretzels, etc.....	.01
Ice Cream.....	.07

In addition to the above, the following is a sample menu for two weeks:

Monday

Cream of Tomato Soup.....	.06
Baked Ham.....	.18
Glazed Sweet Potato.....	.07
String Beans.....	.07
Egg Salad.....	.12
Fruit Tapioca Pudding.....	.06
Junket06
Individual Apple Pie.....	.06

THE SCHOOL LUNCH

Tuesday

Vegetable Soup.....	.06
Roast Beef.....	.18
Franconia Potatoes.....	.07
Creamed Carrots.....	.07
Banana Salad.....	.12
Rice Pudding.....	.06
Chocolate Pudding.....	.06
Cream Puffs.....	.06

Wednesday

Bean Soup.....	.06
Cottage Pie.....	.15
Creamed Peas.....	.07
Tomato Salad.....	.12
Fruit Jelly.....	.06
Cottage Pudding.....	.06

Thursday

Creole Soup.....	.06
Creamed Chicken.....	.18
Rice Croquette.....	.07
Apple and Celery Salad.....	.12
Chocolate Cake.....	.06
Lemon Jelly.....	.06
Cup Custard.....	.06

Friday

Clam Chowder.....	.06
Oyster Fricassee.....	.15
Parsley Potatoes.....	.06



PLATE 4—TEACHERS' DINING-ROOM IN HIGH SCHOOL.

PLAN OF SERVICE

Pineapple and Cheese Salad.....	.12
Mocha Tart.....	.06
Spanish Cream.....	.06

Monday

Cream of Pea Soup.....	.06
Liver and Bacon.....	.15
Scalloped Potatoes.....	.07
Buttered Beets.....	.07
Asparagus Salad.....	.12
Baked Apple.....	.06
Chocolate Bread Pudding.....	.06

Tuesday

Turkish Soup.....	.06
Roast Veal.....	.18
Potato Puff.....	.07
Creamed Cauliflower.....	.07
Fruit Salad.....	.12
Gingerbread06
Soft Custard.....	.06
Orange Jelly.....	.06

Wednesday

Vegetable Soup.....	.06
Salmon Cutlet.....	.15
Creamed Peas.....	.07
Cabbage and Nut Salad.....	.12
Orange Blanc-Mange.....	.06
Chocolate Sundae.....	.06

THE SCHOOL LUNCH

Thursday

Corn Chowder.....	.06
Lamb Fricassee.....	.15
Sweet Potato Croquette.....	.07
Carrots and Peas.....	.07
Tomato and Celery Salad.....	.12
Sponge Cake.....	.06
Pineapple Jelly.....	.06
Rice Custard.....	.06

Friday

Oyster Soup.....	.06
Fillet of Cod.....	.15
Parsley Potatoes.....	.07
Stewed Tomatoes.....	.07
Waldorf Salad.....	.12
Apricot Tart.....	.06
Raisin Pudding.....	.06
Snow Pudding.....	.06

FLOOR PLAN AND DETAILS OF ARRANGEMENT

In Philadelphia nearly all of the high school buildings are planned with the basement floor entirely above the ground level. This is shown in the frontispiece. The kitchen, store rooms and lunch rooms are all located on this floor, with an entrance for the delivery of supplies directly from the street into the lunch department.

The central idea in planning the working area for the school lunch is three-fold: to save steps in



PLATE 5—PUPILS' DINING-ROOM IN HIGH SCHOOL.

PLAN OF SERVICE

the preparation and serving of food; to secure the comfort of the workers; and to insure sanitary conditions—light, air, drainage and ventilation. The aim is to have as small a space as possible for handling the estimated volume of business. The floor plan illustrated in Plate 2 is adequate to serve from two thousand to three thousand persons.

This area includes kitchen, dish-washing room, pantry, store room opening from the pantry, dietitian's office, room for workers, the teachers' dining room and the serving counter for the pupils.

The arrangement and equipment of a school lunch kitchen is entirely different from that of the regular cafeteria or restaurant kitchen because the type of service is different, only one meal a day being served and that necessarily in a very short period of time. Simplicity of equipment and simplicity of service are essential, and compactness is the very keynote of facility. These points must be kept in mind at each step in fitting a school lunch kitchen.

It will be noted in the illustration of floor plan that there are five feet of free space around the important pieces of stationary equipment, between work table and sink, between sink and stove, etc., and that a long work table occupies the center of the kitchen space.

There are two sinks, a deep two-compartment one for pots and pans, of galvanized iron with

THE SCHOOL LUNCH

double drainboards of the same; the other, a salad sink of porcelain with double wooden drainboards which is reserved for washing salads and sandwich materials. This is adjacent to the table which is used for preparing sandwiches and this sandwich table is placed near a door close to that portion of the counter where the sandwiches are served. The meat slicer also is in this section of the room so as to be in constant readiness during the serving period for slicing meats and bread for additional sandwiches.

As the lunch department is located in the basement it is important to have the kitchen and dish-washing room well ventilated. This is done by placing a hood over the entire cooking section of the kitchen, as illustrated in Plates 3 and 13. This hood is connected with a flue, and all odors are drawn out by means of an electric fan. The dish-washing room is also connected with this ventilating system.

The kitchen floors are of cement, cork or composition, sloping toward suitably located drains, so that they may be flushed and kept thoroughly clean. Cement floors are undesirable because they are hard and cold to stand upon and under certain atmospheric conditions it becomes damp and slippery.

It is advisable to have the dish-washing room shut off from the kitchen by a dividing wall because of the steam and of the noise. The loca-



PLATE 6—HIGH SCHOOL LUNCH COUNTER, SHOWING PLATE WARMER, COCOA URN AND ARRANGEMENT OF RAILS TO DIRECT PUPILS TOWARD DIFFERENT SECTIONS OF THE COUNTER.

PLAN OF SERVICE

tion of the dish-washing machine controls the amount of work in connection with the handling of dishes. It should be centrally located in relation to the counter and the dining-room, with a window opening on the counter so that soiled and clean dishes may be passed through with little handling. The arrangement of shelves and tables about the dish-washing machine depends upon the kind of machine used, so that dishes may be put in and taken out most conveniently. The type of washer is therefore decided upon before shelves and tables are placed.

ARRANGEMENT OF PANTRY

The pantry is used as the receiving and distributing room for food materials and as a place for preparing desserts and salads. It is equipped with a work table; with shelves to hold those supplies which need to be close at hand, such as a convenient supply of flour, sugar, spices, etc.; with some of the smaller cooking utensils, and with scales. The scales are placed near the door so that as the supplies are received they may be weighed and checked and then put either in the refrigerators or in the inner store room.

There are two refrigerators in the pantry, one for butter and milk, in which nothing else is kept, and a second larger one with a separate compartment for meat, one for fruit and vegetables and one section for miscellaneous articles and large

THE SCHOOL LUNCH

enough to hold a crate of eggs. In schools where there is cold storage machinery, brine refrigeration is used, because of the greater economy and cleanliness.

Opening from the pantry is the store room, which may vary somewhat in size and shape according to the space obtainable. It has deep shelves on two sides with space under the shelves where barrels and cases may be kept. This store room may be the sole storage space but it is advisable to have elsewhere, as conveniently located as possible, an additional store room where surplus supplies are kept. In this extra store room there should be a cool section where potatoes and green vegetables may be safely stored for a long period. This makes it possible to buy in large quantities.

DIETITIAN'S OFFICE

Near to the service entrance to this department and adjacent to the kitchen, is located the dietitian's office. It is here that all of the clerical work of the department is carried on, the planning of menus, counting money and luncheon checks, making up the weekly reports, telephoning the daily orders, etc. The dietitian also uses this room for conferences with the director of the department during her frequent visits to the school and with her helpers who may need a word of encouragement or a possible reprimand for some carelessness in work or conduct. This



PLATE 7—HIGH SCHOOL GIRLS IN LINE READY TO BE SERVED.

PLAN OF SERVICE

room is also used as a dressing room by the dietitian and her assistant, as they must change from street dress to uniform each day before beginning the work of the day.

A dressing and rest room for the workers of the lunch department is provided. It is furnished with individual steel lockers, hand basin and toilet, dressing table, chairs and a couch.

ARRANGEMENT OF DINING-ROOMS

The teachers' and pupils' dining-rooms are in close proximity to the working area so that food is carried as short a distance as possible. The teachers' dining-room shown in Plate 4 is equipped with a counter for cafeteria service which is supplied with drawers, steam serving table with hot closet beneath, with an electric hot plate for heating water, also electric toaster, and with coffee and cocoa urns. A small refrigerator, a sink behind the counter for washing dishes and a china closet are part of the equipment in this room. Extension tables and chairs are used for the teachers and the dining-room is made as restful and attractive as possible.

The pupils' dining-room is fitted with stationary tables and swinging stools, the tables being placed far enough away from counters to permit of free passage. There is a check booth at both entrances to the dining-room.

THE SCHOOL LUNCH

A large dining-room with a seating capacity of five hundred is shown in Plate 5. The counter is dimly visible in the extreme end of the room.

Menu boards are placed where they can be clearly seen, one near each cash booth and another over the counter. The menu cards are stenciled, the letters being about an inch in height, so they can be clearly read at a distance, and the boards are grooved so the cards may be slipped in easily. These boards are made in the school workshops. All cards are kept indexed in a drawer in the counter, so they are ready for use from time to time.

COUNTER ARRANGEMENT AND EQUIPMENT

Nothing is more important to success in serving the school lunch than the arrangement of the counter. The counter space must be sufficient to serve without crowding and yet not so great as to overtax the workers or require an additional number. The counter should be accessible to as many points of the dining-room as possible. The shape is somewhat determined by the plan and location of the room.

A long counter located in the centre of one side of the room is very desirable because the dietitian can observe all parts of the serving from one point. The floor plan illustrated in Plate 2 shows the counter around two sides of the kitchen, which

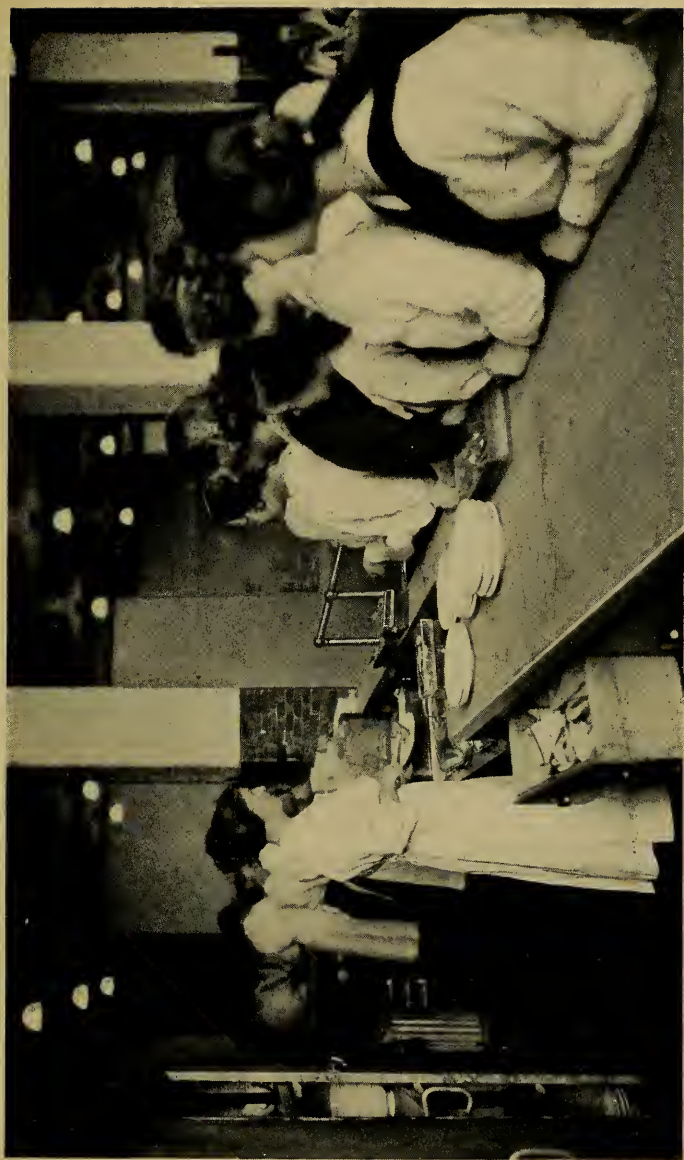


PLATE 8—SERVING FROM STEAM TABLE. PLATE WARMER IN THE REAR.

PLAN OF SERVICE

is a very convenient arrangement. The serving here is done with greater ease because fewer steps are necessary than with the long straight counter.

On the outside of the counter are rails to direct the pupils. (See Plate 6.) These have openings for entrance and exit according to the groupings of the food so that the lines do not have to go the full length of the counter. For instance, where the hot food ends there is a break in the railing, another where the ice cream section ends, etc. The use of this form of rail is shown in Plate 7, where two lines of pupils are grouped at the steam table and a third line at the sandwich section.

The counter is equipped with a steam serving-table, from which all hot foods are served, with cocoa urns and ice cream cabinets. It has a hot closet under the serving table to keep plates and soup bowls warm, with an additional plate warmer behind the counter. This is shown in Plates 6 and 8. A closet for cold dishes is placed in the rear of the ice cream cabinet. Beneath the counter are drawers for sandwiches, rolls and bread, cookies and a section with sliding shelves to hold desserts ready for serving. (See Plate 9.) There are also drawers for silver from which the boxes on the counter are refilled when needed. Back of the counter along the walls are closets to hold dishes and boxes of crackers, cookies and chocolates so that the counter supplies may be quickly replen-

THE SCHOOL LUNCH

ished. Drawings of sections of the counter are shown in Plates 10 and 11.

In the rear of the counter there is a hand basin and paper towels so that the workers and student aids may keep their hands clean at all times without returning to the kitchen.

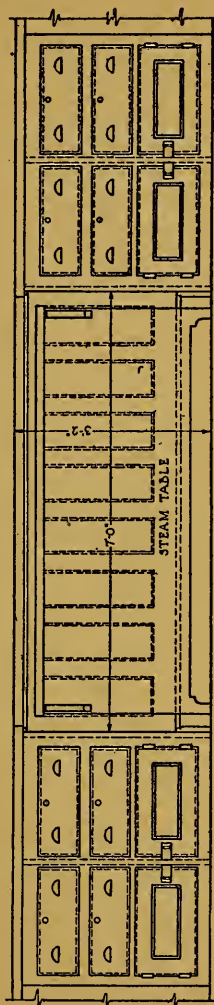
The counter top should be of ash or oak treated with a liquid hardener to preserve the wood. This prevents the roughening of the surface which otherwise would be caused by the daily scrubbing necessary to keep the counter immaculately clean.

The steam table for hot foods is located at a central point in the counter. The rail is divided in the middle of the steam table so that the lines may have access to the hot foods from two points. All other service is duplicated, cocoa, ice cream, sandwiches and milk, cookies, chocolates, etc., as shown on the plan of the counter. This plan of duplicate service and the two or three lunch periods make it possible to serve the large number of pupils very comfortably in the short time allowed for lunch.

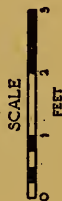
The display of the food on the counter is of great importance and bears a distinct relation to the amount of the sales. All foods should be attractively arranged, with a clear division between the different groups. Over the cookies,



PLATE 9—SECTION OF COUNTER SHOWING SANDWICH DRAWER, DESSERT CLOSET WITH SHELVES
DRAWN OUT AND ICE CREAM CABINET.



SERVING SPACE SIDE OF LUNCH COUNTER.
 IN STUDENTS LUNCH ROOMS OF
 HIGH SCHOOL BUILDINGS



THE SCHOOL LUNCH

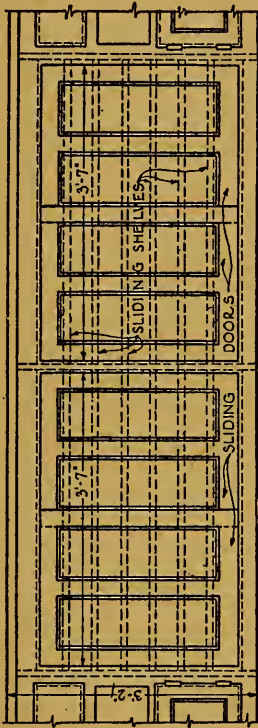
crackers, chocolates and fruits are placed the prices, since these vary slightly for different varieties. Coin checks are handed over the counter for each food as it is purchased. The coins are dropped by the persons serving into locked boxes, conveniently placed behind the counter.

ADAPTATION FOR SMALLER LUNCH ROOM

All details of arrangement as described here are for the school lunch on a large scale. Adaptations would have to be made for the smaller school. Many of the labor-saving devices necessary in the large kitchen would be unnecessary and extravagant in the small kitchen. Dish-washing, for instance, can be done by hand. Steam cookers are unnecessary if the stoves are supplemented by fireless cookers. If there is a good-sized closet in the kitchen a store room may be eliminated, although it is always desirable. It is advisable, even for the small school, to have a dietitian's office and a locker room for the workers.

Separate cafeteria service for the teachers is not necessary in the small school, but service for the teachers can be arranged at one end of the pupils' counter and they can carry their food to their own dining-room. The duplication of service as for the large school is not necessary. A gas-heated table will serve for keeping food hot, as steam is seldom available in a small school.

PLAN OF SERVICE



DESSERT CLOSET UNDER SERVING COUNTER IN STUDENTS' LUNCH ROOMS OF HIGH SCHOOL BUILDINGS

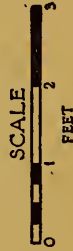


PLATE 11

Chapter Five

THE WORKING FORCE OF THE
HIGH SCHOOL LUNCH

THE WORKING FORCE OF THE HIGH SCHOOL LUNCH

THE working force necessary to serve a school lunch depends upon several factors:

Character of menu.

Type of service.

Number of pupils in the school.

Amount of co-operation on the part of pupils.

It is usually considered as a basis for calculation, for the type of menu served in the Philadelphia schools, that one worker is necessary to a school with a hundred pupils or up to a hundred and twenty-five. For a school with a hundred and fifty pupils one full time and one half-time worker are necessary. The number of workers will not increase, however, in exact ratio to the number of pupils, as the proportion of workers naturally decreases with increasing numbers of persons served.

In a high school with eighteen hundred to two thousand students, where there are convenient arrangements and a fair measure of co-operation on the part of the students, the minimum force necessary, in addition to a dietitian and assistant

THE SCHOOL LUNCH

dietitian, is seven full time women workers, three half-time women workers and one man, full time. This force takes care of about two thousand sales of substantial foods a day and a thousand sales of fruits, chocolates and crackers.

The Philadelphia high school lunch system employs in all:

- 15 Dietitians in charge of lunch rooms.
- 8 Assistant dietitians.
- 124 General helpers.
- 228 Student aids each day.

THE DIETITIAN

The success of a high school lunch room depends very largely upon the dietitian, as she gives the stamp to the place and is responsible for the running of the machinery. She works under the director of school lunches, but is responsible for the management of the individual lunch room and for all of its employees. She has nothing to do with the equipping of the lunch room, but takes charge when it is ready to operate. She works eight hours a day five days in the week and receives a salary rated on the present basis of the teachers of domestic science in the elementary schools, paid in ten instalments.

During her working hours the dietitian wears a white uniform, cap and white shoes and stock-

THE WORKING FORCE

ings. Her very appearance strikes the keynote of the lunch room in contrast with that of the street vender or the old type concessionaire.

QUALIFICATIONS OF THE DIETITIAN

The first qualification of the dietitian is that she shall be a home economics graduate or that she must have the equivalent of that training in previous experience. Because the work she has to do calls for quick action, for correlation with the other work of the school and for careful dealing with people of all ages and kinds, the successful dietitian needs to be a very well rounded person. She should be fortified with an inordinate amount of common sense and sound judgment. She should have business ability, tact, a cheerful disposition and poise. She must be prompt, and, above all else, she should be drawn into the work through a knowledge of and a genuine interest in the subject of school feeding so that at all times she pledges her energies to maintain ideals and standards.

DUTIES OF THE DIETITIAN

The duties of the dietitian may be considered as threefold in character: scientific, executive and social. It is hard to say which phase is of greatest importance. Under the first, or scientific, come her duties as director of the food preparation of the lunch room; under the second, her

THE SCHOOL LUNCH

duties as head of her corps of workers and the responsibility of ordering supplies and directing the management; and under the third come the important duties of winning the co-operation of principal and teachers and of dealing tactfully with the children.

In her scientific capacity she plans all the menus for the lunch room both for pupils and teachers. These menus are made up of the standard recipes of the department with some slight variations. They are planned with a view to nutrition and to well-balanced combinations, the dietitian always keeping in mind the seasons and the food supplies on hand. She should utilize the supplies wisely, and especially towards the end of the school must so plan the menu as not to leave surplus stock of perishables in the larder. As a basis for her recipes she uses "Institution Recipes," but she keeps on hand a book in which recipes are adapted to just the quantities served in her particular school. This is a valuable part of her office equipment and is at hand for reference in case the dietitian is absent and someone else takes charge.

In addition to the planning of the menus, the dietitian actually supervises the preparation and cooking of the food so as to be sure that it is properly done, instilling in her workers the necessity for absolute cleanliness and sterilization in the handling of food, and the great importance of careful seasoning.

THE WORKING FORCE

She should inspire all her workers with a desire to have the food served each day as nearly perfect in taste and appearance as it can possibly be made. The motto of the lunch room should be "Trifles make perfection and perfection is no trifle."

In her executive capacity fall the larger range of the dietitian's duties. She is responsible for the food from the time it comes in as raw material until it is consumed, for most of the ordering, for some of the buying and for keeping a careful account of all foods brought in and used. Within her province comes the ordering of all foods that are delivered daily, milk, bread and ice cream, and perishable vegetables and fruits which can best be secured within a short radius. As a means of keeping track of these orders she has always on her desk a book in which are recorded daily the amounts of each of these foods ordered and at the end of the day the amounts left over, as a guide for the next day's order. This method of recording orders is uniform with all the dietitians so that in case of substitution when a dietitian is absent from her post, the newcomer has but to refer to the order book as a guide.

Once a week, on Friday, the dietitian sends to the director's office an order for meat, butter, eggs, crackers and cookies which may be needed for the school during the week to come. Once a month she sends in to the central office an order

THE SCHOOL LUNCH

for staple groceries. On delivery of supplies she checks the invoices and has all food weighed to see that the invoice tallies with the order and that the correct weight and quantity are delivered.

As a part of a large system in which leakage or inaccuracy would mar the whole plan, she has to make careful reports to the central office. These reports, some of which are sent in weekly and some monthly, show a record of the supplies received and on hand, menus served to pupils and faculty, portions served, cash receipts and receipts in coin checks. (For detailed account of these reports see chapter on System of Records and Accounting.)

Among the dietitian's duties also is a monthly counting of all silver and dishes to see if there are any shortages and at the end of each term to examine all equipment, see what needs replacing or mending, and to make out requisitions for replacement, so that the lunch room may start fully equipped at the beginning of the fall term.

The dietitian likewise sends in to the director the payroll of her workers and pays them each week with a check sent from the central office.

In her social capacity the dietitian can do much to bring about the co-operation of principal, teachers and students with the lunch room, although that is a fifty-fifty undertaking, and unless her interest is met by the interest of the principal she is greatly hampered.

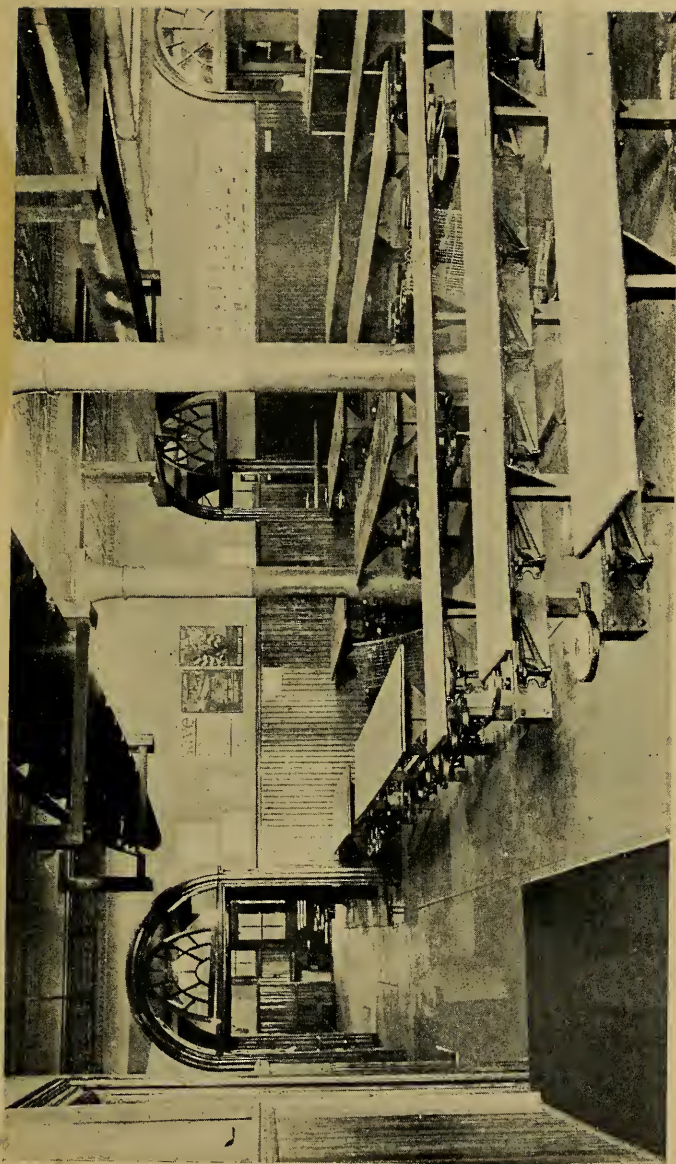


PLATE 12—PUPILS' DINING-ROOM SHOWING CHARTS ON THE WALL.

THE WORKING FORCE

Where student government is in operation in the school, the dietitian attends meetings of the student governing body and, with the pupils, works out plans for keeping order in the lunch room, for directing the service and helping to clean up after lunch.

If a student grows careless along any line, the magic words "student government" are all that is necessary to insure the usual co-operation, and the forgotten dishes are promptly returned to the counter or the waste paper placed in the baskets provided for that purpose. In some schools where there is no student government as a basis with which to work, the dietitian can infuse an atmosphere of tidiness and dignity into the lunch room by encouraging the boys who like to eat at a clean table, setting apart special tables and giving them paper napkins. This example very rapidly spreads through the school.

Each lunch room is provided with a set of food charts which are issued by the United States Department of Agriculture, which give the composition of different kinds of foods. These charts and others showing the proper combinations of foods to furnish a wholesome luncheon, are placed on the walls in a conspicuous part of the room, as shown in Plate 12. The interest created by the charts gives the dietitian the opportunity of talking with the pupils and guiding them in the choice of suitable luncheons.

THE SCHOOL LUNCH

THE DIETITIAN'S MEETING

Once a month, on Saturday morning, all dietitians in the department meet with the director to talk over various phases of the work in the different schools and to gain new ideas from each other and suggestions from the director. This family council is important in keeping up the spirit and stimulus of the work. The usual plan of the meeting is sometimes varied by having a qualified person give a talk on some pertinent topic, as the manufacture of a food product, or the use of labor-saving equipment. The director or one of the dietitians may give a report of a Home Economics Conference, her impressions of a recent visit to school lunches in another city, or other subject of interest to this group. Occasionally a visit is profitably made to an ice cream plant, a soup factory, or the well-equipped kitchen of restaurant, hotel or tea room.

THE STUDENT OR ASSISTANT DIETITIAN

In schools where the lunch service is too large for the direction of one dietitian an assistant is assigned, and this assistant is usually a student dietitian who wishes to become a directing dietitian in the Philadelphia system or to work in some other city. The system, therefore, offers this practical training course as subsidiary part of the work.

The student dietitian must be a graduate of a recognized home economics school. She receives a

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nominal salary, during the period, from five to ten months, when she is in training, which is considered merely maintenance. She is then in line for promotion to the position of a head dietitian in Philadelphia, or, if she prefers, to go into the school lunch system in another city.

The student dietitian works on the same schedule of hours as her superior and also wears a white uniform. She assists the dietitian in whatever way may be necessary. During the course of her training she usually does every part of the work so that she may become thoroughly familiar with each detail, may gain confidence and get a sympathetic attitude towards the workers whom she may later have to direct. Usually she is in direct charge of the kitchen, doing a good deal of the actual preparing and cooking of the food. She takes her turn in serving behind the counter, keeping the record of sales, and she often acts as cashier.

The advantage of this apprentice system is two-fold. It gives the worker the benefit of a valuable practice school to supplement her theoretical training before she takes a regular position and it likewise gives the lunch system well-trained workers upon whom it may draw for filling vacancies.

GENERAL HELPERS

The dietitian has from one to ten or more workers to assist her in the lunch room, according to the demands of the service. Some of these helpers

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work for eight hours a day, from eight to four o'clock, and others work half a day or four hours. The wages are increased on a regular scale, according to the character of the work and the length of the time the worker is employed. These workers are paid by the week, receiving extra for overtime or Saturday work, and are paid for all holidays during the school term. All of the employees receive their lunch. These women helpers are usually secured by personal recommendation and nearly always live in the neighborhood of the school. They are frequently older women whose training has been that of home-makers and who are not fitted for factory work and yet find in the school lunch rooms, because of the shorter working week, a satisfactory means of livelihood.

The work which these helpers do is that of preparing and cooking, serving and cleaning up. A man usually attends to the cleaning of the lunch rooms and operating the dish-washing machine. According to the plan of work, each helper has her definite duties in the preparation or cooking and in the cleaning after lunch is over, and all help during the period of serving, each having her regular place at the counter and her part of the serving.

The women assistants wear a white shirt-waist and black skirt. A white serving apron is furnished by the department.

The same standard of cleanliness is required of these workers as for the dietitian and her assist-

THE WORKING FORCE

ant and they are thoroughly imbued with the spirit of the lunch room. No one who is dissatisfied is kept. The fact that the work is made interchangeable and that the dietitian and her assistant work side by side with the helpers removes from the work any suggestion of the menial.

A sufficient corps of workers is maintained in each school so that if one is absent the service is not crippled.

STUDENT AIDS

As a means of supplementing the working force of the lunch room and of linking the system more closely with the school, student aids are used to assist with the serving of the lunch. From ten to fifteen of these aids serve during the lunch period each day. They are chosen in different ways in different schools. In some schools they are selected from the honor students and are under the supervision of a teacher. In other schools certain pupils from special classes are assigned in rotation from the lower classes of the school and they work under the supervision of a senior. The advantage of this plan is that these pupils are in the school for several successive years and become well trained to their duties.

The boy aids wear white coats and the girls white aprons, furnished by the department. They are paid in money, ten cents for half the lunch period.

THE SCHOOL LUNCH

The student aids are impressed with the obligation of their agreement and if they fail to treat it as a business arrangement they are not retained as helpers.

This system of student aids is of co-operative value; it helps the pupils and it assists the dietitian. It shows the pupil the value of promptness, as he sees in the congestion of the line a definite result of his tardiness. He also gains habits of neatness in serving food. He is aided financially, often earning enough to pay for his lunch or some of the many incidental school expenses that are a tax on the family pocketbook in these times of high cost of living. Last year about \$4,000.00 was paid to student aids. The student aid also acquires a personal interest in the lunch room, when he has once served behind the counter. This is a feeling that the dietitian is anxious to foster. The student is of value to the dietitian not alone for the help he gives at service time but he keeps her in touch with the school activities, preparing her for a "slow day" at the lunch counter on the day that the school paper comes out or a class excursion reduces the number of patrons. The student aid is also a means of gathering the criticisms of the pupils, because he is personally acquainted with the dietitian he will talk with her freely and in this way she can get the view of the pupils and often correct a misunderstanding or give a valuable food lesson in a few words.

Chapter Six

EQUIPMENT FOR THE HIGH
SCHOOL LUNCH

EQUIPMENT FOR THE HIGH SCHOOL LUNCH

THE equipment for any high school lunch room is determined by the type of menu served and the extent of service. In the Philadelphia schools the equipment is arranged for a standardized menu, which does not vary greatly within the limit set. As the breads are all bought, there is no baking equipment necessary.

The school lunch kitchens are adequately equipped with labor-saving machines because these devices have been found to pay for their cost many times over in facilitating service and in reducing labor costs. The labor savers which have proved absolutely essential in serving large numbers of people in a short time, as must be done in the school lunch, are dish-washing machines, meat and bread slicers, potato peelers, food choppers and kitchen mixers, the last three with electric motor attachment. (See Plate 13.)

Gas ranges, it has been found, are more practical than coal, because they are cleaner, easier to work with and the heat is available at all times and at whatever degree needed; they likewise do not heat the kitchen so much and are more

THE SCHOOL LUNCH

comfortable for the workers. The gas ranges are largely supplemented by steam cookers wherever steam is available. As steam is a product within the building in the large schools, it can be used for cooking purposes with very little extra expense to the school. The cookers being stationary and requiring no handling are more practical for large quantity cooking. Fireless cookers, likewise, are used a great deal as a means of economy and convenience, especially in the smaller schools where steam is not available. In many cases all the vegetables for soups are started in the afternoon and left overnight in the fireless cookers. Hams also are cooked in the fireless cookers.

The kitchen must be amply provided with work tables. Those built with metal frames and ash or oak tops have been found desirable. The cooks' tables are made with two drawers for knives, spoons, etc., a shelf about one foot from the floor and a pot rack supported from either end by uprights securely fastened to the ends of the table.

Aluminum utensils are used wherever possible because they are durable, easily kept clean, quickly heated and hold the heat a long time. Even for the large steam cookers aluminum has been found more practical than the copper-jacketed kettles.

In deciding upon the number of dishes and the amount of silver necessary for a school lunch the plan of service must be taken into considera-

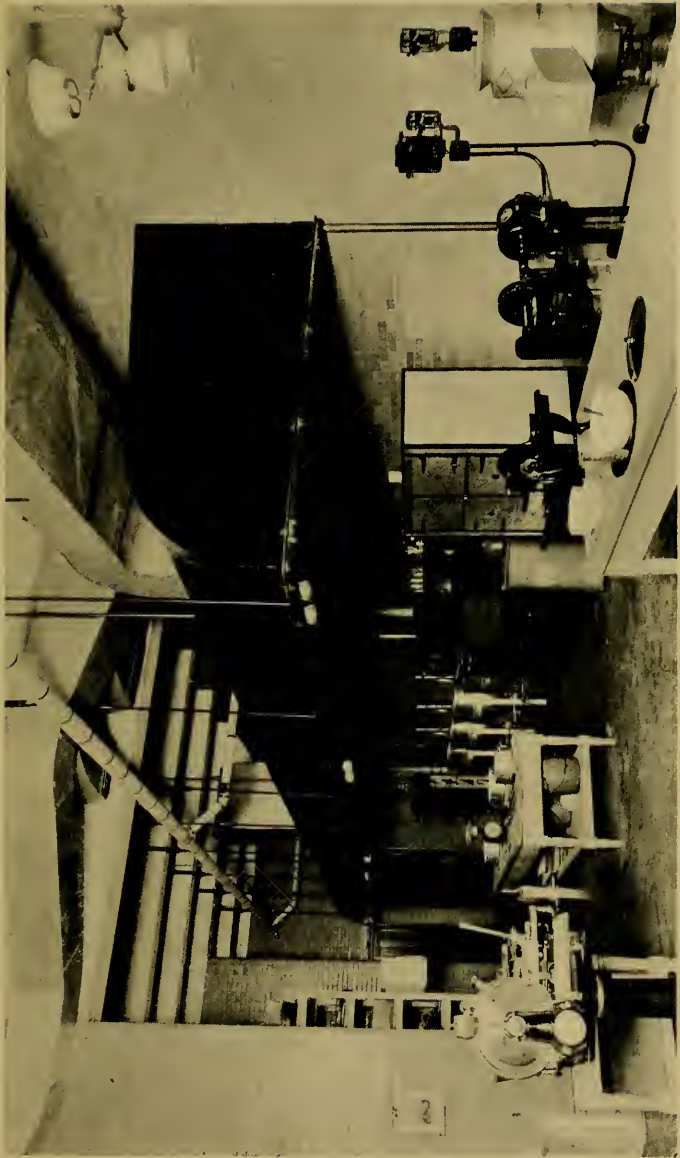


PLATE 13—HIGH SCHOOL KITCHEN.

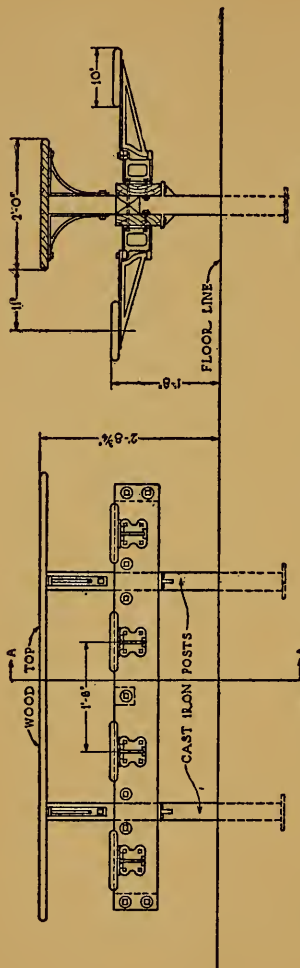
EQUIPMENT

tion, the number of lunch periods and the length of intermissions between. Where ice cream is served, the number of saucers has to be proportionately large because they cannot be used hot and therefore a sufficient number must be provided to last through the whole lunch period. It is always necessary to provide a larger number of teaspoons than any other article of silver.

The kind of tables and benches in a school lunch room is very important. The Philadelphia schools, after some experimenting, have found that where the lunch room is used for that purpose alone, stationary tables with attached swinging stools are the most practical. They save space, reduce confusion and noise during the lunch hour, and make it possible to clean the room quickly and easily. As shown in Plate 5, the detailed drawings of which are given in Plate 14.

In one school benches with broad arms have been tried out, but they have not proven satisfactory because in cleaning the floor it takes two persons to lift one bench. They contribute to breakage because the pupils are apt to knock dishes off the arms in passing.

The number of seats necessary in a lunch room depends upon the number of lunch periods. With two periods there should be from one-third to a half as many seats as there are pupils in the



SECTION A-A

TYPICAL TABLE FOR STUDENTS LUNCH ROOMS
OF
HIGH SCHOOL BUILDINGS



EQUIPMENT

school. A school of two thousand children can manage with eight hundred seats, as not all of the children remain in the lunch room during the whole lunch period.

LIST OF EQUIPMENT FOR SCHOOL OF 2000 TO 3000

The following is the list of equipment used in the Philadelphia High School Lunch Room providing noon lunch for 2000 to 3000 pupils and 125 teachers :

DIETITIAN'S OFFICE EQUIPMENT

- 1 sanitary base desk
- 1 desk chair
- 1 wardrobe
- 1 four-fold screen
- 1 rug
- 1 hand basin
- 1 mirror
- 1 small table
- 3 chairs
- 1 rubber stencil set

EQUIPMENT FOR ROOM FOR WOMEN HELPERS

- Hand basin
- Toilet
- Steel lockers
- Dressing table and mirror
- Chairs

THE SCHOOL LUNCH

KITCHEN AND PANTRY EQUIPMENT

- 1 three-oven gas hotel range
- 1 24-in. gas broiler
- 2 40-gallon steam-jacketed kettles (aluminum)
- 1 25-gallon steam-jacketed kettle (aluminum)
- 1 two-section upright vegetable steamer
- 1 meat slicer
- 1 electric potato-paring machine
- 1 electric food chopper
- 1 electric mixing machine
- 1 steam dish washer
- 1 cook's table with drawers and under shelf
- 2 pantry tables with drawer and under shelf
- 1 small pantry table
- 1 saucepan rack attached to cook's table
- 1 pot sink and drain boards
- 1 porcelain sink and drain boards
- 1 large refrigerator, underdrained
- 1 small refrigerator for milk and butter, underdrained
- 6 dish trucks with rubber tire castors
- 1 platform truck with rubber tire castors, platform 24 in. x 36 in.
- 1 No. 4 Seely fireless cooker
- 6 stools, two feet high
- 1 6-ft. step ladder
- 2 2-ft. step ladders

White Enamel Ware

- 2 1-pt. pitchers
- 2 2-qt. pitchers

EQUIPMENT

- 8 4-qt. pitchers
- 3 12-qt. pails
- 2 doz. instrument trays, 10 in. x 16 in., smooth bottom, without lip
- 2 doz. pans to fit into openings in steam serving table .
- 6 half-pint ladles
- 6 one-third-pint ladles
- 2 1-pt. funnels

Tin Ware

- 12 sets muffin pans (12's)
- 2 20-qt. retinned mixing bowls
- 2 30-qt. retinned dish pans
- 2 extra heavy retinned bakers' egg basins, 8½ qts.
- 2 extra heavy retinned bakers' egg basins, 10 qts.
- 2 extra heavy retinned bakers' egg basins, 12 qts.
- 1 No. 110 retinned colander
- 2 1-qt. milk dippers
- 6 T apple corers
- 2 No. 1 biscuit cutters.
- 4 bakers' glacé racks, 25 in. x 19 in.
- 4 pans 1 in. deep, 25½ in. x 19 in.
- 3 3-qt. block tin saucepans
- 1 5-gal. extra heavy block tin cereal cooker, copper bottom
- 4 flour dredges
- 2 flour sifters

THE SCHOOL LUNCH

- 4 tin scoops for flour
- 3 1-qt. graduated measures
- 12 1/2-pint graduated measures
- 2 nutmeg graters
- 6 6 1/2-in. heavy bowl strainers
- 6 8-in. heavy bowl strainers
- 1 9-in. puree sieve
- 2 half-sheet graters, 8 in.
- 12 1-qt. "brown bread" tins
- 12 deep pie plates, 10 in.
- 2 French bread boxes
- 1/2 doz. japanned trays, 19 in. x 24 in.

Aluminum Ware

- 6 17 1/2-qt. cereal cookers
- 4 8 1/2-qt. cereal cookers
- 2 6 -qt. cereal cookers
- 1 1 -qt cereal cooker
- 12 5 -qt. pudding pans
- 2 14 -qt. preserving kettles
- 2 10 -gal. stock pots with spigot and cover
- 2 14 -qt. stock pots with cover
- 8 doz. serving trays, 16 1/2 in. x 12 1/4 in. (for teachers)
- 6 1/2-pt. soup ladles
- 2 tea kettles
- 6 sauté pots

Wooden Ware

- 3 26-in. paddles
- 6 6-in. soap dishes

EQUIPMENT

- 2 16 in. x 20 in. pastry boards
- 2 rolling pins
- 2 chopping boards, 10 in. x 12 in.
- 2 towel racks, 8-arm
- 6 14-in. French wooden spoons
- 6 12-in. French wooden spoons, slotted
- 3 flour-barrel covers
- 3 sugar-barrel covers

Iron Ware

- 3 round sad iron heaters
- 6 roasting pans, 20 in. x 14 in. x 4 in.
- 12 Russian iron gingerbread pans, 10 in. x 15 in. x 2½ in.
- 2 double hotel fryers, deep
- 2 13-in. frying pans
- 6 16-in. iron basting spoons
- 6 18-in. iron basting spoons

MISCELLANEOUS

- 5000 aluminum 5c coins
- 2500 aluminum 3c coins
- 3000 aluminum 1c coins
- 1 doz. cash boxes, 4½ in. x 7 in. x 3 in., with slot large enough to admit a silver dollar
- 2 nickel clocks, 4-in. diameter
- 4 cooks' forks, 4½-in. tines
- 1 No. 3 food chopper (Universal)
- 2 dial scales, 25 lbs. capacity.
- 1 portable platform scale, with platform 15 in. x 21 in., ¼ lb. to 400 lbs. capacity
- 1 meat saw, 14 in.

THE SCHOOL LUNCH

- 1 8-in. market cleaver
- 2 pairs 7-in. shears
- 2 12-in. steels
- 2 8-in. spatulas
- 2 9-in. French knives
- 4 7-in. French knives
- 2 4-in. French knives
- 1 bread knife
- 12 paring knives
- 6 case knives
- 6 case forks
- 6 plate scrapers
- 12 nickel tablespoons
- 12 nickel teaspoons
- 1 "quick and easy" lemon squeezer
- 1 hotel egg whip
- 1 sensible egg whip
- 3 large Ladd egg beaters
- 2 hotel wire potato mashers
- 2 potato ricers, round and seamless
- 1 bread slicer, Sterling No. 20
- 1 Elgin butter cutter
- 2 corkscrews
- 6 Delmonico can openers
- 1 force pump
- 2 handle pot chains
- 1 pr. ice tongs
- 2 ice picks
- 1 hammer
- 2 hatchets
- 1 screw driver, 4 in.

EQUIPMENT

- 1 monkey wrench
- 1 Stillson wrench, 10 in.
- 4 paper towel holders
- 2 glass lemon reamers
- 3 doz. jelly glasses
- 1 doz. 2-qt. Mason jars
- 1 doz. 1-qt. Mason jars
- 1 doz. 1-pt. Mason jars
- 25 doz. earthen custard cups
- 6 6-in. earthen bowls
- 6 10-in. earthen bowls
- 12 scrub brushes
- 6 sink scrubs
- 6 vegetable brushes
- 3 brushes, for cocoa urn gauges
- 3 brushes, for refrigerator pipes
- 12 round-end dust brushes
- 3 8-in. x 13 in. japanned dust pans
- 2 12-in. floor brushes and handles (Ajax)
- 2 18-in. floor brushes and handles (Ajax)
- 2 floor scrubs and handles (Alpha)
- 3 mop handles
- 12 floor mops
- 1 mop wringer
- 3 hotel brooms (4 tie)
- 6 14-qt. galvanized pails
- 1 5-gal. oil can
- 4 galvanized ash barrels with covers
- 24 wire leaf consumers, 18 in. in diameter, solid bottoms, without covers (to be used as receptacles for waste paper)
- 1 17-qt. garbage pail, bale handle, with cover

THE SCHOOL LUNCH

DINING-ROOM EQUIPMENT—PUPILS

- 1 counter, with drawers and shelves
- Tables with attached swinging stools (800 seats)
- 1 steam serving table
- 1 steam dish warmer
- 2 cocoa urns (5-gal. capacity)
- 1 hand basin
- 2 dish cupboards
- 2 cupboards for food supplies
- 2 cash booths
- 2 stools, 30 in. high
- 2 ice cream cabinets (5 20-qt. cans)

Dishes

- 100 doz. plates, 8 in. (white)
- 150 doz. fruit saucers, 5 in. (white)
- 50 doz. soup bowls (white)
- 50 doz. cups and saucers (white)
- 2 doz. salt shakers
- 2 doz. pepper shakers

DINING-ROOM EQUIPMENT—TEACHERS

- 1 counter with drawers and shelves
- 1 serving table, steam-heated
- 1 coffee urn
- 1 two-burner gas plate or 1 electric hot plate
- 1 porcelain sink and drain boards
- 1 refrigerator, underdrained

EQUIPMENT

- 12 extension tables
- 9 doz. chairs
- 1 china cupboard
- 1 electric toaster, hotel size
- 1 cash register

Dishes

- 15 doz. cups and saucers (green band)
- 30 doz. bread and butter plates, 6 in. (green band)
- 12 doz. soup plates, 8 in. (green band)
- 15 doz. plates, 8 in. (green band)
- 10 doz. vegetable dishes, $5\frac{1}{4}$ in. (green band)
- 15 doz. fruit saucers, 5 in. (green band)
- 10 doz. 2-oz. individual cream pitchers (green band)
- 3 doz. glass sugar bowls
- 2 doz. glass pitchers
- 6 doz. sherbet glasses, footed
- 25 doz. tumblers
- 2 doz. oil bottles, 6 oz.
- 2 doz. salt shakers
- 2 doz. pepper shakers
- 6 teapots.

Plated Silver for Teachers and Pupils

- 75 doz. dessert knives
- 75 doz. dessert forks
- 75 doz. dessert spoons
- 150 doz. teaspoons

THE SCHOOL LUNCH

Linen

- 30 3½-yard table cloths for teachers
- 40 yards table felt for teachers
- 12 doz. dish towels
- 50 yards heavy Russian crash
- 6 doz. dish cloths
- 3 doz. floor cloths
- 1 piece thin muslin, unbleached, single width,
for counter covers
- 1 piece thin muslin, unbleached, double width,
for covering tables at night
- 1 piece bleached cheesecloth, 36 in. wide

LIST OF EQUIPMENT FOR SCHOOL OF FIVE HUNDRED

The following is a list of equipment adapted to the needs of the small high school providing noon lunch for five hundred pupils and twenty teachers:

DIETITIAN'S OFFICE EQUIPMENT

- 1 sanitary base desk
- 1 desk chair
- 1 wardrobe
- 1 mirror
- 1 four-fold screen
- 1 hand basin
- 2 chairs
- 1 rubber stencil set

EQUIPMENT

KITCHEN AND PANTRY

- 1 refrigerator, underdrained
- 1 gas range, oven 18 in. x 23 in. (section hotel range with broiler)
- 1 Seely fireless cooker, No. 4
- 1 galvanized sink and drain boards
- 1 cooks' table with drawers and under shelf, pot rack attached

White Enamel Ware

- 1 3-qt. coffee pot
- 4 4-qt. pitchers
- 2 1-pt. pitchers
- 12 instrument trays, 10 in. x 16 in., without lip, smooth bottom
- 2 one-half-pint ladles
- 2 one-third-pint ladles
- 2 10-qt. seamless deep basins
- 4 6-qt. seamless bowls
- 1 hand basin
- 4 oblong roasting pans (to fit opening in serving tables)

Aluminum Ware

- 1 7½-qt. sheet tea kettle
- 3 17½-qt. cereal cookers
- 1 8½-qt. double boiler
- 2 4-qt. double boilers
- 1 25-qt. stock pot with cover
- 1 15-qt. stock pot with cover
- 2 5-qt. lipped saucepans
- 2 2-qt. lipped saucepans

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- 1 1-qt. lipped saucepan
- 1½ doz. serving trays, 16½ in. x 12¼ in.

Tin Ware

- 1 French bread box
- 6 ½-pt. graduated measuring cups
- 1 1-qt. graduated measure
- 1 half-sheet grater
- 1 nutmeg grater
- 1 No. 110 seamless hotel colander
- 2 8-inch bowl strainers
- 2 6½-in. bowl strainers
- 1 8-in. puree sieve
- 4 sets muffin pans (12's)
- 2 japanned trays, 19 in. x 24 in.
- 2 14-qt. dish pans, heavy, retinned
- 1 flour sifter
- 2 T apple corers
- 2 japanned dust pans, 8 in. x 13 in.
- 2 flour dredges
- 1 potato ricer, round, seamless
- 1 cake cooler, 25 in. x 19 in.
- 1 biscuit cutter
- 1 tin scoop for flour

Iron Ware

- 3 15-in. x 10-in. roasting pans
- 1 11-in. steel skillet
- 2 round sad iron heaters
- 2 galvanized ash cans with covers
- 2 basting spoons, 16 in.
- 2 14-qt. galvanized pails

EQUIPMENT

MISCELLANEOUS

- 2000 5c aluminum coins
- 2000 3c aluminum coins
- 2000 1c aluminum coins
- 6 cash boxes, 4½ in. x 7½ in., with slot large enough to admit a silver dollar
- 1 nickel clock, 4-in. diameter
- 1 dial scale, with scoop, 25 lbs. capacity
- 1 No. 3 food chopper
- 2 glass lemon reamers
- 12 1-qt. Mason jars
- 12 jelly glasses
- 1 sensible egg whip
- 2 large Ladd egg beaters
- 1 bread slicer, Sterling No. 20
- 1 9-in. French knife
- 1 7-in. French knife
- 2 4-in. French knives
- 3 paring knives
- 2 cooks' forks, 4½-in. tines
- 1 10-inch steel
- 1 pair 7-inch shears
- 1-pt. agate funnel
- 6 doz. earthen custard cups
- 3 10-in. earthen bowls
- 3 6-in. earthen bowls
- 2 8-inch spatulas
- 6 nickel tablespoons
- 12 nickel teaspoons
- 6 case knives
- 6 case forks

THE SCHOOL LUNCH

- 3 plate scrapers
- 2 French wooden spoons, 12 in.
- 2 French wooden spoons, 14 in.
- 2 wooden soap dishes
- 1 chopping board, 10 in. x 12 in.
- 1 towel rack, 8 arms
- 1 pastry board, 16 in. x 20 in.
- 1 rolling pin
- 1 wood potato masher
- 1 paper towel holder
- 1 handle pot chain
- 1 corkscrew
- 2 Delmonico can openers
- 1 screw driver, 4 in.
- 1 hatchet
- 1 iron end ice pick
- 2 scrub brushes
- 2 vegetable brushes
- 3 sink scrubs
- 1 brush for refrigerator pipes
- 1 brush for cocoa urn gauges
- 2 round-end dust brushes, No. 1
- 2 12-in. floor brushes and handles
- 2 hotel brooms
- 6 floor mops
- 1 mop handle
- 1 17-qt. garbage can with cover, bale handle
- 6 leaf consumers, 18 in. in diameter, solid bottom without corners

EQUIPMENT

DINING-ROOM

- 1 counter, including gas-heated serving table and plate warmer
- 1 gas-heated cocoa urn
- 1 dish truck with rubber tire castors
- Tables with attached swinging stools (200 seats)
- 1 ice cream cabinet (2 20-qt. cans)
- 1 dish cupboard
- 1 cupboard for food supplies
- 1 hand basin
- 1 cash booth
- 1 stool, 30 in. high

Dishes

- 20 doz. 8-in. plates (white)
- 10 doz. cups and saucers (white)
- 10 doz. soup bowls (white)
- 25 doz. fruit saucers (white)
- 12 doz. tumblers
- 2 glass pitchers
- 1/2 doz. vinegar cruets
- 1/2 doz. sugar bowls

Plated Silver

- 24 doz. teaspoons
- 12 doz. dessert spoons
- 12 doz. dessert knives
- 12 doz. dessert forks

THE SCHOOL LUNCH

Linen

- 1 doz. dish cloths
- 3 doz. dish towels
- 1/2 doz. floor cloths
- 6 three-yard table cloths for teachers
- 6 yards table felt for teachers
- 10 yards thin muslin, single width, unbleached
- 8 yards thin muslin, double width, unbleached
- 10 yards bleached cheesecloth, 36 in. wide

Chapter Seven

THE ELEMENTARY SCHOOL
LUNCH

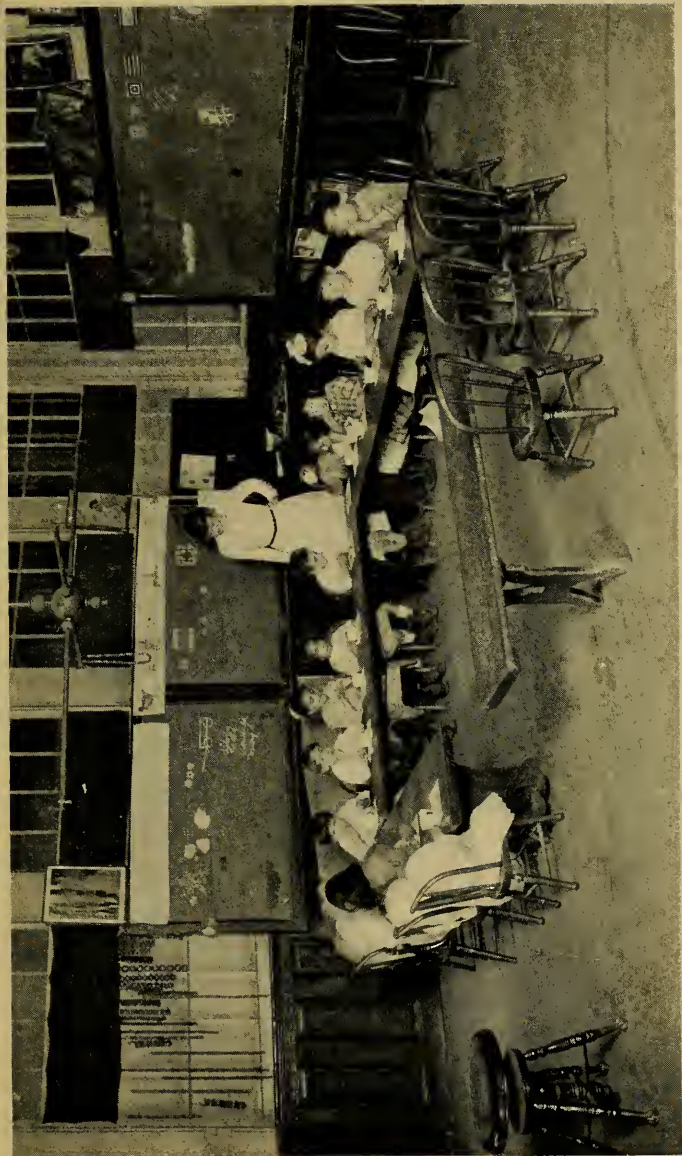


PLATE 15—KINDERGARTEN CLASS AT LUNCH.

THE ELEMENTARY SCHOOL LUNCH

THE school lunch as served in the elementary schools in Philadelphia operates differently from the lunch service in the high school because it meets a different need. It is largely a between-meal or pick-up lunch served at the morning and afternoon recess, with a noon lunch served to small numbers of children in some schools where pupils cannot go home or where the parents are working and cannot provide the noon meal. It is on a smaller scale than the high school lunch and yet it must be adapted to even more specialized needs.

The organization of the elementary school lunch is very much the same as that of the high school lunch. It operates under the same central direction, with an assistant to the director in charge of the work. This assistant's duties are to standardize the service and recipes; to prepare the menus; to train all workers; and to visit and supervise the schools. At the head of each elementary lunch room there is a competent worker who prepares and serves the food and receives the money. In schools where the volume of business requires it, an assistant worker is provided. The children in groups of two or three at each lunch period assist in selling the food, being paid in food for their services.

THE SCHOOL LUNCH

CO-OPERATION WITH TEACHERS

Co-operation on the part of the teachers is even more important in the elementary school than in the high school, because the younger children are more under the influence of the teachers. The attitude of instructors is very quickly reflected in the children. With the proper co-operation the school lunch may be the means of developing ideals in regard to food, of instilling good manners and habits of personal cleanliness. A teacher's presence and her patronage of substantial foods gives the stimulus of example which is more potent than any amount of preaching and teaching. Especially is this influence and co-operation important among the foreign children who are not yet familiar with American food.

MENU AND SERVICE

The underlying purpose of the lunch in the elementary school is to supplement home feeding at whatever point it is needed. An attempt is made to provide adequately for the child who is undernourished, but the chief purpose is to make available to the large mass of children a few simple wholesome foods to supplement the three home meals. The sweet tooth of young children has to be taken into account in the foods provided so that pennies will be diverted from the corner candy store or the street vender's wares, but only sweets with real food value are served. The



PLATE 16—BREAKFAST, OPEN-AIR CLASS.

THE ELEMENTARY SCHOOL LUNCH

main plan of the lunch system is to provide one nourishing soup or corresponding dish each day, also hot cocoa and crackers, with cookies and sweet chocolate in addition.

All lunches in the elementary schools used to be sold on a penny basis, but this price has had to be raised to two cents on some items on account of increased food costs. A simple lunch consisting of milk and crackers is served under the care of the teacher to the children in the kindergarten class room. (See Plate 15.) In one school three-cent breakfasts are served to an open-air class of twenty-five children, the money for this being provided by a philanthropic organization. (See Plate 16.) A noon meal is served to the children in an orthopedic class, the money for this also being provided by a private source.

The foods served in the elementary schools include:

- Cocoa
- Corn Soup
- Bean Soup
- Cream of Tomato Soup
- Cream of Potato Soup
- Cream of Pea Soup
- Tomato Soup with Rice
- Cream of Lima Bean Soup
- Tomato Soup with Macaroni
- Corn and Bean Soup
- Rice Pudding

THE SCHOOL LUNCH

Milk
Cracker Sandwiches
Ice Cream Sandwiches
Sweet Chocolate
Crackers and Cookies

A typical menu for one week for the recess lunch is:

Monday

Cream of Tomato Soup, Cocoa, Milk

Tuesday

Vegetable Soup, Cocoa, Milk

Wednesday

Bean Soup, Cocoa, Milk

Thursday

Cream of Lima Bean Soup, Cocoa, Milk

Friday

Rice Pudding, Cocoa, Milk

All of these foods are served in two-cent portions. In addition to this special menu, crackers, cookies and sweet chocolate are sold each day in one-cent portions.

The percentages which the children in the elementary schools spend for the different foods indicate their preferences: crackers and cookies, 49%; hot foods, 24%; sweet chocolate, 15%; milk, 12%. The average daily expenditure for each



PLATE 17—RECESS LUNCH IN ELEMENTARY SCHOOL. OCCUPYING ONE END OF PLAYROOM.

THE ELEMENTARY SCHOOL LUNCH

child is $\frac{1}{2}c$. The forty-nine per cent. spent for crackers and cookies does not indicate a greater demand for sweets, as it may be that two crackers are bought with a bowl of soup and the unsweetened crackers are more largely called for than the sweet varieties. The fact that the children are entirely free to make their own choice and yet take such a large percentage of the hot foods is an indication of the lesson the school lunch is teaching.

Because of the shorter time of the recess lunch period and also because of the complication involved with younger children in changing pennies into another medium such as the coins used in the high schools, that system is not in use in the elementary schools, the food being paid for with pennies as it is purchased.

The school lunch is in operation in thirty elementary schools in Philadelphia, with an average attendance of 35,000 pupils. There are twenty-nine workers and ninety student aids each day. The average receipts per day for lunches during the year 1919-20 were about \$160.00. The service is rapidly being extended to more schools.

The space used for serving lunch in the average elementary school is the play-room, therefore benches and tables cannot be stationary, although in the newer schools in which the service is being installed a special room is provided for this purpose.

THE SCHOOL LUNCH

EQUIPMENT

The equipment necessary for the elementary lunch room because of the simplified menu and service is very much smaller than that of the high school.

Any figures relating to the cost of equipment must necessarily be very unsatisfactory owing to the extremely high prices due to the unsettled market conditions following the war. Therefore no attempt has been made to enumerate the cost of furnishings and equipment.

The following is the list of equipment used in the Philadelphia elementary school lunch rooms providing recess lunch for pupils:

KITCHEN AND LUNCH ROOM EQUIPMENT

- 1 six-burner gas range, with oven and broiler
- 1 Seely fireless cooker, No. 4
- 1 sink with two drain boards, each 3 feet long
- 1 towel rack, wooden, with 8 arms
- 1 work table
- 1 supply closet with locks
- 1 counter with closets under and wire rack
- Serving tables
- Benches—two heights for large and small children
- 1 hand basin for use of the children
- 1 paper towel holder
- Liquid soap receptacle
- 1 drinking fountain for children
- 1 steel locker for workers' wraps



PLATE 18—ENCLOSED KITCHEN AND COUNTER. SERVING TABLES IN THE PLAYROOM.

THE ELEMENTARY SCHOOL LUNCH

For Serving

- 3 No. 216 W. & W. enamel trays
- 3 No. 220 W. & W. enamel trays
- 3 4-qt. W. & W. enamel pitchers, No. 17
- 12 doz. W. & W. enamel cups, No. 8, with handle
- 1 doz. W. & W. enamel soup bowls, 5-in. diameter
- 2 one-third-pint W. & W. enamel ladles
- 2 one-quarter-pint W. & W. enamel ladles
- 1½ gross nickel teaspoons

MISCELLANEOUS

- 1 agate stove pot, 12 qts.
- 1 20-qt. tin double boiler with copper bottom, spout in lower compartment
- 1 heavy retinned steel stock pot, 7-gal. capacity
- 1 No. 920 aluminum double boiler
- 1 No. 57 aluminum saucepan
- 2 No. 73 aluminum pudding pans
- 1 white enamel bucket having diameter 14 in. at top
- 1 2-qt. white enamel saucepan
- 1 graduated tin measure
- 1 3-portion measuring cup
- 1 4-portion measuring cup
- 2 retinned basting spoons, 14 in.
- 1 French wooden mixing spoon, 14 in.
- 1 heavy wire bowl strainer, 6 in.
- 1 japanned pepper shaker, No. 1½
- 1 bakers' egg whip
- 1 Delmonico can opener

THE SCHOOL LUNCH

- 1 paring knife
- 1 silver knife (for cutting brick ice cream for sandwiches)
- 1 wire pot chain
- 1 wooden potato masher
- 2 extra heavy dish pans, 14 qts.
- 1 4-tie broom
- 1 dust brush
- 1 No. 2 extra heavy japanned covered dust pan
- 2 scrub brushes
- 1 "Gong" sink scrub
- 1 chopping board, 8 in. x 10 in.
- 1 6-in. holly wood soap dish
- 3 16-qt. galvanized water pails
- 1 large hand-made tin wash boiler, copper bottom
- 1 No. 2 garbage pail, bale handle, with cover
- 1 No. 2 hatchet
- 1 25-lb. dial scale, with scoop
- 1 clock (nickel)
- 3 cash boxes, 4½ in. x 7 in. x 3 in., with slot to admit silver dollar
- 1 doz. tins (25-lb. capacity) for storing food materials
- ½ doz. 2-qt. fruit jars for storing food materials
- 3 doz. tea towels, hemmed, 1 yd. long
- ½ doz. dish cloths, 18 in. x 18 in.
- 2 floor cloths, 22 in. x 22 in.
- 1 piece cheesecloth

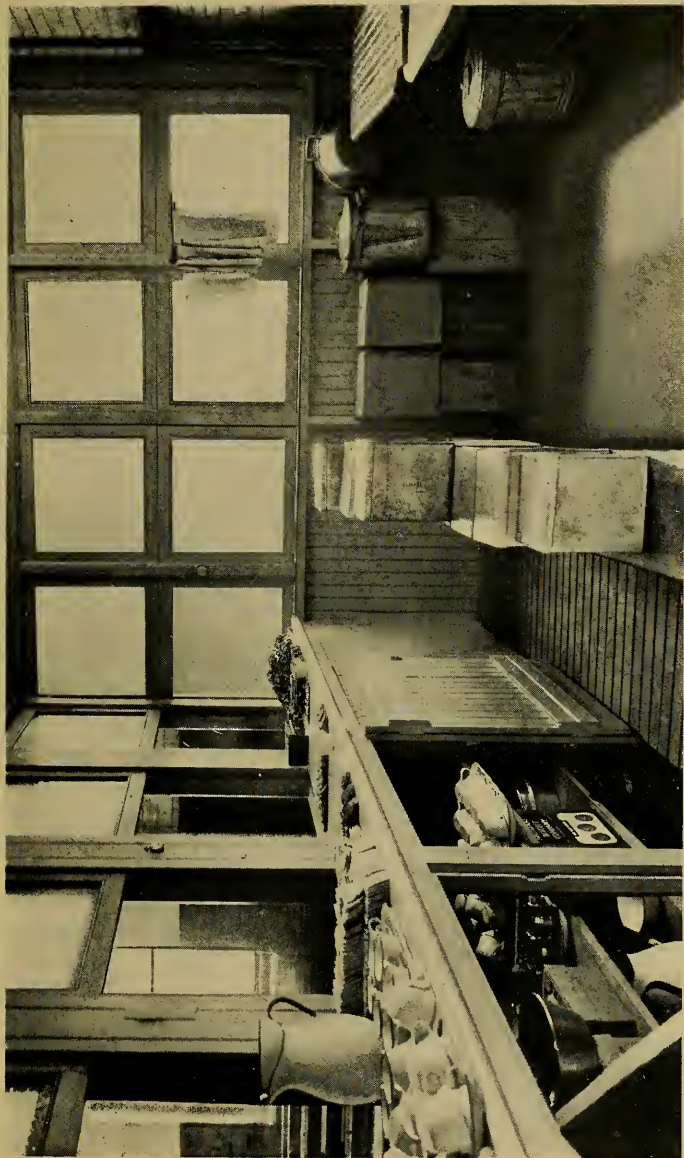


PLATE 19—THE ENCLOSED KITCHEN CONTAINING COUNTER, CLOSETS FOR SUPPLIES AND UTENSILS, STOVE AND SINK.

THE ELEMENTARY SCHOOL LUNCH

24 yds. unbleached muslin (1 yd. wide, for counter covers)

2 12-yd. piece white oilcloth, 1 yd. wide

PLAN AND ARRANGEMENT

The elementary school lunch room should, if possible, be used for lunch purposes only. It should be adjacent to the play-room and accessible to the play-yard. Where it is not possible to have a room exclusively for the lunch, which occurs in many of the schools, the movable equipment is installed in the play-room. This plan is shown in Plate 17. The lunch room should be bright and sunny and well heated, as the children lose much of the benefit of any heat calories they may gain if the room is cold; for the comfort of the lunch room worker also there should be adequate heat.

The floor of the lunch room should be of cement, cork or composition, with properly arranged drains so it may be flushed frequently. If cement is used slatted wooden floors or racks may be placed back of the counter so the worker need not stand on the cement.

The sink, work table and range should be so placed that they get a good light and conveniently adjacent to each other. The sink should be 31 in. from the inside bottom to the floor, with a

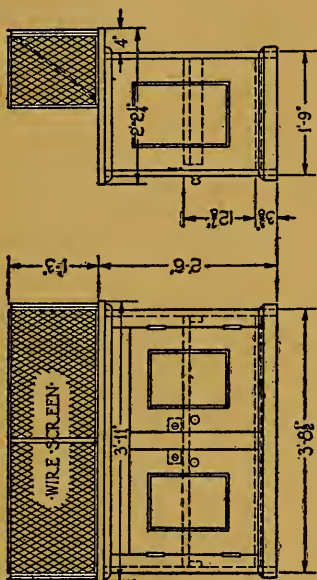
THE SCHOOL LUNCH

30-in. drainboard at each end. The supply closet should be convenient to the cracker counter. It saves steps to have the supply closet, the gas stove and the sink all in close proximity to the counter.

The counter should be stationary, and of sufficient depth to take large enameled trays on which the enameled cups can be inverted, one tray being placed on top of another, ready for serving. The length of the counter depends upon the number to be served. For a school of 1200 a sixteen-foot counter has been found sufficient. It should be of convenient height for children. A wire rack in front of the counter is advisable to protect the food from the contact of hands and clothing and to prevent food from being knocked off or taken. The shelves in the counter closet should, like the top of the counter, be of sufficient depth to take the large enameled trays containing cups. The supply closet should have tight-fitting doors to keep out dust. The shelves should be wide enough and with sufficient space between to hold the supply cans and the large utensils. Counter closet and supply closet should be provided with strong locks.

Plates 18 and 19 show the most satisfactory arrangement with counter, closets, stove and sink within an enclosed space at one end of the lunch room or the play-room. The sliding windows in front of the counter are raised during serving time and kept closed at other times.

THE ELEMENTARY SCHOOL LUNCH

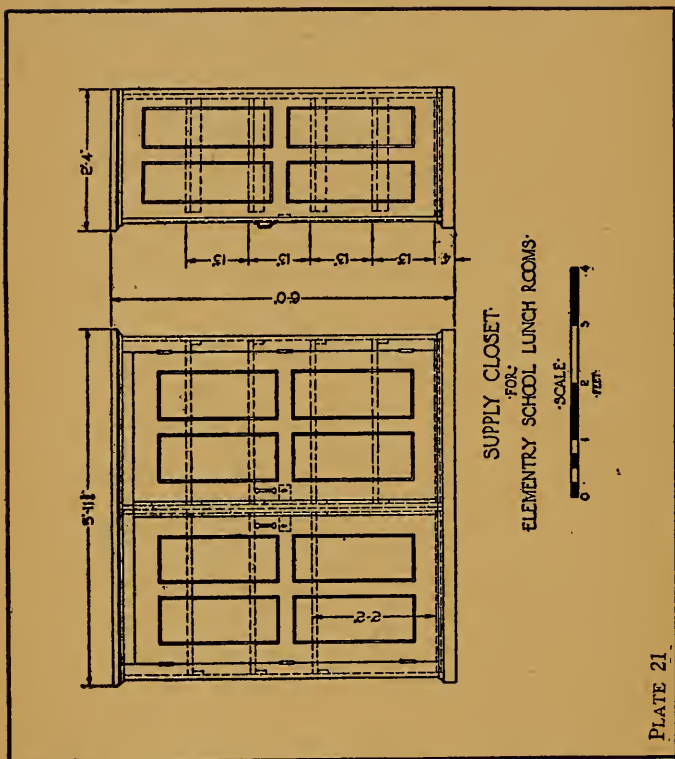


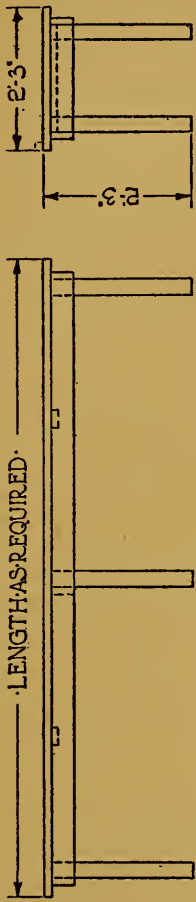
COUNTER-CABINET
FOR
ELEMENTARY SCHOOL LUNCH ROOMS



PLATE 20

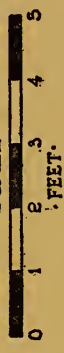
THE SCHOOL LUNCH

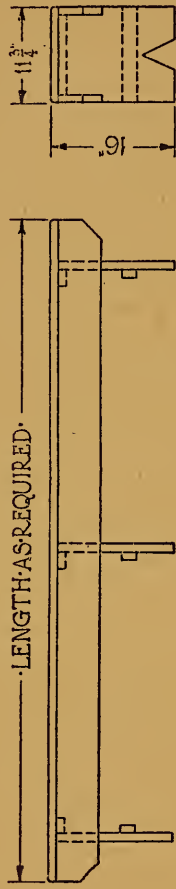




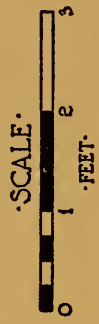
·DINING·TABLE·
 ·FOR·
 ·ELEMENTRY·SCHOOL·LUNCH·ROOMS·

·SCALE·





·DINING·TABLE·BENCH·
 ·FOR·
 ·ELEMENTARY·SCHOOL·LUNCH·ROOMS·



THE ELEMENTARY SCHOOL LUNCH

The tables and benches should be of proper height for children, preferably two heights of benches for the large and small children. The tables should be at sufficient distance from the counter to prevent crowding and the aisle between tables wide enough for children to pass one another comfortably. A rail directing the line at the counter is a great advantage.

The counter cabinets, supply closets, tables and benches used in the lunch rooms have been made by the boys in the manual training classes. The detail drawings are given in Plates 20, 21, 22 and 23. Tables eight feet long, two feet three inches wide are a convenient size.

Chapter Eight

PURCHASING OF SUPPLIES

PURCHASING OF SUPPLIES

NOTHING is more essential to the success of a school lunch system than a well-organized plan of buying. In Philadelphia all buying is in the hands of the School Lunch Department except for the initial equipment of the lunch rooms. The advantages of the buying being done by those who are directly in control of the school lunch are obvious. The department heads have direct contact with the dealers, can take advantage of market conditions to get better prices and can control the plan of buying and the payment of bills. Practically all supplies are purchased through the director's office and the whole purchasing plan of the department has been built up on three points: quality, service and price. Quality is the first consideration, service next and price third. When the school lunches were first started, there was a feeling on the part of dealers that second-rate goods could be offered to the schools, but by making the watchword of all buying, "Nothing is too good for the children," a standard has been set which merchants realize must be met in order to secure the school trade.

In the early days of the school lunch system goods were purchased from many different firms, the director going in person to the markets until

THE SCHOOL LUNCH

she was sure of the sources from which she was getting the best values and most advantageous prices. Competition is always kept in mind as an important factor in the buying plan, but when a firm is thoroughly imbued with the principles on which all purchases are made and knows that strict watchfulness is kept on all goods delivered, the element of competition is of less importance.

The principle of the department is to give large orders at definite times, weekly, monthly and yearly, through the one channel of the central office, the advantages to be gained thereby being that the central checking holds the dealer to a higher standard, the volume of the order counts in securing a better price; the elimination of deliveries and selling costs helps to secure better prices; and bookkeeping is greatly simplified.

With a centralized system of buying the money is always at hand to pay bills promptly, which is another factor in obtaining the best price from merchants, with benefits to be gained also through discounts.

SUPPLIES PURCHASED FOR USE IN SCHOOL LUNCH

The groups of supplies purchased by the school lunch department are:

- Staple groceries and canned goods
- Meats
- Milk, eggs, butter

PURCHASING OF SUPPLIES

Ice cream

Green groceries and fruit

Bread and rolls

Sweet chocolate

Crackers and cookies

Ice

Miscellaneous, china, silver, linen and toweling, glassware, kitchen equipment, paper napkins and cups, paper bags, wrapping paper, brushes, mops, soap, silver polish, etc.

BUYING AT REGULAR PERIODS

Many of the staple foods which are not subject to deterioration and many of the miscellaneous supplies are bought once a year, this order usually being given towards the end of the school year, so that the goods may be delivered and on hand before the beginning of the fall term. Spot canned goods can often be purchased in May or June cheaper than in September, before the new vegetables and fruits come to the market. It is advisable to take advantage of these cheaper goods, especially since it is often difficult and almost impossible to get a variety of canned goods at the time school opens.

For this large order buying, it is necessary that the schools have ample storage space, a point which has been taken into consideration in the planning of the lunch rooms. Where one or two

THE SCHOOL LUNCH

of the schools have larger storage space, surplus supplies are held there and during the year transferred to other schools as needed. For this purpose one small truck is necessary as part of the working equipment of the department.

Once a month, each school sends in to the director a requisition for chocolates, dry groceries and canned goods, miscellaneous supplies or equipment, which may be needed during the month to come. These monthly orders are given out by the director's office, a separate order for each school so that deliveries may be made by the firm direct to the schools.

Once a week, the dietitians send in requisitions for meat, butter and eggs, crackers and cookies. This buying is done by the director's office in the same way as the monthly buying. The orders come in on Friday morning and are placed by Friday afternoon, all deliveries being made the following week on the days designated.

As stated elsewhere, it has been found more satisfactory to have the dietitian give her own orders for bread, rolls, milk and ice cream because the quantities vary from day to day, but these supplies are purchased from firms chosen by the central office. The dietitian does her own buying of green groceries within the neighborhood of her school. The buying of these supplies is also guided to the extent that the director's office suggests to her the firm from which to buy.



PLATE 24—THE STREET VENDER SELLING TO CHILDREN
WHERE NO SCHOOL LUNCH IS PROVIDED.

PURCHASING OF SUPPLIES

PLAN OF BUYING IMPORTANT SUPPLIES

In the purchasing of meat it has been found more economical to buy just the cuts needed for carrying out the menus planned. With only one meal a day and a limited menu, there would be waste of certain cuts through buying whole sections. For sandwiches, for instance, skin-back hams are bought and one special cut of roast beef. Slightly different cuts are needed for use in the teachers' dining-room because of the more varied menus. Through this method of buying only the cuts needed for specific purposes waste is eliminated.

Milk is bought from several different firms on account of the districting system in operation in Philadelphia. It is bought on a wholesale basis and delivered by local branches to the different schools. Bottled milk served with straws was formerly the only milk purchased for sale to pupils, but with the approval of the city health authorities, milk in bulk is now bought for this purpose as well as for cooking. In the latter case much time is saved in handling and the lower price is also an advantage. Some powdered and evaporated milk is used to supplement the fluid milk.

The ice cream used in the school lunch rooms is bought from one firm which has been found to meet the three requirements of quality, service and price better than other firms. Before this agreement was reached, samples of ice cream from

THE SCHOOL LUNCH

several firms were submitted to chemical analysis. The ice cream is delivered from a central depot to the different schools. It comes in individual bricks, one-eighth of a quart each, wrapped in paper and ready to serve. This makes the price higher than the bulk cream, but it saves in the end because there is no waste, the labor in handling is reduced and there is an absolute check on the firm and on the servers.

The varieties of crackers and cookies sold in the lunch rooms are those which after some experimenting have proven to be the best sellers. No rich iced cakes are sold, nothing but the simple varieties of cookies, to conform with the whole plan of the lunch system of selling only the things which serve an actual food need. Sweet chocolates are the only confections sold and they are bought because of their nutritive value.

In the purchase of green groceries the dietitian is usually guided by the advice of the director, selecting the local dealer or dealers who give the best returns. Orders are placed a day ahead so that the dealer may select the fruits and vegetables at the docks and terminals early the next morning. If the goods ordered are not satisfactory something else is substituted and the dietitian changes her menu accordingly, another advantage in the dietitian's being responsible for the menus in her school. This method of purchase has proven more satisfactory than buying in large quantities

PURCHASING OF SUPPLIES

for all the schools at once, as that would necessitate sorting the materials, would possibly entail waste, involve an elaborate delivery system and require more bookkeeping.

SPECIFICATIONS FOR BIDS

As the Board of Education pays for all initial equipment of the lunch rooms, purchases for this purpose are put out to bid according to the school law. The director of the lunch rooms works closely with the Board in this matter, making out specifications for the bids carefully so that only appropriate articles may be submitted. These specifications are made with the idea that all utensils must be adapted to the uses for which they are intended, that they must be durable and easy to keep in order and that the most economical articles are not always those which cost the least money. The requisition blanks are worded very carefully and samples of what is wanted are placed in the office of the superintendent of supplies. All bidders are required to submit samples with their bids. The contracts are then awarded according to the quality as well as the price.

ADDITIONAL POINTS IN BUYING

From time to time if there is any question as to the purity or food value of anything purchased for the schools, the article is submitted for chemical analysis.

THE SCHOOL LUNCH

It has been found in buying china for the pupils' dining-room that in order to keep the service uniform all white china is better. A hard, vitrified variety, with rolled edges to dishes and bowls, is most durable. For the teachers a standard pattern of white with a green band is used. Nickel silver is used for the pupils and plated silver for the teachers. The dessert size knives and forks are bought because they are more practical and less expensive, teaspoons are used for desserts and dessert spoons for soup.

When replacing equipment the Department buys all table linen and toweling in wholesale quantity. Table cloths of the size used for the teachers' dining-room are made up by girls in the trade school; they also hem dish towels and make aprons for serving. This sewing is done by the girls as practice work under the direction of the teachers. Any expense connected with it is paid by the lunch department.

Chapter Nine

SYSTEM OF RECORDS AND
ACCOUNTING

SYSTEM OF RECORDS AND ACCOUNTING

THE centralized plan of administration of the school lunches in Philadelphia requires a careful system of records and accounting by the director's office so that school lunch rooms may operate to the best advantage and all details of profit and loss be kept well in hand. This calls for thorough co-operation between the dietitian or head worker of a lunch room and the central office, and when it is once demonstrated to the workers that the required reports are the very wheels on which the system moves, the element of drudgery in preparing records disappears. They are as important to the dietitian as they are to the central office. Some reports are sent in weekly and some monthly.

Reports from the high school lunch rooms cover the subjects of:

- Orders

- Supplies received and on hand

- Menus served to students and faculty

- Portions served

- Cash receipts

- Coin checks sold to students

- Coin checks taken over counter

- Payroll

THE SCHOOL LUNCH

ORDERS

As has been explained in the chapter on Purchasing of Supplies all orders for the schools are given through the central office, except for bread, milk, ice cream and green groceries, which are given daily by the dietitian directly to the dealer.

For the weekly orders of meats, butter, eggs, crackers and cookies the dietitian fills out an order blank and mails it to the central office and from this the director makes her purchases from the dealers. The monthly orders for staples such as flour, sugar, rice, beans, etc., are sent in to the office on order blanks in the same way.

All delivery slips for orders delivered to the school are held by the dietitian after goods have been checked and weighed and sent in once a week to the central office (this includes slips for the daily orders as well). These delivery slips are then checked by the bookkeeper in the central office to see that they tally with the invoices sent in by the dealers.

WEEKLY SUPPLY SHEET

The dietitian has a supply sheet on which are listed all of the supplies used by the lunch room, with a column in which to record what supply of each is on hand at the beginning of the week, another to record supplies received during the week and additional columns for each day of the school week in which are recorded what sup-

SYSTEM OF RECORDS AND ACCOUNTING

plies of each article are taken from the supply closet each day. At the end of the week what has been used of each article is subtracted from the supply on hand at the first of the week plus that received, if any, to show the balance. It is from this record that the dietitian makes up her orders for the week and the month. At the central office this weekly supply sheet serves as a check in connection with the menu and portion reports to indicate whether the supplies are being properly used. It is also the basis for the inventory which is used to arrive at profit and loss of the school at the end of the month. This sheet is illustrated on the following page.

THE SCHOOL LUNCH

From these supply sheets is made out in the central office a card index record which is invaluable in indicating at a glance exactly what the individual inventories of supplies of each school are at any time. (See Plate 25.) For this record a group of cards is kept for each school with a separate card for each commodity. On these cards is recorded the amount of the commodity on hand at the beginning of the year, the dates when the supply is renewed and in what quantity, and the balance on hand. From this record, which at a glance shows how much of one food is used by a school during a certain period of time and how much is on hand, the director makes up her yearly orders.

MENU AND PORTION RECORDS

At the end of the week the dietitian sends in to the central office a menu and portion report, showing the menu served to the pupils on each day of the week and the number of portions of each kind of food served on each day, and another with the menus served to teachers. These records are gone over in the office to see that the proper ratio is maintained between the different kinds of foods served; and if a school shows a small number of servings of one food, soup, for instance, in relation to the total food sales, this condition is investigated to determine just what is the cause of the falling off. These reports, as explained above, are

DAY	FACULTY M
MON.	
TUES.	
WED.	
THURS.	
FRI.	

PLATE 27—FACULTY

DIETITIAN

DAY	STUDENTS' MENU		NUMBER OF PORTIONS								TOTAL *	REC. FOR CRACKERS CHOCOLATE FRUIT	TOTAL
			SOUP	HOT DISH	COCOA	SAND- WICHES	MILK (GLASS)	MILK (PINTS)	DESSERTS	TOTAL			
MON.	SOUP	SANDWICH											
	HOT DISH	DESSERT											
TUES.	SOUP	SANDWICH											
	HOT DISH	DESSERT											
WED.	SOUP	SANDWICH											
	HOT DISH	DESSERT											
THURS.	SOUP	SANDWICH											
	HOT DISH	DESSERT											
FRI.	SOUP	SANDWICH											
	HOT DISH	DESSERT											
TOTAL PORTIONS.....													
TOTAL VALUE OF CHECKS RECEIVED.....													

*PRICE LIST PER PORTION

SOUP.....	.05
HOT DISH.....	.06
COCOA.....	.05
SANDWICH.....	.06
MILK (PER GLASS).....	.05
DESSERT (PER PINT).....	.05
ICE CREAM.....	.06

REMARKS :

MENU	RECEIPTS
TOTAL	

MENU REPORT BLANK.

.....HIGH SCHOOL CASHIER

DAY	CASH RECEIVED				* EXPLANATION OF SUNDRIES	DEPOSITED IN BANK
	CHECKS	LUNCHES	SUNDRIES*	TOTALS		
MON.						
TUES.						
WED.						
THURS.						
FRI.						
TOTAL						

REMARKS:

.....

.....

DAY	FACULTY MENU	RECEIPTS
MON.		
TUES.		
WED.		
THURS.		
FRI.		
	TOTAL	

PLATE 27—FACULTY MENU REPORT BLANK.

THE SCHOOL LUNCH

used in checking the supplies to see that the amounts reported are actually being used. Also, the director can see if menus are sufficiently varied. (See Plates 26 and 27.)

CASH REPORT

Once a week the dietitian sends in a report of the cash receipts of the sales of the lunch room. This is a totaling of all sales both in coin checks and money. (See Plate 28.) Cash receipts are usually from the teachers' dining-room; sundries cover special parties. The columns of all receipts are totaled and the week's receipts summed up. In the "bank" column is placed the amount for the week deposited by the dietitian, which should tally with the total receipts. Money is usually deposited each day by the dietitian at a nearby bank.

COIN CHECKS SOLD; CHECKS TAKEN IN

Once a month the dietitian sends in a cashier's report showing how many coin checks of each denomination have been sold to students on each date, with the total value and the total number for each day and the sum total for the whole month. (See Plate 29.) This report is checked against the "checks sold" item on the cash receipts report. A similar detailed monthly



THE SCHOOL LUNCH

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DATE	CHECKS SOLD				CASHIER	NUMBER OF CHECKS
	ONE CENT	THREE CENT	FIVE CENT	TOTAL		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
TOTAL						

REMARKS :

.....

.....



SYSTEM OF RECORDS AND ACCOUNTING

report (see Plate 30) showing the coin checks taken over the counter for food is sent in and this is used as a check against the "portion record." To avoid confusion the latter report is printed on blue paper.

PAYROLL

Each week the dietitian reports any changes in the regular payroll which might be occasioned by absences in the force. A check for the total amount is sent to the dietitian from the central office and she pays the helpers, taking receipts in return which form part of the central office records for audit.

TRANSFER SLIPS

Where supplies are transferred from one school to another a slip made for the purpose is filled out by the dietitian of the school from which the supplies are sent, specifying the article and the quantity, and these slips are mailed to the central office with the other weekly reports. The school receiving the supplies records them in the same way as any other supplies received.

LEDGER

An account is kept with each school, by the central office, to which, at the end of the month, the receipts are posted as a credit and supplies received from dealers, supplies transferred from

THE SCHOOL LUNCH

other schools, helpers' wages, dietitian's salary, etc., as a charge, the balance with inventory being the profit or loss during the month.

EQUIPMENT AND REPLACEMENTS

An account with "equipment and replacements" is kept in the general ledger, since, when original equipment furnished by the Board of Education wears out, it must be replaced at the expense of the Department. All such items are charged direct to "equipment and replacements" and included in the overhead charges, since to charge them direct to the school would be unfair in that a new school would have a decided advantage.

AUDIT

The accounts are subject to audit each month by a certified public accountant who verifies invoices, payrolls, checks drawn in payment of invoices, bank balances, etc., and issues a detailed statement showing the balances for each school and the profit and loss statement for the entire department.

SETTLING OF ACCOUNTS

All invoices payable weekly are paid promptly and every advantage is taken of discounts. Monthly accounts also are paid within ten days and in some cases discounts are obtained on these.

SCHOOL

DATE	CHECKS RECEIVED				DIETITIAN
	ONE CENT	THREE CENT	FIVE CENT	TOTAL	NUMBER OF CHECKS
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
TOTAL					

REMARKS:

SYSTEM OF RECORDS AND ACCOUNTING

EXPENDITURE

The receipts of the school lunch rooms are usually spent in the following ratio:

70% for food

22% for wages and salaries

4% for supervision

4% for replacements and repairs

The percentage of receipts spent for service seems high proportionately, but this is explained by the fact that only one meal is served each day and there is service only five days in the week (or about 183 meals during each school year) so that this percentage cannot be compared with that of a restaurant serving three meals a day on seven days each week. If three meals were served in the School Lunch Department, the service expenditure would decrease in proportion to the food expenditure, as three meals could be served with little additional help.

ELEMENTARY SCHOOL RECORDS

The records for the elementary school lunches are very much simpler than those of the high school. There is a monthly supply sheet corresponding to the weekly supply sheet of the high schools. This is sent in by the worker in charge of the school to the assistant director in charge of elementary school lunches.

One record card practically covers the report of the work in the elementary lunch rooms. This

THE SCHOOL LUNCH

card is divided into the five school days of the week and it has columns for the hot food (that being subdivided into soup and cocoa) ; for kindergarten milk, counter milk, and crackers and chocolate. In these columns are given the receipts of sales for each of these items and the receipts are totaled at the end of each day and for the week. On the back of the card is space to record the petty cash expenditures. (See Plates 31 and 32.) This card is brought in person once a week to the central office at which time the worker talks over the work of the lunch room.

SCHOOL, DIST. NO.....
 WORKER

DAY	MILK REC'D	MENU	CASH RECEIVED				TOTAL
			HOT FOOD	KINDER-GARTEN MILK	COUNTER MILK	CRACKERS AND CHOCOLATE	
MON.							
TUES.							
WED.							
THURS.							
FRI.							
TOTAL							

REMARKS :

.....

.....

Chapter Ten

THE SCHOOL LUNCH AND
CLASSES IN COOKERY

THE SCHOOL LUNCH AND CLASSES IN COOKERY*

THERE is an excellent opportunity for co-operation between the school lunch room and the classes in cookery in girls' high schools. The William Penn High School in Philadelphia has worked out a plan in which the lunch room serves as a practical laboratory for the cooking classes, with advantages on both sides.

Through this connection with the domestic science classes, the lunch room gets the benefit of increased interest and patronage. It likewise gets the benefit of the food prepared, which is a factor in reducing labor. The canned goods put up by the classes especially illustrates the mutual benefit to lunch room and cooking classes. The raw materials are provided by the lunch room department and after the fruits or vegetables have been preserved they are returned to the lunch room to be used. Many vegetables for winter soups have been provided in this way with no cost to the lunch room for labor, on the other hand the cookery classes are spared the expense of buying large

* This chapter has been furnished by Miss Ada Z. Fish, Director of the Department of Art and Home Economics, at the William Penn High School, Philadelphia, Penna.

THE SCHOOL LUNCH

quantities of materials for these very essential lessons.

It is a decided incentive to the cooking class pupils to have the food they prepare serve a definite purpose. Also they are enabled to prepare food in family quantities instead of on the usual small quantity plan.

In this scheme of co-operation the cooking classes act as contributing assistants in the lunch room. It would be unwise from the standpoint of the value of the lesson to the pupils to have them prepare all of the lunches because of the repetition that would be necessary. There is, however, a wide enough range in the dishes used in the lunch room to permit of lessons that vary in technique and in application to important scientific facts. A series of lessons is planned by the teacher of cookery and the dietitian in charge of the lunch room in a measure adapts her menus to these lessons. To prevent monotony in the menus a series of lessons extends throughout a period of time and by a process of permutations each of the classes gets the same type of lesson, although the materials used may differ somewhat, as, with croquettes, meat might be used for one lesson and vegetables for another. To illustrate:

CLASSES IN COOKERY

SERIES I

1. Creamed Vegetable
2. Muffins
3. Croquettes
4. Salad
5. Ginger Bread

First Week

Monday	1
Tuesday	2
W'dn'sd'y	3
Thursday	4
Friday	5

Second Week

Monday	2
Tuesday	3
W'dn'sd'y	4
Thursday	5
Friday	1

Third Week

Monday	3
Tuesday	4
W'dn'sd'y	5
Thursday	1
Friday	2

Fourth Week

Monday	4
Tuesday	5
Wednesd'y	1
Thursday	2
Friday	3

Fifth Week

Monday	5
Tuesday	1
Wednesd'y	2
Thursday	3
Friday	4

The plan operates on these general rules:

I.—Details are carefully planned in advance and one teacher acts as adjuster with the lunch room authorities. Teachers keep in mind that they are

THE SCHOOL LUNCH

to be a help and not a hindrance to the busy lunch room workshop.

II.—Duties of each teacher.

- A. To make a statement of the quantity of food that can be prepared for each lesson, considering:
 - 1. Number of pupils;
 - 2. Laboratory equipment.
- B. To make each week a requisition to go through the adjuster to the dietitian, of the supplies needed for the following week's lessons.
- C. To submit to the adjuster at least a week in advance of the time in which the food is to be prepared all necessary information and all preliminary questions relating to the lessons.

III.—Duties of Adjuster.

- A. To combine requisitions of teachers and place statements of supplies needed for each day in the office of the dietitian.
- B. To record kinds and amounts of food to be prepared for each day on a wall chart in the office of the dietitian. This is also done a week in advance.
- C. To confer with the dietitian at the latter's convenience on any points of discussion and then report results of the conference to the other teachers.

IV.—The lunch room authorities supply and

CLASSES IN COOKERY

deliver all the materials for foods prepared to the supply room of the laboratories.

V.—As few pupils as possible are appointed from each class to take the prepared food to the lunch room.

All the pupils of the William Penn High School are required to take one year of cookery. Two forty-five minute periods a week are given to the lessons. The practical work is carried out according to the general plan suggested.

In preparing practice lunches for twelve or more people the classes have been able to secure supplies from the lunch room. The pupils plan the menus, work out the costs based on retail prices and make out definite requisitions for the supplies, which are sent to the laboratories where the luncheon is prepared. Later it is served to the teachers, at the cost of materials.

There is some question whether the products made by the classes will be satisfactory enough to use in the lunch and can be counted on with any regularity. Any unsalable products would, of course, have to be replaced from the school supplies. During three years of co-operation on the part of the William Penn High School only twelve muffins and two desserts have proved unsatisfactory. The food is almost invariably delivered promptly. Some of the lessons under this plan are strenuous, but neither teachers nor pupils would be willing to go back to the old small quantity type of lessons.

Chapter Eleven

THE IDEAL SCHOOL LUNCH PLAN

THE IDEAL SCHOOL LUNCH PLAN

THE ideal school lunch plan is to provide for the food needs of every child who comes within the school system, whatever they may be, during the time they are under school supervision. How far this provision should overlap home feeding in special cases is as yet a subject for future determination.

To fulfil this ideal, the service should be sufficiently elastic to make available to every child either one hot meal a day, breakfast or lunch; or to supply wholesome foods to supplement the home meals.

The ideal school lunch system takes into account not only the average pupil in elementary and high schools but provides for the children in special classes; the open air classes; orthopedic classes; also serving suppers to night school classes.

In a model school lunch plan every pupil who comes within the school system should have access to the privileges of the lunch room. The service should be in no sense exclusive or undemocratic, the scale of prices being made low enough to be within the reach of the great mass of pupils and yet uphold the standards of quality and service.

THE SCHOOL LUNCH

For those children who are unable to afford to patronize the school lunch, special provision should be made, since it is obviously unfair to provide for them at the expense of the others. At the present time benevolent organizations are attempting to solve this problem, but it is impossible for them to meet it adequately, nor is charity the right way of meeting it. If our educational plan is to work effectively these children from poor homes must receive the benefits of school feeding. As long as they are underfed they are a menace to the school at large. To provide for them, funds should be appropriated by either state or city. The school lunch system will never be complete until this is done. Such funds should be so administered that the child is not made to feel an object of charity.

As the serving of lunches is made necessary by the compulsory school hours, the Board of Education of a city should furnish space and equipment as for any other activity of the school. Operating costs should be covered by the cost of the food sales.

The school lunch system should operate as a separate enterprise or department under the Board of Education, rather than being under the management of the domestic science or any other department of the schools. It should be uniform in all schools, with standardized equipment, service and prices. Pupils thus get the benefits gained through sound business management.

THE IDEAL SCHOOL LUNCH PLAN

Elementary and high school lunches should be consolidated under one management in order to benefit by central buying and accounting, but each division should have its own plan to meet a different situation.

The school lunch should be considered primarily as a business enterprise but also as an enterprise with a scientific and social aspect. The person in charge should have business training and acumen, as well as a scientific knowledge of foods and should be endowed with social vision, understanding both the business and the broad educational aspects of the work.

The ideal school lunch room should be incorporated in the school building with the architect's plans. It should have adequate kitchen and dining-room space to serve the number of pupils in the school; ample storage room; adequate counter space to display the foods. The pupils' dining-room should be light and airy and should be used as a dining-room only, with a separate dining-room for teachers.

The kitchen should be fitted with equipment and utensils appropriate to the work and with labor-saving machinery for such large scale tasks as dishwashing, potato peeling, meat chopping, bread and meat slicing.

If the school lunch is not to be a mere appendage of the educational system, it should be closely

THE SCHOOL LUNCH

linked with the work of the school, one of its arteries through which the active blood of co-operation runs. The departments with which it may be correlated are:

- Domestic science
- School gardens
- Vocational classes
- Medical department

It has been shown in the preceding chapter how the school lunch may be made to co-operate with the domestic science classes. The school gardens is another field of co-operation with the lunch room as yet undeveloped, but one that offers many possibilities. Vocational classes could make use of the school lunch rooms to offer practical training for institutional management, for buying and marketing.

Through co-operation with the medical department the school lunch should extend its function to strike at the roots of malnutrition. To some degree this is being done in many school lunch systems. Children who are undernourished are singled out by the doctor and nurse and proper diets are made out by the dietitian in charge of lunch rooms. These children are kept under the eye of the nurse and doctor and their weight and improvement noted. Nutrition clinics are also being operated with beneficial results in connection with school lunch rooms.

THE IDEAL SCHOOL LUNCH PLAN

The school lunch offers one of the most effective links between the school and the home. It is the best possible medium for teaching wise food habits which, instilled in the child, are frequently introduced into the home. The daily buying of clean, wholesome food, permitting of some range of choice, impresses a lesson upon children to a much greater degree than the enforced eating of a meal selected for them.

No branch of the school activities offers greater opportunity of fitting in with the Americanization plan than the school lunch. Food is a means of approach which cannot be gainsaid by those of any nationality. With the menus of the school lunch sufficiently adapted to take into consideration strong national preferences, the introduction of wholesome food to which children from foreign homes are unaccustomed can be made effective. Recipes may be given by dietitians to the children to take home to their parents. Thus another tie is established between the foreigner and his adopted country and children may be saved from the undernourishment that so often follows the transplanting of families from an old country to a new.

The school lunch room of the future might well adapt itself to community needs by selling a few hot dishes to the mothers of school children in neighborhoods where many of the mothers are at work or even in other families where the domestic

THE SCHOOL LUNCH

help problem is acute, thus becoming a logical community kitchen. With all of the machinery ready this service could be added to the school lunch with little additional cost. A beginning towards this was made in one or two cities during the war when the school kitchens were used for community canning and cooked food centers.

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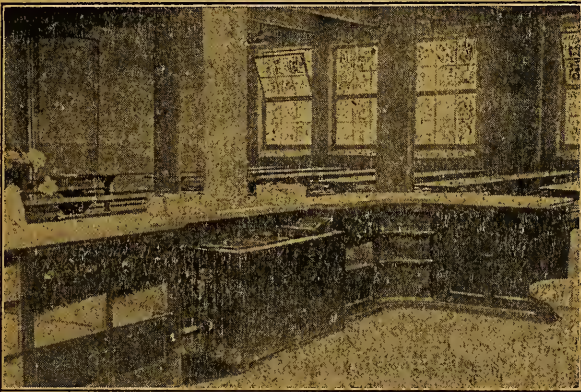
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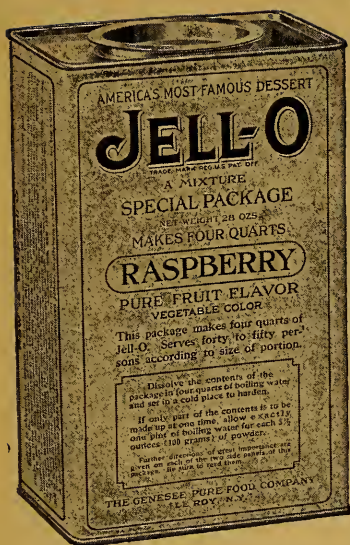
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TOTAL FOOD VALUES**

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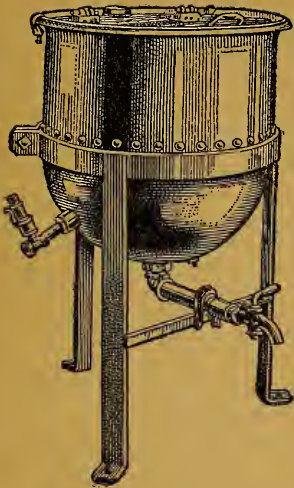
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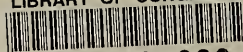
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