

A PLATE WASTE STUDY MADE IN A SMALL
TYPE "A" LUNCHROOM

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THESIS

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INTRODUCTION

Southworth and Klayman (1941) have very ably summarized the history of the school lunchroom. They state that the school-lunch program is an educational project in health and nutrition, designed to supplement what is being done in homes with adequate incomes and to help check deficiencies bound to exist among children from homes with inadequate income. . . Good health means better feeling, more courage and faith for the individuals. Such individual improvement will in turn help bring about better social, physical, and moral living conditions for the home, community, and state.¹

Science has determined not only the amount of food which is necessary for good nutrition, but also what constitutes the right kinds of foods for good vitality. Unless these foods are combined to make a well-balanced daily diet, the children may be expected to suffer physically and mentally from malnutrition.²

The schools which are obtaining reimbursement from the government are required to meet certain food requirements, not only in the kinds of foods but also in amounts. The

¹H. M. Southworth and M. I. Klayman, The School Lunch Program and Agricultural Surplus Disposal, p. 4.

²Federal Security Agency, The Administration of School Lunch Programs, Circular No. 211, p. 24.

type "A", or complete lunch, is to provide one-third to one-half of the day's nutritive requirements for the child.³ When children do not eat all of the food served them in the lunchroom, they do not get the amount required for good nutritional development.

The purpose of this study is to determine the plate waste from the type "A" lunch served to the children in the Collinsville School Lunchroom during the school year of 1947-1948.

³ War Food Administration, Menu Planning Guide for School Lunches based on FDA Requirements for Type "A" and "B" Lunches, NFC-10, p. 1.

PROCEDURE

Although this study pertains to the plate waste in a Government type "A" lunchroom, it is important to describe the school plant and the spirit of cooperation existing in the lunchroom.

The Collinsville School is located in a community of small, sandy farms. Although the city has a population of about 553, the school district has approximately 800 inhabitants. These people are engaged in the following occupations: agriculture, twenty-five per cent; homemaking, forty per cent; professions, three per cent; sales work, one per cent; skilled labor, three per cent; secretarial, one per cent; business, five per cent; and unskilled labor, twenty-two per cent. The entire community is served by four school buses which travel a total of two hundred miles per day and transport more than eighty per cent of the 250 students. In order for some of the pupils to attend school, it is necessary for them to get on the bus at six-thirty a.m. and remain there until eight-thirty a.m.

The school building, which was completed in 1942 at a cost of three hundred thousand dollars, is a one story brick structure equipped with an auditorium which has a seating capacity of five hundred; twenty class rooms,

including study hall, vocational agriculture and science laboratories; offices; and one of the best equipped home-making departments in Grayson County. The other buildings on the campus are the gymnasium, auto mechanic shop, and a recently constructed fifteen thousand dollar lunch room.

The lunch program of the Collinsville School has continued since its inception in 1937 during the Work Progress Administration period. The first lunch room was set up in a store building one-half mile from school, but was soon moved to the high school gymnasium. The equipment was inadequate and poorly constructed, but adequate meals were served. In May of 1944 the lunch room had served an average of sixty-nine pupils per day for the past term, which was less than one-fourth of the students in daily attendance.

The beginning homemaking teacher of the 1944-1945 term desired to improve the lunchroom program and to increase the number eating in the lunch room. The superintendent thought that the pupils had been served good food the previous year and that an average of sixty-nine per day was an excellent number considering the equipment and the place where the meals were served, but he had also found that the greater the number served, the less expense involved, and he was willing to help in any way he could. He thought if he tried to force the children to eat in the lunchroom, that they would quit, as that had been tried before. While there was five hundred

dollars in the lunchroom fund, there was a delay in its use until it was evident that the new teacher could keep the operating expense within the limits of the lunchroom budget.

With this information, the beginning teacher started investigating the operation of the lunch room program during the previous years.

From the time the W P A supervision was discontinued until 1944, the lunchroom was operated through the joint efforts of the superintendent and homemaking teacher. The business transactions were conducted through the superintendent's office, and the homemaking teacher supervised the lunch room. The responsibilities of the supervisor were as follows: to provide all menus and recipes, order groceries, see that foods were delivered on time, receive the money from the sale of lunch tickets, check bills, make out reports, supervise cooks, and to supervise the entire student body while in the lunch room.

As the teacher talked with people in the community and the school, she was glad to hear comments and questions like these: The butcher asked if she would want ground liver every week. The store operator across the street from the school asked if she was going to allow the children to eat lunch in his store. She gave him an answer to his question by saying, "I am sure the children will want candy if they have extra money, but don't you think they should have more

than candy for lunch?" He agreed that they should, but insisted that he had to make a living. Similarly, the drug store manager said that he thought the lunch room was a wonderful asset to the school, but he felt that it should be in a building equally as good as the school building. He also agreed that the gymnasium could be used, if some needed improvements were made, until there were sufficient funds to build a lunch room.

The teachers in the school system were glad to give their opinions when they were asked to do so. They would ask the homemaking teacher such questions as were asked by the first grade teacher, "Where do you want the first grade to sit? You did not tell us yesterday, and I let them sit at the first table." The homemaking teacher replied, "Since the tables are all too high for the little fellows, I don't suppose it makes any difference." The other grade school teachers were alarmed to find that the new supervisor was not going to try to discipline their pupils and was planning just to let them "run wild." In the teachers' meeting the discipline problem was discussed, and the homemaking teacher asked the individual teachers to be responsible for their own pupils, as she did not know the pupils.

The teachers were asked their opinions on all changes that were made in the lunch room, and after a period of six or eight months they were giving their ideas and making

suggestions for the improvement of the lunch room without being asked. The teachers and the supervisor as well as the people in the community saw the need for new equipment as the business increased, and all available funds were used to purchase equipment. As new equipment was purchased, the superintendent and teachers asked people in the community to eat lunch with them, and they took pride in showing the new equipment.

During the school term of 1946-1947, the school board started discussing building a bus garage, but many of them felt that a lunch room was needed much more than a bus garage. The teachers and lunch room supervisor believed that if the school board would construct a building for the lunch room, the community would raise money to buy the equipment. The school board approved of this plan.

A committee of parents and faculty members was organized for the purpose of raising \$835. The committee consisted of three teachers and eight mothers, one from each of the eight communities in the school district. The committee raised \$890 during a period of six weeks. The activities consisted of a Mother-Daughter basketball game, in which the mothers wore white middy blouses and black bloomers with the year they played in high school on the back of the blouses, dating as far back as 1911; a negro basketball game, auction sale; and a variety show. The committee appointed two women to aid in selecting the equipment that they had helped raise

the money to buy. The equipment was purchased in the spring of 1947 during the time the government was supplementing the school funds with fifty per cent of the total.

The history of the school plant has been described, but the operation of the lunch room must be explained more fully, as this study pertains to plate waste.

The method of serving in the newly constructed lunch room is primarily that used in most small schools. The lunch room employs only three full-time and one part-time cooks; therefore the lack of help makes it necessary to have more than one lunch period in order to take care of the number of pupils to be served. The school has two lunch periods. The division is made by having all elementary children eat at the first lunch period, which begins at 11:30 a.m., and the high school children at the second period, which begins at 12:00 noon. There is a period of about ten minutes between the two lunch periods, depending upon how long it takes the students to eat. This time is used to clean the tables and replenish the serving counter for the next group.

The children pass by the serving counter in single file and take their served trays, milk, dessert, and silver, which is wrapped in their napkins. When the elementary students have finished eating, they take their dishes to the soiled dish table; and the elementary students return to their tables to wait until all of the students in their grade have

finished eating before they leave the dining room, but the high school students leave as they finish eating. During the period of this study the twelve grades were divided into four groups of three grades each, and the plate waste was collected for three consecutive days for each group, once during October and once during April. The waste was weighed by individual foods and recorded under the weight of the average serving of each food as had been previously determined. The difference between the waste weight and the original serving gave the amount of food which the child actually ate; therefore, the amount of food the different age groups ate could be compared with the recommended daily allowance for that particular group.

The plate waste method used in this study was formulated by modifying the method set up by a subcommittee of the Administrative Section of the American Dietetic Association, 1944.⁴ To determine the amount of food served each student, the food portions as suggested for the type "A" lunch⁵ were measured and weighed at the beginning of the serving period to obtain averages to be used in estimating or determining the amount wasted. The plate waste was weighed before being

⁴"A Method of Checking and Evaluating Plate Waste in Hospitals and Other Feeding Units," Journal of American Dietetic Association, XX (1944), 376.

⁵See Appendix, p. 32.

placed in the containers, thus giving the total waste of each food as well as the individual waste.

The complete data for this study are to be found in the appendix page 32 to page 126.

DISCUSSION OF RESULTS

In order to obtain an accurate picture of the lunch room situation in this particular school in Collinsville, Texas, it was necessary to collect plate waste over an extended period of time. The periods of time chosen were from October 14, 1947, through October 29, 1947, and from April 13, 1948, through April 27, 1948. During these periods of time the fall and fresh spring foods were available. The original plan was to check during the winter, but because of intervening interruptions of holidays due to cold weather, it was impossible to check during that period.

Table 1 shows the twenty-four days on which the data were gathered. The underscored dates on the table indicate the days for which the nutritive value of the menus was calculated.⁶ The plate waste was collected for each of the three days, and for each of the grades, which were grouped in three's as follows: October 14, 15, and 16 for the first, second, and third grades; October 17, 20, and 21 for the fourth, fifth, and sixth; October 22, 23, and 24 for the seventh, eighth, and ninth grades; October 27, 28, and 29 for the tenth, eleventh, and twelfth grades. The same type of grouping was used during April.

⁶See Appendix, pp. 47-48.

TABLE 1

THE DAYS OF THE SCHOOL CALENDAR AND THE GRADES
USED IN OBTAINING THE RECORDS OF PLATE
WASTE IN THE LUNCH ROOM¹

GRADE	DATES
October, 1947	
1st, 2nd, and 3rd	<u>14</u> , 15, and 16
4th, 5th, and 6th	<u>17</u> , 20, and 21
7th, 8th, and 9th	<u>22</u> , 23, and 24
10th, 11th, and 12th	<u>27</u> , 28, and 29
April, 1948	
1st, 2nd, and 3rd	<u>12</u> , 13, and 14
4th, 5th, and 6th	<u>15</u> , 16, and 19
7th, 8th, and 9th	<u>20</u> , 21, and 22
10th, 11th, and 12th	<u>23</u> ² , 26, and 27

¹As the title indicates, this is a calendar showing only the days of the month on which the plate waste was checked.

²The underscored dates are the days for which the nutritive value of the lunch and the waste were calculated.

A sample of the menu check sheet used daily to obtain all the data used in calculating the lunches and in determining the plate waste during this study is shown in Table 2. Separate sheets were used for each grade. This sample shows the check made on the twenty-two first grade children who were

TABLE 2

PLASTIC WASTE CHECK SHEET

Date 10-14, 1947 No. Enrolled 35 Day's Attendance 33
Grade First, No. Sack Lunches 3 No. Eating Elsewhere 9

MENU						
Serving Type "A" Lanches	Meat Balls	Creamed Potatoes	Cabbage and Apple Salad	Apricot Cobbler	Milk	Margarine
Serving in Oz.	2	3	1	3	8	2t
Extra Servings	A	B	C	D	E	F
Servings					G*	

PLATE WASTE						
Plates						Comments
1	1			1		Too full to eat all of meat ball
2						
3	1/2		1/2			
4				1/4	1/2	
5				2		
6	1/2	2	1	2		Don't like creamed potatoes
7	1				2	
8						
9					3	
10					2	

TABLE 2--Continued

11		1	1/2	2			1/2
12	2	2	1	2			1/2
13	2	1/2	3	4			1/2
14	1	1	4	4			2
15							
16							
17							
18							
19							
20							
21							

All menu check sheets are found in the Appendix

* Capital letters indicate extra servings, but first grade had none.

in attendance on October 14, 1947. The list of foods on the top row, from left to right, represents the menu for the day. The next row shows the weight of the original serving. The first column to the extreme left shows the number of plates served, while the rows to the right show the amount of each individual food wasted in ounces. To the extreme right there are two columns, one for extra servings and one for comments made by students.

Some of the typical comments which were made by the students and recorded by the home room teacher on the menu check sheet will be discussed in the following paragraphs. Because of the lack of time, some of the teachers found it difficult to record the second helpings and the comments; therefore the lunch room supervisor kept a record of the most interesting comments made by those pupils and parents, which will also be discussed.

The government issued trays to the school which were used for one day in the lunchroom, but the cooks had difficulty washing them, so they resorted to using the plates as they had previously done. The following comments were made concerning the stainless steel trays. Mary Minnis, a sixth grade student, said, "I like the new trays because they keep the food from running together, and they are easy to carry." Noel Lewter, a third grade student, said to his father, "I'm not going to eat in that lunch room another time if they don't use those army trays." After hearing similar comments from a number of

students, the teachers, the cooks, who were having difficulty washing the trays, the lunchroom committee and some ex-service men, who had washed trays of this type while doing K. P. (Kitchen Police) in the armed services, decided to install another sink to dip the trays in before putting them into the dish washing machine; the cooks' dishwashing problem and the students' tray problem were solved with an added fifty dollar expense.

The first grade students made these comments concerning their food: "Don't like creamed potatoes"; "delicious lunch"; "too full to eat all of my meat ball"; "I can't eat all of this, I ate too many wieners yesterday." The teacher, Miss Murdock, said, "The boys say they love the beer juice (grapefruit juice), but it is too sour." The first grade students were given sugar for the grapefruit juice. Kenneth Owen said, "I want that red wiener recipe for Mother." A homemaking student reduced the quantity recipe to six servings and sent it to his mother.

The students in the second grade made these comments: "'Blinky' milk"; "meat too salty"; "I have the head ache"; "I have an ulcer in my mouth"; "I don't like potatoes fixed this way--au gratin."

The students in the other grades made these comments: "I like cornbread"; "don't want yams; we have them at home"; "when are we going to have chocolate pudding?" Earl Coulson,

a football player, said, "We can't play football on soup." Mack Hanning said, "I think we should have steak before the ball games." Extra servings were given the ball players that day, and a copy of the football schedule was posted in the homemaking department to be referred to before making out the menus.

The comments made by the students helped to determine some of the numerous possible reasons for the children's plate waste--they were: did not like the food served, had the food at home, or the food was not prepared as they liked it. Not only have the comments made by the students helped to determine some of the reasons for plate waste; they have influenced the teachers, cooks, and people in the community to the extent that they have been continuously working to improve the lunchroom situation. Therefore, the student participation has increased from about sixty-nine students eating in the lunch room in 1943-1944, to two hundred eating in 1946-1947 and 1947-1948. The number eating in the lunch room represents eighty-two per cent of the students in average daily attendance, and ninety-eight per cent of the students living in the country.

The menu check sheets also furnished the information for Table 9⁷, which shows the total waste of individual foods by grades, and the total weight of food served each grade. The

⁷ See Appendix, pp. 33-40

average percentage of plate waste was determined for the foods shown in the following table:

TABLE 3
THE AVERAGE PERCENTAGE OF PLATE WASTE
IN OCTOBER AND APRIL

Foods	Per Cent Waste October	Per Cent Waste April
Salad	11	8
Meats	12	7
Breads	12	1
White potatoes	13	12
Soup	7	0*
Desserts	9	14
Meat substitutes	9	4
Sandwiches	0**	37
Fruit juices	0***	13
Fruits	3	13
Milk	3	4
Vegetables	11	14

* Soup was not served in April

** Sandwiches were not served

*** Fruit juice was served only once during October

The above table shows that the higher percentage of waste occurred in April, with sandwiches, desserts, fruit juices, vegetables, and fruits giving the greatest plate waste. The sandwich filling was made principally of peanut butter. The school had received a surplus supply from the government. Many of the children did not like it; but in order to use the supply, it was served the children, who soon tired of the monotony.

Lynn (1934) conducted a plate waste study in the University School Lunchroom at the Ohio State University;⁸ her average percentages of waste are compared with those of this study in Table 4.

TABLE 4
PERCENTAGE RANGE OF PLATE WASTE

Foods	Per Cent Waste Lynn's Study	Per Cent Waste Present Study
Salads, Vegetables, Meat substitutes	16.51-22.16	9-14
Meat, Soup, White potatoes	9.67-14.45	7-12
Desserts, Breads, Beverages, Sand- wiches, Preserves	5.10-5.91	4-5

The range and total percentage of waste is lower in the present study than in the study conducted by Lynn. The appetite of the Collinsville students may have been better because of the fact that many ride the buses. The difference in the economic level of the rural children and the urban students attending the University School in Ohio may also account for the lessened plate waste of the present study.

⁸E. D. Lynn, "A Study of Plate Waste and Cost of Edible Food Served in The University School Lunchroom at the Ohio State University," Master's Thesis, unpublished.

The War Food Administration of the United States Department of Agriculture⁹ has recommended the following basic seven foods for the diet of an average person: green and yellow vegetables; oranges, tomatoes, or grapefruit; potatoes and other vegetables and fruits; milk and milk products; meat, poultry, fish, or eggs; bread, flour, and cereals; and butter or fortified margarine.

"It is estimated that children should have approximately one-third of their daily food requirement at noon."¹⁰ Table 5 shows the calculated nutritional value of the lunches served during April compared with one-third of the National Research Council's Recommended Daily Allowance. The nutritional value of the food served during this period was greater than the requirement in all instances except for the amount of calories. The 16-20 year old boys received too few calories and slightly less riboflavin than that recommended for this group. The calculations are compared with requirements for boys because of the fact that the waste for the boys and girls was not kept separately. It has been the policy of the Collinsville school lunchroom for the past four years to serve smaller amounts of food to the elementary children than to the high school, to serve the same size servings to boys and

⁹War Food Administration, National Wartime Nutrition Guide, July, 1943.

¹⁰Federal Security Agency, The Administration of School Lunch Programs, Circular No. 211, pp. 7, 24.

TABLE 5

ONE-THIRD OF THE NATIONAL RESEARCH COUNCIL'S RECOMMENDED DAILY ALLOWANCES OF SPECIFIC NUTRIENTS¹ WITH THE NUTRITIONAL VALUE OF THE LUNCHES SERVED IN APRIL FOR EACH AGE GROUP

NUTRIENTS	Children up to 12 years				Boys ²			
	N.R.C. 7-9 Years	Calcu- lated	N.R.C. 10-12 Years	Calcu- lated	N.R.C. 13-15 Years	Calcu- lated	N.R.C. 16-20 Years	Calcu- lated
Calories	666	1148	833	1117	1066	1206	1266	867
Protein (gm.)	20	32.8	23.3	39.4	28.3	36.4	33.3	39.4
Calcium (mg.)	0.3	0.5	0.4	0.4	0.5	0.5	0.5	0.5
Iron (mg.)	3.5	11.10	4	7.4	6	7.3	5	6.4
Thiamin (Vitamin B ₁) (mcg.)	330	663	400	825	500	620	600	620
Ascorbic acid (Vitamin C) (mg.)	30	102	25	81	30	78	33	88
Niacin (Nicotinic acid) (mg.)	3.3	3.9	4	6.7	5	5.1	6	6.2
Riboflavin (Vitamin B ₂) (mcg.)	500	815	600	874	666	956	833	824

¹The figures for this table were obtained by taking one-third of the amount recommended by the Food and Nutrition Board, National Research Council, Recommended Dietary Allowances, Revised 1945.

²The calculated amount is compared with the nutritional requirements for boys.

girls, but the students have been allowed second servings of all foods other than milk, meat, and dessert at no extra charge. The food value of the extra servings was not calculated; therefore, the boys probably received sufficient amounts of calories and riboflavin.

Table 10¹¹ furnished the information for Table 6, which shows the range and average weight of plate waste for the individual grades during October and April. This table shows that the range of waste was greater in the twelfth and the first grades for both October and April. In October, the first grade had a range of 0-16 and the twelfth grade had the next highest range of 0-13. The seventh grade had the highest average percentage of waste, which was seventeen per cent. The grade having the lowest percentage of waste was the sixth grade, which had eight per cent in October and four per cent in April. The average percentage of waste was nine for April and six for October; even so, these percentages are less than those found in Lynn's Study.

The average percentage shows that there was greater plate waste in April than in October. There are several explanations that might be offered for this situation. These explanations are as follows: The new lunchroom, which the pupils had been eagerly awaiting, was opened in the fall.

¹¹See Appendix, pp.41-42.

TABLE 6

PERCENTAGE AND RANGE OF WASTE OBTAINED FOR EACH GRADE
IN OCTOBER AND APRIL*

October	Range oz.	Av. Waste %	April	Range oz.	Av. Waste %
Grade 1	0-16	5	Grade 1	0-16	9
2	0-8	12	2	0-8	7
3	0-7	12	3	0-13	13
4	0-5	5	4	0-10	8
5	0-5	4	5	0-7	7
6	0-4	0.8	6	0-4	4
7	0-6	5	7	0-12	17
8	0-7	4	8	0-10	11
9	0-4	4	9	0-10	9
10	0-6	4	10	0-10	9
11	0-9	3	11	0-7	9
12	0-11	9	12	0-13	5
Total		67.8		Total	108
Average		6		Average	9

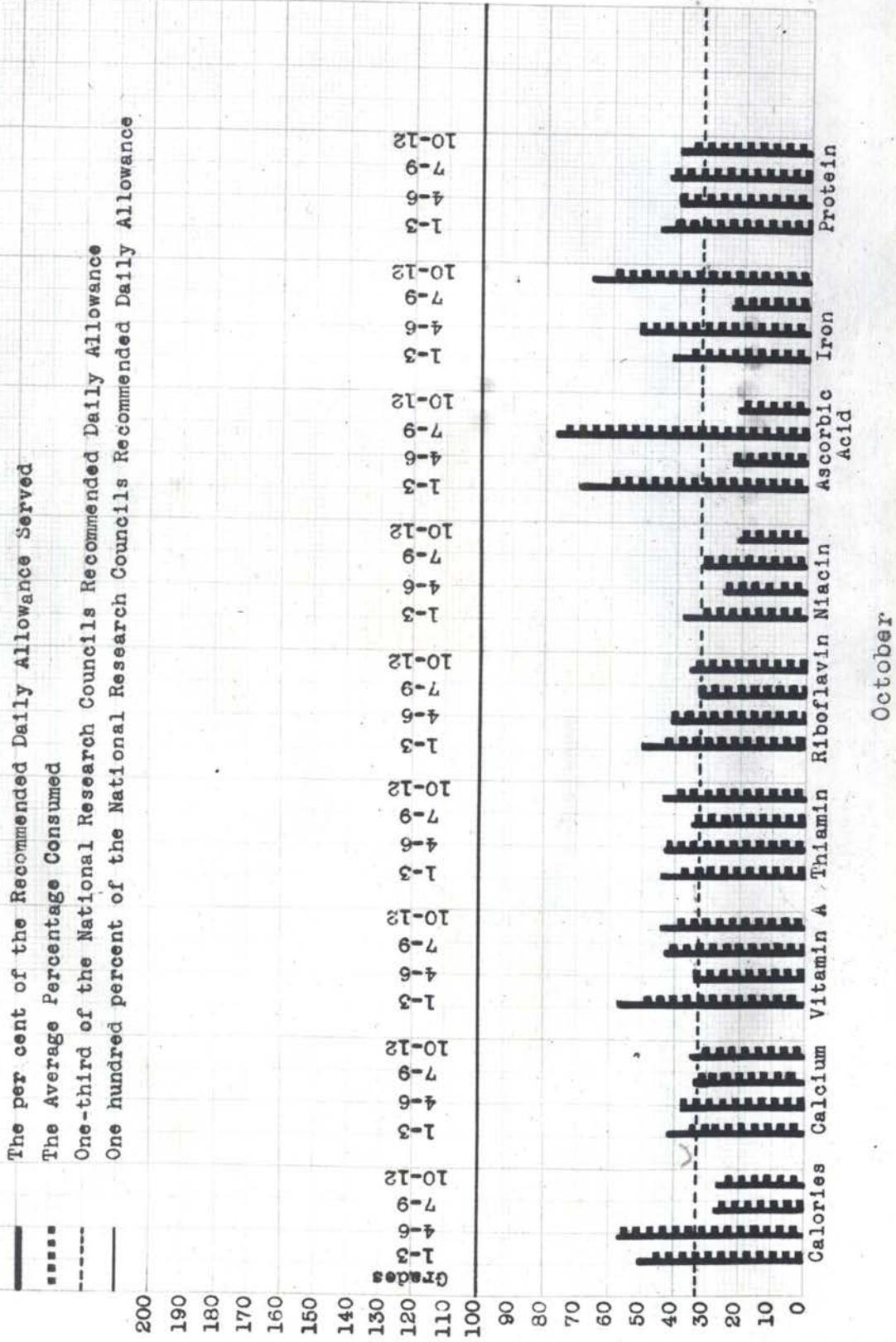
*The percentage was obtained by taking the total amount of food served and the total waste for the days checked.

The atmosphere, with the new stainless steel trays, new equipment of all types, and the gay, bright colors, was enjoyable. Many of the children had been bringing sack lunches for three weeks before the lunchroom opened, and

others had been eating candy and cold drinks at the store. The menus in October had a greater variety of foods than the ones in April because of the excessive amounts of Government surplus commodities received, principally peanut butter, prunes, raisins, and fruit juices. The April weather was much warmer, and the students wanted more salads and cold beverages as shown by the extra servings and the increase of ascorbic acid consumed.

Figures 1 and 2 give the calculated nutritive value of the lunches served, and the average nutritional value of the lunches consumed by the students. The column on the extreme left shows the percentage recommended. The broken line represents the one-third of the total day's recommended requirement that should be received at the noon meal. One hundred per cent represents the total day's requirement. The calculated nutritional value of the food served in October meets the one-third requirement in all of the food nutrients except for the seven to nine grades and ten to twelve grade calories; the four to six grades and ten to twelve grades niacin; and the four to six and ten to twelve grades ascorbic acid; the seven to nine grades iron. The plate waste caused the ten to twelve grades to be low in calcium, and one to three to be low in niacin. The calculated nutrients in the food served in April, Figure 2, were adequate in all of the nutrients other than calories for the

Fig. 1.--Percentage of the calculated nutritive value of school lunches and the percentage of waste compared with one-third of the recommended daily allowance.



October

May

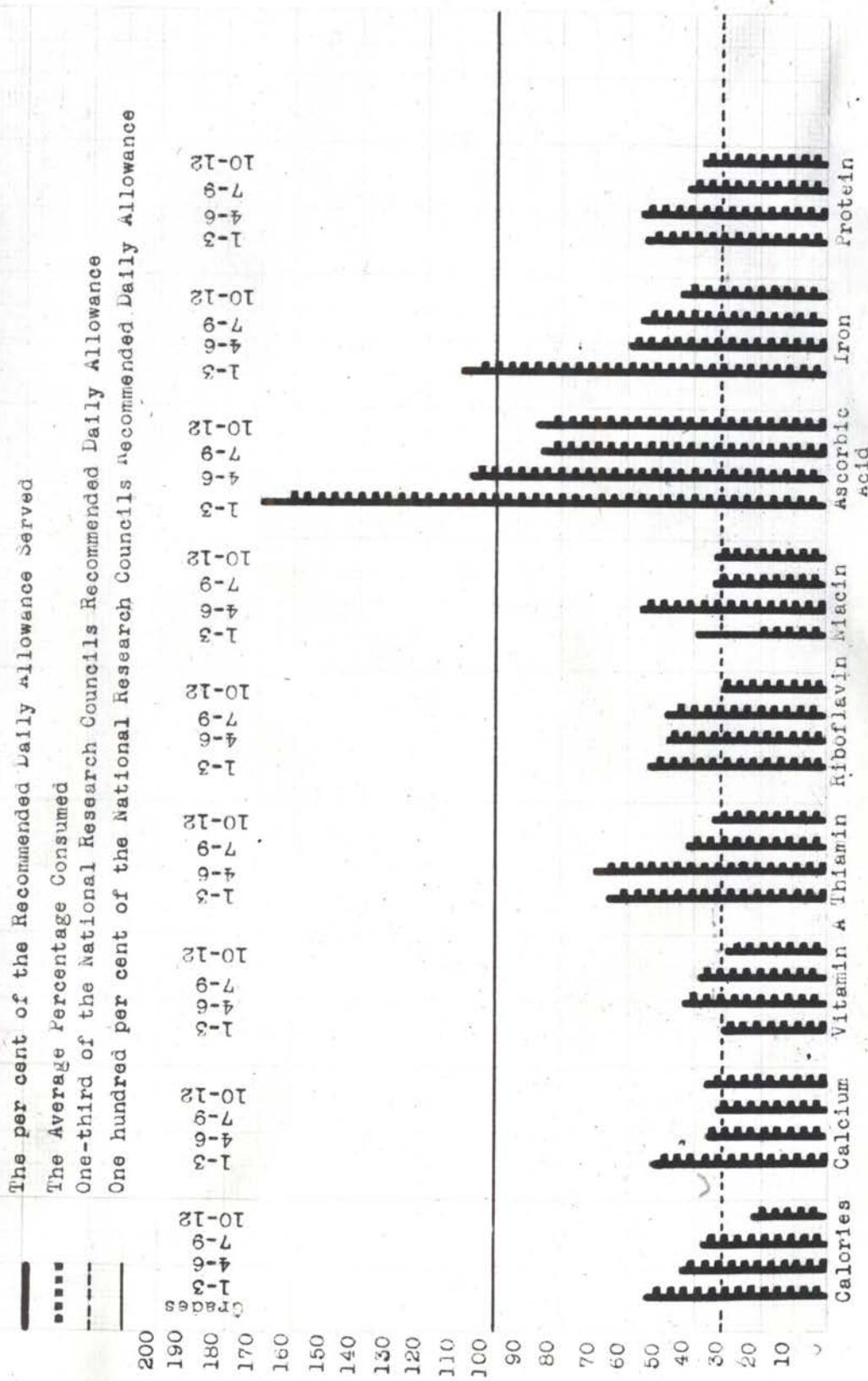
June

July

Aug

Sept

Fig. 2.—Percentage of the calculated nutritive value of school lunches and the percentage of waste compared with one-third of the recommended daily allowance.



ten to twelve grades and vitamin A for the one to three grades and ten to twelve grades.

The Pennsylvania studies show that to meet the needs of the great majority of a heterogeneous group of children representing many income levels, food provided at school must contain about one-half of the energy, protein, phosphorus, and iron; two-thirds of the calcium; and from one-half to four-fifths of the major vitamins except vitamin D, with nine-tenths of the latter.¹² Figure 1 shows that the one to three grades meet the Pennsylvania studies requirement in calories, vitamin A, riboflavin, and ascorbic acid. The four to six grades meet the requirement for calories and iron; the seven to nine grades meet the requirement for ascorbic acid; and the ten to twelve grades meet the requirement for iron. Figure 2 shows that the Pennsylvania studies requirement was met in April by the following: one to three grades calories, calcium, thiamin, riboflavin, ascorbic acid, iron, and protein; four to six grades thiamin, niacin, ascorbic acid, iron, and protein; seven to nine grades ascorbic acid, and iron; ten to twelve grades ascorbic acid.

Newton, (1941-1942) conducted a study of the W P A lunch room in Williams Rural Consolidated High School in Brown County, Texas. The percentages shown in the first

¹² Pauline Berry Mack, "A Nine-Year Study of the School Lunch," Journal of Home Economics, XXXIX (February, 1947), 76.

column of Table 7 are the percentages of the child's daily requirement served at lunch as obtained from Newton's study, while the percentages in the second column are those determined in the present study.¹³

TABLE 7
A COMPARISON OF NEWTON'S STUDY WITH THE PRESENT STUDY

NUTRIENTS	Percentage Served in Newton's Study	Percentage Served in Present Study	Percentage Served when Plate Waste Is Deducted
Calories	23.8-40.2	23-57	21-56
Protein	23.9-39.8	39-56	36-54
Calcium	33 -46.2	34-53	31-50
Iron	81.2-122	24-110	23-104
Vitamin A	78.3-134	34-58	28-49
Thiamin B ₁	25.1-41.6	33-69	32-68
Riboflavin B ₂	24.3-40.5	33-54	33-51
Ascorbic acid	52.7-87.7	22-170	20-161

The preceding table indicates that the percentages of the child's daily requirement of the nutrients were, on the whole, higher in the Collinsville study than in the Newton study, with the exception of iron and ascorbic acid.

The Collinsville study indicates a minimum intake of iron and ascorbic acid provided by the lunches served. This

¹³Emma Pearl Saunders Newton, "A Study of the W P A Lunches Served in a Rural Consolidated School During the School Year 1941-1942," Master's Thesis, North Texas State Teachers College, p. 46.

minimum occurred in October, when fresh fruits were not obtainable because of prohibitive prices. In April, after the school had received large issues of fruit from the government, the percentages were equal to or higher than those in the Newton study. The table also shows that even when plate waste is taken into consideration, the total percentage of each nutrient consumed is not lowered appreciably. The latter study did not take into consideration the individual plate waste, and the calculations were made on total food served and not on the actual individual servings as in the present study.

The most significant conclusion to be drawn from these charts and related studies is that the children under observation are being well-fed at school on an average in spite of the plate waste, but certain deficiencies and weaknesses have been revealed.

SUMMARY AND RECOMMENDATIONS

The average percentage of waste per person in this study was seven per cent. The average percentage of waste for October and April by grades was as follows: first grade, seven per cent; second grade, eight per cent; third grade, twelve per cent; fourth grade, six per cent; fifth grade, five per cent; sixth grade, two per cent; seventh grade, eleven per cent; eighth grade, seven per cent; ninth grade, six per cent; tenth grade, six per cent; eleventh grade, six per cent; and twelfth grade, seven per cent. The grade having the highest average percentage of waste in October was the second grade with twelve per cent. The grade having the highest average percentage of waste in April was the seventh grade with seventeen per cent.

There was more food wasted in April than in October. The total average percentage of waste in October was six per cent, and in April the total average percentage of waste was eighteen per cent. The foods which had the greatest waste in October were meats, twelve per cent; bread, twelve per cent; white potatoes, thirteen per cent; and vegetables, eleven per cent. The foods with the greatest plate waste in April were white potatoes, twelve per cent; fruit juices, thirteen per cent; fruit, thirteen per cent; vegetables,

fourteen per cent; desserts, fourteen per cent; and sandwiches, thirty-seven per cent. The foods that had the higher percentage of plate waste in April, other than vegetables, were those that had been received in large quantities from the government, and many of them needed to be used during the school term; therefore the recommendation should be made that more even distribution of staple surplus commodities be made throughout the school term to reduce waste of those foods. The continued distribution of fruits is recommended because of the increase of ascorbic acid from twenty-two per cent to seventy-seven per cent in October to eighty-eight per cent to one hundred seventy per cent of the National Research Council's daily recommended allowance in April, when the fruits were made available by the government.

Continuous effort must be put forth through the lunch room program to educate the children to eat a wider variety of foods, to overcome food prejudices, and to develop a greater desire for foods other than desserts.

The study shows that the school children and the entire community can be aroused to an understanding and appreciation for the school lunch program, and by voluntary means the attendance can be doubled and tripled in a brief time.

APPENDIX

TABLE B

FOR AN "A" TYPE MEAL*

I. MEAT or MEAT SUBSTITUTE which may be one of the following:

1. fresh lean meat, processed meat, cheese, fish, poultry meat
(2 ounces-uncooked measure-per serving)
 2. eggs (1 per serving)
 3. dried peas, beans, or soy beans
(1/2 cup-cooked measure-per serving)
 4. peanut butter (4 tablespoons per serving)

II. VEGETABLES and/or FRUIT which may be

1. raw, cooked or canned vegetables) (3/8 cup vegetable plus
 (3/4 cup per serving)) 1 serving raw fruit,
) or (or 3/8 cup vegetable plus
 2. raw, cooked or canned fruit) 1/2 cup fruit juice
 (3/4 cup per serving))

III. BREAD which may be

1. whole wheat or enriched white bread
(1 or more slices per serving)
 2. muffins or other hot bread made of whole grain cereal or
enriched flour

IV. BUTTER or FORTIFIED MARGARINE
(2 teaspoons per serving)

V. MILK--Whole milk (1/2 pint per serving as a beverage)

* Type A Meal Outline Was Issued to Schools by War Food Administration Office, Washington, D. C.

TABLE 9
TOTAL WASTE OF INDIVIDUAL FOODS BY GRADES

Date	10-14-47	1st Grade No. 35, No. served, 22	2nd Grade No. 19, No. served, 16	3rd Grade No. 30, No. served, 25	Total
Food		Amount served in oz.	Amount served in oz.	Amount served in oz.	Served
Meat balls	44	10.0	32	59	126
Creamed potatoes	66	9.5	48	75	189
Cabbage and					
Apple salad	22	5.5	16	7.5	5.5
Milk	176	17.5	128	8.0	20.8
Biscuit	44	11.0	32	9.0	12.0
Total	352	53.5	256	43.3	1017
Date	10-15-47	No. 35, No. served, 23	No. 19, No. served, 15	No. 30, No. served, 22	
Roast beef	46	6.0	30	8	44
Peas, black eyed	46	8.5	30	2.0	44
Head lettuce					
salad	23	3	15	3	22
Biscuit	46	1.2	30	4.0	44
Milk	184	13.5	160	7.0	176
Total	345	29.5	265	14.0	330
Date	10-16-47	No. 35, No. served, 23	No. 19, No. served, 16	No. 30, No. served, 21	
Barbecued Wieners	57.5	7.0	40	0.0	52.5
Potatoes	69.0	17.5	48	17.0	63.0
Mixed greens	46.0	9.0	32	12.0	42.0
Balls	46	8.0	32	9.0	42
Milk	184	13.0	128	2.0	168
Cake, Chocolate	23.	6.0	16	0.0	21
Total	425.5	60.5	296	40.0	389.5
Total for 3 days	1122.5	143.5	865	100.3	1193.5
					139.0
					3067
					377.0

TABLE 9—Continued

Food	Date 10-17-47		4th Grade No. 21, No. served, 11		5th Grade No. 25, No. served, 16		6th Grade No. 22, No. served, 15		Total
	Served	Wasted	Served	Wasted	Served	Wasted	Served	Wasted	
	Amount served in oz.	Amount served in oz.		Amount served in oz.		Amount served in oz.		Amount served in oz.	
Pinto beans	17	0.0	48	0.0	45	0.0	109	0.0	
Mashed Potatoes	22	1.0	48	0.0	45	0.0	115	1.0	
Lettuce and									
Tomato salad	22	2.0	32	2.0	30	0.0	84	4.0	
Cornbread	22	0.0	32	5.0	30	0.0	84	5.0	
Milk	88	0.0	128	0.0	120	0.0	336	0.0	
Cup cake	22	0.0	32	0.0	30	0.0	84	0.0	
Total	193	3.0	220	7.0	200	0.0	812	10.0	
Date 10-20-47									
No. 21, No. served, 14			No. 25, No. served, 19		No. 22, No. served, 15				
Meat balls	28	1.0	38	2.6	30	0.0	96	3.8	
Corn	28	4.0	38	3.0	30	0.0	96	7.0	
Candied Yams	28	2.5	38	4.0	30	.5	96	6.5	
Milk	112	3.0	152	0.0	176	0.0	440	3.0	
Biscuit	14	0.0	19	.8	15	0.0	48	.8	
Total	210	10.5	285	10.6	281	0.5	776	21.1	
Date 10-21-47									
No. 21, No. served, 13			No. 25, No. served, 20		No. 22, No. served, 15				
Beans, pinto	39	0.0	60	3.5	45	0.0	144	3.5	
Potato salad	39	3.3	60	1.0	45	.5	144	5.0	
Head lettuce									
salad	13	3.5	20	5.5	15	.5	48	9.5	
Cornbread	13	0.0	20	.8	15	2.0	48	3.0	
Milk	104	6.5	160	1.0	120	0.0	384	8.0	
Baked apple	39	4.0	60	5.5	45	4.0	144	14.0	
Total	247	20.	380	17.3	285	7.0	912	42.0	
Total for 3 grades	650	30.8	985	34.8	866	7.5	2500	74.0	

TABLE 9—Continued

Date	10-22-47	7th Grade No. 22, No. served, 20	8th Grade No. 14, No. served, 14	9th Grade No. 26, No. served, 17
Food		Amount served in oz. Served	Amount served in oz. Served	Amount served in oz. Served
Orange juice	120	17.5	84	84
Creole Spaghetti	60	2.0	42	51
Beans, snappead	60	4.5	42	51
Biscuit	80	0.0	56	68
Milk	160	0.0	112	0.0
Cream Puff	40	0.0	80	136
Total	520	24.0	416	9.0
Date 10-23-47	No. 22, No. served, 14	No. 14, No. served, 14	No. 26, No. served, 16	No. 26, No. served, 17
Barbecued wiener	35	0.0	35	0.0
Fruit salad	28	3.5	28	0.0
Potatoes au gratin	42	8.0	42	10.0
Balls	28	0.0	28	5.0
Milk	160	0.0	112	2.0
Total	293	11.5	245	17.0
Date 10-24-47	No. 22, No. served, 12	No. 14, No. served, 10	No. 26, No. served, 15	No. 26, No. served, 15
Soup	132	16.0	110	12.0
Crackers	12	0.0	10	0.0
Gingerbread	24	1.5	20	5.5
Apple	60	0.0	50	5.0
Milk	76	0.0	80	2.5
Total	304	17.5	279	25.0
Total for 3 grades	1117	53.0	931	51.0

Food	Served	Wasted	Served	Wasted	Served	Wasted
Orange juice	120	17.5	84	0.0	288	0.0
Creole Spaghetti	60	2.0	42	5.5	153	33.0
Beans, snappead	60	4.5	42	5.0	153	7.0
Biscuit	80	0.0	56	2.0	204	11.0
Milk	160	0.0	112	0.0	408	0.0
Cream Puff	40	0.0	80	2.0	154	2.0
Total	520	24.0	416	9.0	1360	53.0
Date 10-23-47	No. 22, No. served, 14	No. 14, No. served, 14	No. 26, No. served, 16	No. 26, No. served, 17		
Barbecued wiener	35	0.0	35	0.0	110	0.0
Fruit salad	28	3.5	28	0.0	88	4.5
Potatoes au gratin	42	8.0	42	10.0	132	22.5
Balls	28	0.0	28	5.0	90	7.0
Milk	160	0.0	112	2.0	408	2.0
Total	293	11.5	245	17.0	828	36.0
Date 10-24-47	No. 22, No. served, 12	No. 14, No. served, 10	No. 26, No. served, 15	No. 26, No. served, 15		
Soup	132	16.0	110	12.0	165	12.0
Crackers	12	0.0	10	0.0	15	1.0
Gingerbread	24	1.5	20	5.5	30	2.0
Apple	60	0.0	50	5.0	75	0.0
Milk	76	0.0	80	2.5	120	0.0
Total	304	17.5	279	25.0	405	15.0
Total for 3 grades	1117	53.0	931	51.0	1137	42.0

TABLE 9—Continued

Date	10-27-47	10th Grade No.19, No.served,10 Amount served in oz.	11th Grade No.16, No.served,10 Amount served in oz.	12th Grade No.20, No.served,15 Amount served in oz.	Total	
Food	Served	Wasted	Served	Wasted	Served	Wasted
Navy beans	40	5	40	1.6	60	3.0
Corn	30	1	30	0.0	45	10.5
Lettuce and tomato	20	1	20	0.0	30	4.5
Corn bread	30	7	30	5.0	45	16.5
Apricot cobbler	30	6	30	6.0	45	9.3
Milk	80	0	80	2.0	120	0.0
Total	230	20	230	14.8	345	43.8
Date 10-28-47	No.19, No.served,11	No.16, No.served,11	No.20, No.served,15			
Creole Spaghetti	39	2.5	38.5	2	52.5	8.3
Greens	22	1.0	22.0	1	30.0	5.0
Mashed potatoes	44	1.5	44.0	2	60.0	10.5
Biscuit	22	3.0	22.0	0	30.0	5.5
Milk	88	0.0	88	0	120.0	4.0
Cakey Chocolate	30	0.0	30	2	37.5	6.0
Total	245	8.0	244.5	7	330.0	39.3
Date 10-29-47	No.19, No.served,8	No.16, No.served,10	No.20, No.served,10			
Soup	88	0	110	6	143	6
Crackers	8	0	10	0	13	0
Milk	64	0	80	0	104	0
Peach Cobbler	32	0	40	2	52	1
Total	192	0	240	10	312	7
Total for 3 grades	667	28	714.5	25.8	987	89.1
					2749	54.3
						148.6

TABLE 9—Continued

Date	4-12-48	1st Grade		2nd Grade		3rd Grade		Total
		No. 35, No. served, 20	Amount served in oz.	No. 19, No. served, 11	Amount served in oz.	No. 30, No. served, 10	Amount served in oz.	
Food		Served	Wasted	Served	Wasted	Served	Wasted	Served
Orange juice	120	6	66	0	60	8	1	246
Pinto beans	22	1	22	1	20	1	1	64
Cabbage	22	2	33	3	30	2	0	64
Potato salad	60	2	22	0	20	0	123	7
Corn bread	22	0	88	6	80	3	0	64
Milk	160	9	44	4	40	2	3	328
Raisin pie	80	8	297	15	270	17	1	164
Total	486	28					17	1054
Date	4-13-48	No. 35, No. served, 12	No. 19, No. served, 11	No. 30, No. served, 16	No. 35, No. served, 11	No. 19, No. served, 11	No. 30, No. served, 16	Total
Wieners and kraut	48	2	33	2	36	3	1	117
Creamed potatoes	32	8	22	9	24	9	78	7
Prunes	16	8	11	3	12	9	39	26
Peanut butter cookies	16	0	11	9	12	0	39	9
Rolls	16	0	11	0	12	0	39	0
Milk	128	6	88	0	96	19	12	25
Grapefruit juice	96	7	66	3	72	7	234	17
Total	352	31	242	16	264	47	858	94
Date	4-14-48	No. 35, No. served, 18	No. 19, No. served, 12	No. 30, No. served, 11	No. 35, No. served, 12	No. 19, No. served, 12	No. 30, No. served, 11	Total
Peanut butter sandwiches	72	3	48	14	44	13	1	164
Stuffed egg	18	2	12	2	11	1	0	41
French fries	36	2	24	0	22	0	0	82
Ice Cream	36	1	24	0	22	0	0	82
Milk	144	6	96	0	88	5	7	328
Orange juice	108	23	72	14	66	7	0	246
Total	414	37	276	30	253	26	0	943
Total for 3 grades	1252	96	815	91	787	90	0	2853

TABLE 9—Continued

Food	4th Grade		5th Grade		6th Grade		Total					
	No. served, 13	Amount served in oz.	No. served, 13	Amount served	No. served, 11	Amount served in oz.		Served	Wasted	Served	Wasted	
Meat balls	52	9	52	3	44	2	148	14	111	111	74	10
English Peas	39	6	39	4	33	0	10	0	0	0	0	1
Prune muffins	26	1	26	0	22	0	11	11	11	11	222	4
Lettuce and												
Tomato salad	39	3	39	1	33	0	111	111	222	222	74	0
Orange juice	78	3	78	8	66	0	222	222	74	74	296	0
Rolls	26	0	26	0	22	0	11	11	0	0	0	0
Milk	104	0	104	0	88	0	0	0	0	0	0	0
Total	364	22	364	16	308	2	1036	40	929	27	3017	188
Date 4-16-48	No. 21, No. served, 9		No. 25, No. served, 13		No. 22, No. served, 11							
Salmon croquette	36	7	52	9	40	2	128	18	96	96	128	12
Potato salad	27	1	39	4	30	7	12	12	0	0	0	0
Peanut butter												
Muffin	18	6	26	2	20	2	64	10	96	96	12	10
Prunes	27	7	39	2	30	3	0	0	0	0	0	0
Rolls	18	0	26	0	20	0	64	64	0	0	256	5
Milk	72	0	104	5	80	0	0	0	0	0	192	25
Fruit punch	54	13	78	7	60	5	0	0	0	0	0	0
Total	252	34	364	29	280	19	896	82	929	27	3017	188
Date 4-19-48	No. 21, No. served, 11		No. 25, No. served, 13		No. 22, No. served, 11							
Pinto beans	44	1	52	2	44	0	140	3	140	140	140	25
Mixed greens	44	4	52	14	44	6	140	140	105	105	70	18
Creamed corn	33	6	39	9	33	0	0	0	70	70	0	0
Rolls	22	0	26	0	22	0	140	140	280	280	210	11
Raisin pie	44	2	52	6	44	0	0	0	0	0	0	7
Milk	88	0	104	2	88	0	0	0	0	0	0	2
Orange juice	66	5	78	6	66	0	210	210	0	0	0	0
Total	341	20	403	39	341	6	1085	66	929	27	3017	188
Total for 3 grades	957	76	1131	84	929	27	3017	188	929	27	3017	188

TABLE 9—Continued

Date	4-20-48	7th Grade No. 22, No. served, 10	8th Grade No. 14, No. served, 6	9th Grade No. 26, No. served, 16	
Food		Amount served in oz.	Amount served in oz.	Amount served in oz.	Total
Barbecued wieners	30	0	18	48	96
Creamed potatoes	30	1.5	18	48	96
Peanutbutter cakes	20	1	12	32	64
Apple	40	4	24	64	128
Balls	20	0	0	0	0
Orange juice	60	5	36	96	192
Milk	80	5	48	128	256
Total	280	16.5	168	448	896
Date 4-21-48	No. 22, No. served, 11	No. 14, No. served, 6	No. 26, No. served, 11	No. 26, No. served, 11	42.5
Lima beans	33	3	18	1	33
Greens	44	27	24	3	84
Radish and onions	33	3	12	2	112
Prune pudding	44	44	24	22	67
Corn bread	22	0	12	44	112
Milk	88	0	36	22	56
Apple	44	0	24	66	190
Tomato juice	66	1	36	44	112
Total	374	78	186	21	391
Date 4-22-48	No. 22, No. served, 11	No. 14, No. served, 6	No. 26, No. served, 11	No. 26, No. served, 11	138
Peanutbutter and					
Banana sandwich	55	34	30	14	55
Stuffed egg	33	2	18	0	33
French fries	22	2	12	6	44
Apple pie	44	19	24	8	0
Ice Cream	22	0	12	0	22
Fruit punch	66	4	36	0	66
Milk	66	0	36	2	66
Total	308	61	168	30	308
Total for 3 grades	962	155.5	522	60	1097
					93
					2581
					308.5

TABLE 9—Continued

Feed	Date	10th Grade		11th Grade		12th Grade		Total
		No. served, 8	No. 19, No. served, 3	No. 16, No. served, 3	Amount served in oz.	Account served in oz.	No. 19, No. served, 12	
Fish	Date 4-23-48	24	2	9	2	36	6	69
Potato salad		40	4	15	0	60	1	115
English Peas		32	1	12	0	48	0	92
Rolls		16	0	6	0	24	0	46
Milk		64	6	24	5	72	0	160
Prune cake		32	0	12	0	48	0	92
Apples		40	8	15	0	60	5	115
Orange juice		48	0	18	0	72	0	138
Total		296	21	111	7	420	12	827
Kraut	Date 4-26-48	No. 19, No. served, 8	No. 16, No. served, 1	No. 16, No. served, 1	No. 19, No. served, 1	No. 19, No. served, 14	No. 19, No. served, 14	40
Wierners		24	5	3	0	42	2	69
Corn		24	0	3	0	42	0	69
Creamed potatoes		24	2	3	0	42	6	69
Rolls		16	0	2	0	28	0	46
Milk		64	0	8	4	112	5	184
Baked apples		32	14	4	0	56	3	92
Orange juice		48	5	6	0	84	3	138
Total		256	28	32	4	448	19	736
Meat balls	Date 4-27-48	No. 19, No. served, 7	No. 16, No. served, 1	No. 16, No. served, 1	No. 19, No. served, 11	No. 19, No. served, 11	No. 19, No. served, 11	51
Potato salad		21	5	3	0	33	1	57
Honey		28	3	4	0	44	4	76
Raisin pie		14	3	2	0	22	3	38
Rolls		28	8	4	0	44	8	76
Milk		14	0	2	0	22	0	38
Grapefruit juice		56	0	8	0	88	3	152
Total		42	0	6	3	66	11	114
Total for 3 grades		203	17	29	3	319	30	551
		755	66	172	14	1187	61	2114

Comments: Collected during the county fair, and most of the boys were at the fair.

TABLE 10
RANGE OF PLATE WASTE

Grade	Date	Total Served in oz.	Total Wasted in oz.	Number Persons Served	Average Waste in oz.	Range in oz.
1st	10-14-47	506	74.75	22	3.39	0-13.5
1st	10-15-47	437	40-25	23	1.79	0-7
1st	10-16-47	518	60.30	23	2.62	0-16
2nd	10-14-47	368	46.25	25	1.85	0-8
2nd	10-15-47	285	14.00	15	9.33	0-3
2nd	10-16-47	316	40.00	16	2.50	0-6
3rd	10-14-47	575	62.50	25	2.50	0-6
3rd	10-15-47	418	23.50	22	1.06	0-3
3rd	10-16-47	223.02	53.00	21	2.52	0-7
4th	10-17-47	193	3.00	11	.27	0-2
4th	10-20-47	210	10.25	14	.75	0-5
4th	10-21-47	247	16.25	13	.25	0-4
5th	10-17-47	320	7.00	16	.43	0-3
5th	10-20-47	285	10-50	19	.55	0-2
5th	10-21-47	380	17.30	20	.86	0-5
6th	10-17-47	300	14.00	15	.93	0-3
6th	10-20-47	281	.50	15	.30	0-0.5
6th	10-21-47	285	7.00	15	.46	0-4
7th	10-22-47	520	24.00	20	1.20	0-5
7th	10-23-47	293	11.50	14	.82	0-3
7th	10-24-47	304	17.50	12	1.45	0-5.5
8th	10-22-47	416	9.00	14	2.50	0-4
8th	10-23-47	245	17.00	14	1.21	0-5
8th	10-24-47	270	25.00	10	2.50	0-7
9th	10-22-47	424	19.50	17	1.14	0-3
9th	10-23-47	290	7.50	16	.46	0-2.5
9th	10-24-47	405	15.00	15	1.00	0-4
10th	10-27-47	230	19.75	10	1.97	0-6
10th	10-28-47	245	8.00	11	7.30	0-4
10th	10-29-47	192	.00	8	.00	0-0
11th	10-27-47	230	8.75	10	8.70	0-3.5
11th	10-28-47	244.5	6.50	11	5.90	0-6
11th	10-29-47	240	10.00	10	1.00	0-9
12th	10-27-47	405	43.75	15	2.91	0-10.5
12th	10-28-47	390	39.25	15	2.61	0-7.5
12th	10-29-47	364	6.50	13	2.00	0-6

TABLE 10—Continued

Grade	Date	Total Served in oz.	Total Wasted in oz.	Number Persons Served	Average Waste in oz.	Range in oz.
1st	4-12-48	486	28	20	1.4	0-8
1st	4-13-48	352	31	16	1.9	0-6
1st	4-14-48	414	37	18	2.0	0-16
2nd	4-12-48	297	15	11	1.3	0-4
2nd	4-13-48	242	16	11	1.4	0-3
2nd	4-14-48	276	23	12	2.4	0-8.3
3rd	4-12-48	270	17	10	1.5	0-4
3rd	4-13-48	264	47	12	3.8	0-5
3rd	4-14-48	253	26	11	2.3	0-13.3
4th	4-15-48	364	22	13	1.6	0-5
4th	4-16-48	252	33	9	3.7	0-9.5
4th	4-19-48	341	20	11	1.8	0-5.3
5th	4-15-48	364	16	13	1.2	0-5
5th	4-16-48	364	29	13	2.2	0-6
5th	4-19-48	403	39	13	2.9	0-7.3
6th	4-15-48	308	2	11	0.18	0-2
6th	4-16-48	280	19	10	1.9	0-3.5
6th	4-19-48	341	6	11	0.56	0-2.3
7th	4-20-48	280	16.5	10	1.6	0-7
7th	4-21-48	374	78	11	7.1	0-10
7th	4-22-48	308	61	11	5.4	0-11.5
8th	4-20-48	168	9	6	1.5	0-3
8th	4-21-48	186	21	6	3.4	0-9
8th	4-22-48	168	30	6	4.8	0-10
9th	4-20-48	448	17	16	1.1	0-6
9th	4-21-48	341	39	11	3.6	0-8
9th	4-22-48	308	38	11	3.5	0-10
10th	4-23-48	296	21	8	2.6	0-7
10th	4-26-48	256	28	8	3.4	0-10
10th	4-27-48	203	17	7	2.4	0-6
11th	4-23-48	111	7	3	2.3	0-7
11th	4-26-48	32	4	1	4.0	0-4
11th	4-27-48	29	3	1	3.0	0-3
12th	4-23-48	420	12	12	0.9	0-8
12th	4-26-48	448	19	14	1.0	0-10
12th	4-27-48	319	30	11	2.8	0-13

TABLE 11
FOOD VALUE OF FOOD SERVED

Lunch	Wt. Gr.	Calo- ries	Calo- cium Mgs.	Vit. A I.U.	Vit. B ₁ Mgs.	This. B ₂ Mcgs.	Ribo. B ₂ Mcgs.	Nia. C Mgs.	Asc. C Mgs.	Iron Eggs. Mgs.	Pro. Gr.
October 14, 1947											
1st, 2nd, and 3rd Meat balls.	57	202	15	45	137	79	1.6	0	1.4	8.2	
Creamed potatoes.	85	100	74	200	80	43	.8	9	.5	4.0	
Cabbage and apple salad	28	90	15	49	58	35	.1	28	1.2	.2	
Apricot pie	85	266	8	1050	55	408	.3	4	.2	4.0	
Milk.	240	165	283	384	96	408	.2	2	.2	8.4	
Margarine, fortified.	13	95	0	350	0	0	.0	0	.0	.1	
Biscuit.	57	111	25	31	106	90	.6	0	.7	3.0	
	555	1029	421	2109	532	745	3.8	43	4.2	27.9	
October 17, 1947											
4th, 5th, and 6th Pinto beans	43	155	64	0	206	102	.9	0	4.1	9.6	
Mashed potatoes	57	80	32	150	65	50	1.2	7	.3	2.0	
Lettuce and tomato salad.	56	9	6	300	15	16	.1	7	.4	.4	
Corn bread.	56	154	41	172	115	126	.6	0	.8	4.7	
Margarine, fortified.	13	95	0	350	0	0	0	0	.0	.1	
Milk	240	165	282	384	96	408	.2	2	.2	8.4	
Cup cakes, iced.	57	257	34	161	17	78	.2	0	.5	3.0	
	522	915	459	1517	514	780	3.2	16	6.3	28.2	

TABLE 11.—Continued

Lunch	Wt. Gr.	Calo- ries	Cal- cium Mgs.	Vit. A I.U.	Vit. B1 Mcgs.	Ribo- B2 Micros.	Nia- Mgs.	Isc. C Mgs.	Iron Mgs.	Pro- Gr.
April 12, 1948										
1st, 2nd, and 3rd										
Orange juice.	170	80	48	145	100	30	.30	62	.6	.9
Pinto beans	56	200	84	0	160	114	1.20	0	6.1	12.6
Cabbage	57	15	30	50	40	40	.16	30	.3	.9
Potato salad.	85	75	9	30	100	80	1.00	8	.5	3.0
Corn bread	57	123	36	132	90	102	.59	0	1.8	3.8
Margarine, fortified.	13	95	0	350	0	0	0	0	0	.1
Milk	240	165	284	384	96	408	.24	2	.2	8.4
Raisin pie	113	395	36	20	77	41	.41	0	1.6	3.1
	791	1148	526	1111	663	815	3.90	102	11.1	32.8
April 15, 1948										
4th, 5th, and 6th										
Meat balls	113	504	38	104	342	198	4.10	0	3.4	20.4
English peas.	85	10	18	490	85	45	.80	6	1.0	2.8
Tomatoes and lettuce	85	14	8	500	20	23	.09	11	.5	.5
Prune muffin.	58	124	16	149	36	47	.20	0	.7	1.6
Rolls . . . /	57	180	28	170	146	128	1.06	0	1.0	4.6
Orange juice.	170	80	48	145	100	30	.30	62	.6	.9
Milk	240	165	284	384	96	408	.24	2	.2	8.4
	807	1117	439	1942	825	874	6.73	81	7.4	39.4

April 20, 1948
7th, 8th, and 9th

Barbecued wiener.	201	9	605	190	230	2.40	0	2.3	15.2
Creamed potatoes.	100	74	200	80	76	.75	9	.5	4.0
Peanut butter cookies	242	14	44	74	20	.66	0	1.6	3.7
Apples	201	6	90	40	102	.20	5	.3	.3
Rolls	123	36	132	90	0	.59	0	1.8	3.8
Margarine, fortified	95	0	350	0	0	0	0	0	.1
Orange juice	80	48	145	100	30	.30	62	.6	.9
Milk	165	283	384	96	408	.24	2	.2	8.4
	820	1207	470	1950	620	956	5.14	78	36.4

April 23, 1948
10th, 11th, and 12th

Fish	90	18	10	80	45	3.00	0	1.1	18.0	
Potato salad	178	104	280	118	166	1.04	10	.9	4.8	
English peas	56	21	400	90	45	.75	7	1.3	3.0	
Apple	90	8	120	55	28	.28	7	.4	.4	
Rolls	123	36	132	90	102	.59	0	1.8	3.8	
Margarine, fortified	95	0	350	0	0	0	0	0	.1	
Orange juice	80	48	145	100	30	.30	62	.6	.9	
Milk	165	283	384	96	408	.24	2	.2	8.4	
	842	867	518	1821	629	824	6.20	88	6.3	39.4

TABLE 12
ONE-THIRD OF NATIONAL RESEARCH COUNCIL'S RECOMMENDED DAILY ALLOWANCE
AND PERCENTAGE OF N. R. C. TOTAL DAILY REQUIREMENT

Age	Date	Calo- ries	Ca. Grs.	A I. U.	Thia. Mcgs.	Ribo- flavin Mcg.	Nia. Mcgs.	Asc. Mcgs.	Iron Mgs.	Pro. Gr.
7-9 yrs.	Oct. 14, 1947									
Amount served.		1029	.420	2109	532	745	3.83	4.2	4.20	27.88
One-third of recommended allowance.										
Per cent of daily allowance.		666	.333	1166	330	500	3.3	30	3.30	20.00
		51%	42%	57%	44%	50%	38%	70%	42%	46%
10-12 yrs.	Oct. 17, 1947									
Amount served.		915	.459	1517	514	780	3.19	17	6.30	28.18
One-third of recommended allowance.										
Per cent of daily allowance.		833	.400	1500	400	600	4.00	25	4.00	23.3
		57%	38%	34%	43%	41%	26%	23%	52%	40%
13-15 yrs.	Octo. 22, 1947									
Amount served.		900	.473	2142	521	881	4.84	69	3.54	36.56
one-third of recommended allowance.										
Per cent of daily allowance.		1066	.466	1666	500	666	5.00	30	5.00	28.33
		28%	34%	43%	35%	33%	32%	27%	24%	43%
16-20 yrs.	Oct. 27, 1947									
Amount served.		1051	.493	2667	793	899	4.01	22	9.87	34.28
One-third of recommended allowance.										
Per cent of daily allowance.		1266	.466	2000	600	833	6.00	33	5.00	33.33
		27%	35%	44%	44%	36%	22%	22%	66%	40%

TABLE 12—Continued

Age	Date	Calo- ries	Ca. Grs.	A I.U.	Thia. Mcgs.	Ribo- flavin Mcgs.	Nia. Mcgs.	Asc. Mcgs.	Iron Mgs.	Pro. Gr.
7-9 yrs.	April 12, 1948	1148	.526	1111	663	815	3.9	102	11.10	32.78
Amount served.	• • • • •	•	•	•	•	•	•	•	•	•
One-third of recommended allowance	• • • • •	666	.333	1166	330	500	3.3	30	3.30	20.00
Per cent of daily allowance.	•	55%	53%	32%	66%	54%	39%	1.7%	1.10%	5%
10-12 yrs.	April 15, 1948	1117	.439	1942	825	874	6.73	81	7.37	39.4
Amount served.	• • • • •	•	•	•	•	•	•	•	•	•
One-third of recommended allowance	• • • • •	833	.400	1500	400	600	4.00	25	4.00	23.3
Per cent of daily allowance.	•	44%	37%	43%	69%	49%	56%	1.08%	61%	56%
13-15 yrs.	April 20, 1948	1206	.470	1950	620	956	5.14	78	7.30	36.38
Amount served.	• • • • •	•	•	•	•	•	•	•	•	•
One-third of recommended allowance	• • • • •	1066	.466	1666	500	666	5.00	30	5.00	28.33
Per cent of daily allowance.	•	38%	34%	39%	41%	48%	34%	87%	56%	43%
16-20 yrs.	April 23, 1948	867	.518	1821	629	824	6.20	88	6.35	39.38
Amount served.	• • • • •	•	•	•	•	•	•	•	•	•
One-third of recommended allowance	• • • • •	1266	.466	2000	600	833	6.00	33	5.00	33.33
Per cent of daily allowance.	•	23%	37%	30%	34%	33%	34%	88%	42%	39%

TABLE 13
FOOD VALUE OF FOOD WASTED

Grade	Date	Wt. Gr.	Calo- ries	Cal- cium Mgs.	Vit. A I.U.	Thia. B ₁ Mgs.	Ribo. B ₂ Mgs.	Nia. Mgs.	Asc. C Mgs.	Iron Mgs.	Pro. Gr.
1st	Oct. 14, 1947	96.3	178.2	72.9	336.1	92.2	129.2	.7	7.2	.7	4.8
2nd	Oct. 14, 1947	81.9	151.9	62.0	211.3	77.5	109.9	.6	6.2	.6	4.1
3rd	Oct. 14, 1947	70.9	131.4	54.0	269.0	68.0	95.1	.5	5.4	.5	3.6
4th	Oct. 17, 1947	6.0	13.5	7.0	22.4	7.6	3.8	.1	.2	.1	.4
5th	Oct. 17, 1947	21.4	21.7	10.9	36.1	12.2	6.1	.1	.4	.1	.7
6th	Oct. 17, 1947				NO WASTE						
7th	Oct. 17, 1947	34.0	44.2	23.3	105.4	25.7	9.3	.2	3.4	.1	.2
8th	Oct. 17, 1947	18.2	23.7	12.4	56.5	13.5	4.9	.1	1.6	.09	.9
9th	Oct. 17, 1947	32.5	42.2	22.1	100.8	24.1	2.3	.2	2.9	.16	1.6
10th	Oct. 27, 1947	56.0	86.8	40.6	220.4	65.5	74.5	.3	1.8	.3	2.8
11th	Oct. 27, 1947	41.8	64.8	30.5	164.4	48.9	55.6	.3	1.3	.61	2.1
12th	Oct. 27, 1947	124.0	192.2	90.5	487.3	145.1	164.9	.7	4.0	1.9	6.2
1st	April 12, 1948	40.4	58.6	26.7	56.6	34.0	41.6	2.0	5.2	.6	1.6
2nd	April 12, 1948	37.4	54.2	24.7	52.3	31.4	38.5	1.9	4.9	.5	1.5
3rd	April 12, 1948	43.9	63.7	29.0	61.5	36.9	45.3	2.2	5.7	.6	1.8
4th	April 15, 1948	46.9	64.7	25.3	113.0	47.8	50.6	.38	4.7	.4	2.3
5th	April 15, 1948	34.0	49.7	19.4	86.7	36.7	38.9	.3	3.6	.3	1.8
6th	April 15, 1948	5.2	7.1	2.8	12.4	5.3	5.6	.0	5.5	.1	3
7th	April 20, 1948	75.1	110.4	42.8	176.8	57.1	87.9	.5	7.5	.7	3.0
8th	April 20, 1948	42.5	62.5	25.2	101.1	32.3	49.8	.3	4.3	.4	1.8
9th	April 20, 1948	31.0	45.6	17.7	73.8	23.6	36.3	.2	3.1	.3	1.2
10th	April 23, 1948	73.3	74.6	44.7	158.3	55.0	7.3	.5	8.1	.6	3.7
11th	April 23, 1948	66.2	67.5	40.4	142.9	49.6	6.6	.5	7.3	.5	3.3
12th	April 23, 1948	28.4	28.9	17.3	61.2	17.3	2.8	.2	3.1	.2	1.4

TABLE 14

PLATE WASTE CHECK SHEET

Date	October 14, 1947	No. Enrolled	35	Day's Attendance	33
Grade	1st	No. Sack Lunches	3	No. Eating Elsewhere	9

		MENU							
SERVING TYPE "A"	Meat balls	Cream potato	Cabbage & apple salad		Apricot cobbler	Milk	Marga- rine	Biscuit	
LUNCH									
SERVING TIME. OZ.	2	2	1			3	8	2t	2
EXTRA SERVINGS	A	B	C	D	E	F	G	H	
PLATES		PLATE WASTE							
1	1					1			
2	1/2		1/2			1/4	1/2	1 1/2	1 1/2
3						2		2	2
4				1					
5	1/2	2							
6									
7	1						3		
8								2	
9									2
10				1 1/2					1 1/2
11	2		2						2
12								2	3
13					1	1/2			4

Too full to eat meat

Doesn't like creamed
potatoes

Left part of meat
ball; too full

	Meat	Cream potato	Cabbage & apple salad	Apricot cobbler	Milk	Margarine	Biscuit	Comments
Plates								
14	1	1			2		2	
15							1/2	Left cobbler didn't like it
16								
17					3			
18						2		
19						2		
20		2	2	1 1/2		2		
21							6	Didn't like meat balls

TABLE 14.—Continued

PLATE WASTA CHECK SHEET

Date	Date	No. Enrolled	19 Day's Attendance	18
October 14.	1947			

Grade	2nd	No. Sack Lunches	0	No. Eating Elsewhere	2
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TABLE II.—Continued

PLATE WASTE CHIEF SHIP

Date	October 14, 1947	No. Enrolled	30 Day's Attendance	29	
Grade	3rd	No. Sack Lunches	2	No. Eating Elsewhere	5

	Meat balls	Cream potato salad	Cabbage & apple salad	Apricot cobbler	Milk	Merge- rines	Biscuit	Ex. Serv.	Comments
Plates									
14									
15	2	1		1 1/2					
16					5			G,1 G,1	Doesn't like meat balls
17					3				Doesn't like meat balls
18					1				Doesn't like meat balls
19									
20									
21									
22									
23								G,1	Doesn't like meat balls

Plates	Roast	Black eyed Peas	Head Let. Salad	Biscuit	Marga- rine	Milk
14		1 1/2		2		
15						
16						
17						
18						
19						
20						
21		1 1/2		1		
22		1 1/2		2		

Don't like butter

TABLE 14--Continued

PLATE WASTE CHECK SHEET

Date October 15, 1947 No. Enrolled 19 Day's Attendance 18
 Grade 2nd No. Sack Lunches 0 No. Eating Elsewhere 2 - home

SERVING TYPE "A" LUNCH	Roast	Black Eyed Peas	Heed Let. Salad	Biscuit	Marga- rine	Milk	H	Comments	Menu	
									G	F
SERVING IN OZ.	2	2	1	1	2t	8				
EXTRA SERVINGS	A	B	C	D	E	F	G	H		
PLATE WASTE										
Plates										
1				1/2	1/2					
2						t				
3					1/4					
4					1					
5						t				
6										
7										
8										
9										
10										
11										
12										
13										
14										

15General Comment: Food was greasy and grease ran together with other food, 1

Good

TABLE 14--Continued

PLATE WASTE CHECK SHEET

Date October 15, 1947 No. Enrolled 30 Day's Attendance 26
Grade 3rd No. Sack Lunches 2 No. Eating Elsewhere 7

	Roast	Black Eyed Peas	Head Let Salad	Biscuit	Marga- rine	Milk	
Dates							
17							
18		2				E, 1	
19		2	1	1/2		E, 1	Doesn't like peas

TABLE 14.—Continued

PLATE WASTE CHECK SHEET

Date	October 16, 1947	No. Enrolled	35	Davis' Attendance	32
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Grade	1st	No. Sack Lunches	2	No. Eating Elsewhere	7
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TABLE I₄—Continued

PLATE WASTE CHECK SHEET

Date	October 16, 1947	No. Enrolled	19	Day's Attendance	18
Grade	2nd	No. Sack Lunches	0	No. Eating Elsewhere	2

MENU										Comments
SERVING TYPE "A"	Barbe- cued wieners	Potatoes au gratin	Mixed greens	Rolls	Marge- rine	Milk	Devils Food cake	Ex. Serv.		
LUNCHES										
SERVING IN OZ.	2 1/2	3	2	2	2t	6	1			
EXTRA SERVING	A	B	C	D	E	F	G	H		
Plates										
1		1	1	1/2					D,1	
2		2	2	2					D,4	
3		2	1	1					D,2	
4		2	1	1					D,2	
5		2	1	1					D,1	
6		2	1	1					D,1	
7		2	1	1					D,1	
8		2	1	1					D,1	
9		2	1	1					D,1	
10		2	1	1					D,1	
11		2	1	1					D,1	
12		2	1	1					D,1	
13		2	1	1					D,1	
14		2	1	1					D,4	
15		2	1	1					D,2	
16		2	1	1						

TABLE 14.—Continued

Date	October 16, 1947	No. Enrolled	30	Days Attendance	29
Grade	3rd	No. Sack Lunches	2	No. Eating Elsewhere	6

TABLE 14--Continued

Date October 17, 1947 No. Enrolled 21 Day's Attendance 18
 Grade 4th No. Sack Lunches None No. Eating Elsewhere 7

SERVING TYPE "A" LUNCH	Boiled pinto beans	Mashed potato	Lettuce tomato salad	Corn bread	Marga- rine	Milk	Cup cake	MENU				Comments
								SERVING IN OZ.	SERVING EXTRA	Plates	Ex. Serv.	
A	B	C	D	E	F	G	PLATE WASTE	D,1	D,1	D,1	D,1	D,1
1												
2												
3												
4							1					
5							1					
6				2								
7			1									
8												
9												
10												
11												

TABLE 14—Continued

Date October 17, 1947 No. Enrolled 25 Day's Attendance 24
 Grade 5th No. Sack Lunches 2 No. Eating Elsewhere 6

SERVING TYPE "A" LUNCH	Boiled pinto beans	Mashed potato	Lettuce tomato salad	Corn bread	Marga- rine	Milk	Cup cake	Ex.Serv.				Comments
								D	E	F	G	
SERVING IN OZ.	1 1/2	2	2	2	2t	8	2					
EXTRA SERVING Plates	A	B	C	D	E	F	G					
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												

TABLE 14.—Continued

Date	October 17, 1947	No. Enrolled	22	Day's Attendance	18	
Grade	6th	No.	Sack Lunches	None	No. Eating Elsewhere	3

SERVING TYPE "A" LUNCH SERVING IN CZ. EXTRA SERVING Plates	MENU						Ex. Serv.	Comments
	Boiled pinto beans	Mashed potato	Lettuce Tomato salad	Corn bread	Marga- rine	Milk cup		
1							D,2	Best food they have served
2							D,6	
3							D,2	
4							D,1	
5							D,1	
6							D,2	
7							D,1	
8							D,1	
9							D,3	
10							D,2	
11								
12								
13								
14								
15								

TABLE 14—Continued

October 20, 1947 No. Enrolled 21
 Day's Attendance 21
 Grade 4th No Sack Lunches 0 No. Eating Elsewhere 7

Plates	MENU						Ex. Serv.	Comments
	SERVING TYPE "A" LUNCH	Meat balls	Corn	Candied yams	Biscuit	Margarine	Milk	
SERVING IN CZ.	2	2	2	1	2t	8		
EXTRA SERVING	A	B	C	D	E	F	G	
Plates			PLATE WASTE					
1					2		D,3	likes bread
2							D,1	
3		2					D,2	wants beans to go now
4							D,1	
5							D,2,B,1	
6							D,2,B,1	
7							D,2,B,1	
8							D,3,B,1	
9							D,1	
10							D,1	
11		1						
12					1/2			
13				2				
14						1		

TABLE 14.—Continued

Date	October 20, 1947	No. Enrolled	25	Day's Attendance	25
Grade	5th	No. Sack Lunches	2	No. Eating Elsewhere	4

SERVING TYPE "A" LUNCH SERVING IN OZ.	Meat balls	Corn	Candied yams	MENU			Milk	Comments
				D	E	F		
EXTRA SERVING Plates	A	B	C	D	E	F	G	Ex.Serv.
1								
2								D,1
3								D,2
4								D,2
5								
6								
7				1				D,1
8				1				D,1
9								D,3
10								D,1
11								D,1
12								
13								
14								
15								
16								
17								
18								
19								Have jams at home
				2	2	2		

TABLE II.—Continued

Date	October 20, 1947	No. Enrolled	22	Day's Attendance	19
Grade	6th	No. Sack Lunches	1	No. Eating Elsewhere	3

TABLE II.—Continued

Date	October 21, 1947	No. Enrolled	21	Day's Attendance	21
Grade	4th	No. Sack Lunches	0	No. Eating Elsewhere	6

TABLE 14—Continued

Date October 21, 1947 No. Enrolled 25 Day's Attendance 20
 Grade 5th No. Sack Lunches 2 No. Eating Elsewhere 3

SERVING TYPE "A" LUNCH	SERVING IN OZ.	EXTRA SERVING	Plates	MENU						Ex. Serv.	Comments	
				Pinto beans	Potato salad	Head lettuce salad	Corn bread	Marge- rine	Milk	Baked apple		
A	B	C	D	E	F	G						
PLATE WASTE												
1				1 1/2	1/4							
2												
3												
4												
5												
6	2 1/2											
7	1/2											
8		2		1/2	1/4							
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

TABLE II.—Continued

Date	October 21, 1947	No. Enrolled	22	Day's Attendance	19
Grade	6th	No. Sack Lunches	0	No. Eating Elsewhere	3

MENU									
SERVING TYPE "A" LUNCH	Pinto beans	Potato salad	Head Lettuce salad	Corn bread	Marge- rine	Milk	Baked apple		
SERVING IN OZ.									
SERVING EXTRA	A	B	C	D	E	F	G	Ex. Serv.	Comments
Plates					PLATE WASTE			D,1	
1					1/2			1	
2					1/2			1	
3					1/2			1	
4					1/2			1	
5					1/2			1	
6					1/2			1	
7					1/2			1	
8					1/2			1	
9					1/2			1	
10					1/2			1	
11					1/2			1	
12					1/2			1	
13					1/2			1	
14					1/2			1	
15					1/2			1	
16					1/2			1	

TABLE 14—Continued

Date October 22, 1947 No. Enrolled 22 Day's Attendance 20
 Grade 7th No. Sack Lunches 0 No. Eating Elsewhere 0

SERVING TYPE "A" LUNCH SERVING IN OZ. EXTRA SERVING Plates	MENU							Ex. Serving	Comments
	Orange juice	Creole spaghetti	Snap beans	Marga- rine	Biscuit	Milk	Cream puff		
	A	B	C	D	E	F	G	PLATE WASTE	
1		3		1					
2		3		1					
3			1						
4				1					
5					1				
6						1			
7							1		
8								1	
9									1
10									1
11									1
12									1
13									1
14									1
15									2
16									1
17									1
18									1
19									1
20									1

TABLE I₄—Continued

Date October 22, 1947 No. Enrolled 14 Day's Attendance
Grade 8th No. Sack Lunches 0 No Eating Elsewhere 0

TABLE IV.—Cont'd.

Date	October 22, 1947	No. Enrolled	17	Day's Attendance	17
Grade	9th	No. Sack Lunches	0	No. Eating Elsewhere	2

TABLE I.—Continued

Date October 23, 1947 No. Enrolled 22 Day's Attendance 20
Grade 7th No. Sack Lunches 1 No. Eating Elsewhere 5

TABLE 14—Continued

Date October 23, 1947 No. Enrolled 16 Day's Attendance 15
 Grade 8th No. Sack Lunches 0 No. Eating Elsewhere 1

SERVING TYPE "A" LUNCHES	Barbe- cued wieners	Potatoes au gratin	Fruit salad	MENU			PLATE WASTE	EX. Serving	Comments
				Large-	Rolls	Milk			
SERVING IN OZ.									
EXTRA SERVING Plates	A	B	C	D	E	F	G		
1				1	2			E,1	
2									
3		3			1			E,1	
4		3 1/2			1	1 1/2	4	B,1,C,1,D,3	
5								A,1,B,1E,1	
6								E,2A1/2 B,1	
7									
8									
9									
10									
11									
12									
13									
14									

TABLE 14--Continued

Date October 23, 1947 No. Enrolled 26 Day's Attendance 24
 Grade 9th No. Sack Lunches 0 No. Eating Elsewhere 8

Plates	MENU						Comments
	Barbe-cued wieners	Potatoes au gratin	Fruit salad	Marga-fine	Rolls	Milk	
1							
2							E,2
3							E,2
4							E,2
5							E,2
6							E,2
7							E,2
8							E,2
9							E,1
10							E,1
11							E,1
12							E,2
13							E,2
14							E,2
15							E,2
16							
							Ex. Serving
							PLATE WASTE
					2		
			1				
		2 1/2		1			
		2					

TABLE II.—Continued

Date	October 24, 1947	No. Enrolled	22	Day's Attendance	18	
Grade	7th	No.	Sack Lunches	1	No. Eating Elsewhere	6

TABLE 14.—Continued

Date	October 24, 1947	No. Enrolled	16	Day's Attendance	13
Grade	8th	No. Sack Lunches	0	No. Eating Elsewhere	3

SERVING TYPE "A" LUNCH SERVING IN OZ.	MENU						Comments
	Soup	Crackers	Ginger bread	Apple	Milk		
A	B	C	D	E	F	G	PLATE WASTE
1				2	5	8	
2	4						B,2
3				3			B,3
4				1			B,1
5							B,1
6							B,1,A,1D,1
7							B,1
8				2 1/2			B,1
9					2 1/2		
10	4						B,1
11	2			1 1/2			

TABLE 14.—Continued

Date October 24, 1947 No. Enrolled 26 Day's Attendance 24
 Grade 9th No. Sack Lunches 0 No. Eating Elsewhere 9

SERVING TYPE "A" LUNCH SERVING IN OZ. EXTRA SERVINGS Plates	MENU					Comments
	Soup	Crackers	Ginger- bread	Apple	Milk	
1						A,1B,1 E
2						B,1
3	2					A,1 B,5
4	4					B,2
5	4	1				B,3
6						B,3
7	2					C, B,2
8						B,2
9						B,3
10						C,2
11						C,1
12						B,3
13						C,1, B,3
14						B,1, B,4
15						

TABLE 14--Continued

Date	October 27, 1948	No. Enrolled	25	Day's Attendance	17
Grade	10th	No. Sack Lunches	2	No Eating Elsewhere	7

TABLE 14--Continued

Date	October 27, 1948	No. Enrolled	16	Day's Attendance	14
Grade	11th	No. Sack Lunches	none	No. Eating Elsewhere	4

TABLE 14--Continued

Date October 27, 1948 No. Enrolled 20 Day's Attendance 17
 Grade 12th No. Sack Lunches none No. Eating elsewhere 4

SERVING TYPE "A" LUNCH IN OZ.	Navy beans	MENU						EX. SERV.	COMMENTS
		Buttered corn	Lettuce tomato salad	Corn bread	Marga- rine	Apricot Cobbler	Milk		
SERVING A	B	C	D	E	F	G			
Plates		Plastic	Plastic						
1		2	1						
2		1		2 1/2			1 3/4		
3		2		1 1/2	t				
4	2	1 1/2		3	t				
5				2	t				
6					t				
7	1		1		t				
8					t				
9		1	1	3	t				
10		1 1/2	1						
11									
12									
13		2 1/2		1 1/2	t				
14		1 1/2		1	t				
15		1							

TABLE 14--Continued

Date October 26, 1947 No. Enrolled 19 Day's Attendance 19
 Grade 10th No. Sack lunches none No. Eating Elsewhere 8

SERVING TYPE "A" LUNCH SERVING IN OZ.	Grecole Spaghetti t1	Greens	Mashed potatoes	Biscuit	MENU			Ex. Serv.	Comments
					Farge- fine	Milk	Chec. cake		
SERVING EXTRA	A	B	C	D	E	F	G		
Plates				PLATE WASTE					
1				1/2	1/2	*	*		
2								D,2	
3								D,1	
4								D,3	
5								D,2	
6								D,3	
7								D,2	
8									
9									
10		2 1/2	1/2	1/2		2	t		
11									

TABLE 14--Continued

Date October 28, 1947 No. Enrolled 16 Day's Attendance 14
 Grade 11th No. Sack Lunches none No. Eating Elsewhere 3

SERVING TYPE "A" LUNCH	Greole Spa- ghetti	Greens			Mashed potatoes			Biscuit			Marga- rine			MENU		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	
SERVING IN OZ.	3 1/2	2	4		2	2t		8	2 1/2							
EXTRA																
SERVING Plates	A	B	C	D	E	F	G	H	I	J	K	L	M	N	EX. SERV.	COMMENTS
1		1/2														
2															D,2	
3															D,2	
4															D,2	
5															F,1	
6																
7																
8																
9																
10																
11																Doesn't like choc.

TABLE 14--Continued

Date	October 28, 1947	No. Enrolled	20	Day's Attendance	19
Grade	12th	No. Sack Lunches	none	No. Eating Elsewhere	4

TABLE 14--Continued

Date	October 29, 1947	% Enrolled	19	Bey's Attendance	16
Grade	10th	No. Sack Lunches	none	No. Eating Elsewhere	8

MENU						
SERVING TYPE "A" LUNCH	Soup	Crackers	Milk	Peach cobbler		
SERVING IN OZ.	11	1	8	4		
EXTRA SERVINGS	A	B	C	D	PLATE WASTE	EX. SERV.
Plates	1					COMMENTS
	2					B,6
	3					B,5
	4					B,5
	5					B,5
	6					
	7					
	8					

TABLE 14--Continued

Date	October 29, 1947	No. Enrolled	16	Day's Attendance	14
Grade	11th	No. Sack Lunches	none	No. Eating Elsewhere	4

TABLE 14--Continued

Date	October 29, 1947	No. Enrolled	20	Day's Attendance	17
Grade	12th	No. Sack Lunches	none	No. Eating Elsewhere	3

TABLE 14--Continued

Date April 12, 1948 No. Enrolled 35 Day's Attendance 24
 Grade 1st No. Sack Lunches none No. Eating Elsewhere 4

SERVING TYPE "A" LUNCH SERVING IN OZ.	Dr.	Ju.	Pinto beans	Cabbage	Potato salad	Corn bread	Marga- rine	Milk	Pie raisin	MENU			EX. SERV.	COMMENTS
										A	B	C	D	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

TABLE 14--Continued

Date	April 12, 1948	No. Enrolled	19	Day's Attendance	16
Grade	2nd	No. Sack Lunches	4	No. Eating Elsewhere	1

MENU										
SERVING TYPE "A" LUNCH	Dr.	Ju.	Pinto beans	Cabbage	Potato Salad	Corn bread	LARGE RINE	MILK	Pie raisin	COMMENTS
SERVING IN OZ.										
EXTRA SERVINGS	A	B	C	D	E	F	G	H	I	J
Plates					PLATE WASTE					
1				1/4	1/2			2	2	Dislike potato salad
2				1/4	1/2					Dislike raisin pie
3						1/4				
4						1/4				
5						1/4				
6						1/4				
7						1/4				
8						1/4				
9						1/4				
10						1/4				
11						1/4				

TABLE 14—Continued

Date	April 12, 1948	No. Enrolled	31	Day's Attendance	26
Grade	3rd	No. Sack Lunches	7	No. Eating elsewhere	8

MENU									
SERVING TYPE "A" LUNCH	Dr.-In.	Pinto Beans	Cabbage	Potato salad	Corn bread	Margar- ine	Pie Raisin	MILK	
SERVING IN OZ.	6	2	2	3	2	2t	4	8	
SERVINGS	A	B	C	D	E	F	G	H	
Plates				PLATE WASING					
1					t		1 1/2		E,1
2	1/4	1/4	1/4	1/2					E,1
3	1/8	1/4	1/8	1/8					D,1
4					t				Doesn't like cab.
5					1/2				" "
6							2		" "
7							1		" "
8							2		" "
9									Doesn't like r/p.
10									Doesn't like Cab.
11							1/4		

Teacher's Comment: Food Very Good

TABLE 14--Continued

Date	April 13, 1948	No. Enrolled	35	Day's Attendance	30
Grade	1st	No. Sack Lunches	4	No. Eating Elsewhere	10

SERVING TYPE "A" LUNCH	Wi- ners	MENU									
		creamed potatoes	P. But. Cookies	Marge- rine	Rolls	Milk	Grape fruit juice	Kraut			
SERVING IN OZ.											
EXTRA											
SERVINGS	A	B	C	D	E	F	G	H	I	J	K
Plates					PLATE WASTE						
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
TEACHERS COMMENT:	The boys love the beer juice, but it was too sour today.										

TABLE 14—Continued

Date April 13, 1948 No. Enrolled 19 Day's Attendance 17
 Grade 2nd No. Sack Lunches 4 No. Eating Elsewhere 1

SERVING TYPE "A" LUNCH	Wiener	Creamed potatoes	P. But. cookies	Marga- rine	MENU				Plates	SERVING TYPE "B" LUNCH	SERVING IN OZ.	EXTRA SERVINGS	A	B	C	D	E	F	G	H	Plates	SERV. Comments	
					Holts	Milk	Grape fruit juice	Kraut															
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							

TABLE 14--Continued

Date April 13, 1948
 Grade 3rd No. Enrolled 31 Day's Attendance 29
 No. Sack Lunches 8 No. Eating Elsewhere 9

MENU											
SERVING TYPE "A" LUNCH	Mrs- hers	Creamed potatoes	P. But. cookies	Marga- rine	Rolls	Milk	Grape fruit juice	Kraut			
SERVING IN OZ.	2	2	1	2t	1	8	6	1			
EXTRA SER.	A	B	C	D	E	F	G	H			
Plates				PLATE WASTE					Ex. Serv.	Comments	
1	1/2	t	t			3	1/2				
2		t	t			1					
3		2	t			3					
4			t			3					
5			t			1					
6			t			1					
7			t			2					
8			t								
9			t								
10			t								
11			t								
12			t								

TABLE 14--Continued

Date	April 14, 1948	No. Enrolled	33	Day's Attendance	32
Grade	1st	No. Sack lunches	3	No. Eating Elsewhere	11
MENU					
SERVING	Peanut TYPE "A" Butter	Eggs	French Fries	Milk	Juice
LUNCH	Sand.		cream		
SERVING					
IN OZ.		1	2	2	6
EXTRA					
SERVINGS		B	C	D	E
Plates				PLATES	PIECES
1					1
2					1/2
3					
4					1/4
5					
6					1
7					5
8					
9					6
10					
11		1/2	1/2		1 1/2
12		1/2	1/2		1
13			1/4		
14					6
15					6
16					
17					
18					
				Ex. Serv.	Contents

TABLE 14--Continued

Date	April 14, 1948	No. Enrolled	19	Day's Attendance	17
Grade	2nd	No. Sack Lunches	4	No. Eating Elsewhere	1

SERVING TYPE "A" LUNCH	SERVING IN OZ.	MENU						EX. SERV.	COMMENTS
		Peanut Butter	Dev. Eggs	French Fries	Ice Cream	Milk	Or. Juice		
SERVINGS	A	B	C	D	E	F	PLATE WASTE		
Plate	3	3	1				2	F,2	Extra hungry
1	3	3	1				6	F,6	Ate candy, Required to eat lunch.
2	3	1							Ulcer in mouth
3	4						6		Dislikes deviled eggs
4									Dislikes peanut butter
5									
6									
7	2		1/4						
8	2		1/4						
9	2	2 1/2	1/4						
10	2	2 1/2	1/2						
11		2 1/2	1/2						
12		2 1/2	1/2						

TABLE 14--Continued

Date April 14, 1948

No. • Enrolled

Day's Attendance 31

No. Sack Lunches	No. Rating Elsewhere
31	12

TABLE II.—Continued

Date	April 15, 1948	No. Enrolled	19	Day's Attendance
Grade	4th	No. Sack Lunches	0	No. Eating Elsewhere

TABLE 14.—Continued

Grade	Date	April 15, 1948	No. Enrolled	25	Day's Attendance	23
5th			No. Sack Lunches	4	No. Eating Elsewhere	6

TABLE 14—Continued

Date	April 15, 1948	No. Enrolled	23	Day's Attendance	20
Grade	6th	No. Sack Lunches	2	No. Eating Elsewhere	10

TABLE 14.—Continued

Date	April 16, 1948	No. Enrolled	19	Dey's Attendance	18
Grade	4th	No. Sack Lunches	1	No. Eating Elsewhere	8

TABLE 14.—Continued

Date	April 16, 1943	No. Enrolled	25	Day's Attendance	23
Grade	5th	No. Sack Lunches	4	No. Eating Elsewhere	5

Plates	MENU						Ex. Serving	Comments	
	Serving Type "A"	Salmon croquette	Potato salad	Peanut butter muffin	Prunes	Rolls	Margarine	Milk	Fruit punch
1	2	1	1		1	1		E,1	
2	2	2	1					E,2	
3	2							E,1	
4	1 1/2	2		1				E,1	
5								B,1,H,2,	
6								D,1,	
7								D,1	
8							2	B,1E,1	
9								H,1	
10		1					3	B,1,E,1	
11								H,1	
12								E,2,H,1	
13								E,2,H,1	

TABLE 14—Continued

Date	April 16, 1948	No. Enrolled	23	Day's Attendance	21
Grade	6th	No. Sack Lunches	0	No. Eating Elsewhere	11

TABLE 14—Continued

Date April 19, 1948 No. Enrolled 19 Day's Attendance 17
 Grade 4th No. Sack Lunches 2 No. Eating Elsewhere 4

Plates	LUNCHEON						PLATE WASTE	EX. SERVING	COMMENTS
	SERVING TYPE "A"	Pinto beans	Greens	Corn bread	Margarine	Raisin pie			
1	1/2						1 1/2		
2			1 1/2					B,1,H,1	
3		2						A,1,D,1	
4		1/2						D,1	
5		1/2						D,1	
6		1/2						D,1	
7		1/4						D,1	
8		2						D,1	
9							1/4	5	
10									
11				1/2					

TABLE I₄.—Continued

Date	April 19, 1948	No. Enrolled	25	Day's Attendance	23
Grade	5th	No. Sack Lunches	4	No. Eating Elsewhere	6

TABLE 14.—Continued

Date	April 19, 1948	No. Enrolled	23	Day's Attendance	21
Grade	6th	No. Sack Lunches	2	No. Eating Elsewhere	10

TABLE 14.—Continued

Date	April 20, 1948	No. Enrolled	22	Day's Attendance	22
Grade	7th	No. Sack Lunches	6	No. Eating Elsewhere	6

TABLE 14--Continued

Date	April 20, 1948	No. Enrolled	14	Day's Attendance	10
Grade	8th	No. Sack Lunches	2	No. Eating Elsewhere	2

MENU						
SERVING TYPE "A" LUNCH	Bar. wieners	Creamed potatoes	Peanut butter cookies	Apple	Rolls	Marga- rine
SERVING IN OZ.						Or. Ju.
EXTRA						
SERVINGS	A	B	C	D	E	F
Plates						
1					PLATE WASTE	
2						Ex. Servy.
3					3	Comments
4		2			2	A,2
5						A,2
6			2			A,1
						A,1

TABLE 14—Continued

Date	April 20, 1948	No. Enrolled	26	Day's Attendance	20
Grade	9th	No. Sack Lunches	0	No. Eating Elsewhere	3

TABLE 14—Continued

Date	April 21, 1948	No. Enrolled	30	Day's Attendance	25
Grade	7th	No. Sack Lunches	5	No. Eating Elsewhere	9

MENU										
SERVING TYPE "A" LUNCH	Lima beans	Greens	Rad. & onions	Prune pudding	Milk	Apple	Tomato juice			
SERVING IN OZ.	3	4	3	4	2	8	4	6		
EXTRA										
SERVINGS	A	B	C	D	E	F	G	H		
Plates					PLATE WASTE					
1	1	1	1	4						
2		3	1	4						
3		3	1	4						
4				4						
5				4						
6				4						
7				4						
8		2		4						
9				4						
10				4						
11				4						

TABLE I.—Continued

Date	April 21, 1948	No. Enrolled	15	Day's Attendance	11
Grade	8th	No. Sack Lunches	0	No. Eating Elsewhere	6

SERVING TYPE "A" LUNCH	MENU										Comments
	Lima beans	Greens	Red. & onions	Prune pudding	Corn bread	Milk	Apple	Tomato juice	PLATE	WASTE	
IN OZ.	3	4	2	4	2	8	4	6			
EXTRA SERVINGS	A	B	C	D	E	F	G	H			
Plates	1	2	1	3							Dislike Greens
	2	1/2	1	4							
	3										
	4										
	5										Dislike prune pud.

TABLE 14.—Continued

Date	April 21, 1948	No. Enrolled	25	Day*	Attendance	21
Grade	9th	No. Sack lunches	0	No. Eating Elsewhere	7	

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TABLE 14—Continued

Date	April 22, 1948	No. Enrolleed	22	Day's Attendance	20
Grade	7th	No. Sack Lunches	5	No. Eating Elsewhere	4

TABLE 14--Continued

Date	April 22, 1948	No. Enrolled	15	Day's Attendance	11
Grade	8th	No. Sack Lunches	0	No. Eating Elsewhere	5

SERVING TYPE "A" LUNCH Serving	Peanut butter sand.	MENU						Comments
		Stuffed eggs	French fries	Apple pie	Ice cream	Punch	Milk	
SERVING IN OZ.		3	2	4	2	6	8	
EXTRA								
SERVINGS	A	B	C	D	E	F	G	
Plates				PLATE	WASTE			
1	4	2	2			2		B,3,C,2 Don't like p. but.
2	1 1/2	1						B,2,C,1 Don't like p. but.
3	2			4				B,1,C,1 Don't like p. but.
4	2			2	1			B,1,C,1 Don't like p. but.
5				2				B,1,C,2 Likes butter sand.
6				2				B,1,C,2 Don't like p. but.

TABLE 14—Continued

Date	April 22, 1948	No. Enrolled	26	Day's Attendance	21
Grade	9th	No. Sack Lunches	1	No. Eating Elsewhere	4

SERVING TYPE "A" LUNCH	PEANUT BUTTER SAND.			STUFFED EGGS			FRENCH FRIES			APPLE PIE			ICE CREAM			PUNCH			MILK		
	SERVING IN OZ.	5	3		2		4		2		6		8								
SERVINGS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
Plates																					
1	2	5																			
	3	1	1/4																		
	4			1/4																	
	5				1/4																
	6					1/4															
	7						1/4														
	8							1/4													
	9								1/4												
	10									1/4											
	11										1/4										
	12											1/4									
	13												1/4								
	14													1/4							
	15														1/4						
	16															1/4					

TABLE 144.—Continued

Date	April 23, 1948	No. Enrolled	19	Day's Attendance	15
Grade	10th	No. Sack Lunches	0	No. Eating Elsewhere	7

TABLE 14.—Continued

Date	April 23, 1948	No. Enrolled	16	Day's Attendance	10
Grade	11th	No. Sack Lunches	0	No. Rating Elsewhere	7

Boys have gone on agriculture trip

TABLE 14--Continued

Date	April 23, 1948	No. Enrolled	19	Day's Attendance	17
Grade	12th	No. Jack Lunches	0	No. Eating Elsewhere	5

TABLE 14--Continued.

Date	April 26, 1948	No. Enrolled	19	Day's Attendance	8
Grade	10th	No. Sack Lunches	0	No. Eating Elsewhere	0

SERVING TYPE "A" LUNCH	Kraut	Wieners	Corn	Marge- rine Rolls	MILK	Baked Apples	Orange Juice	Creamed potatoes	MENU		
									A	B	C
SERVING IN OZ.	3	3	3	3	8	4	6	3			
EXTRA SERVINGS											
Plates					PLATE WASTE						
1									E,4,B,1		
2	1/2								E,2,B,1		
3									E,1		
4									E,2,B,1		
5		3		2					E,1		
6									E,2,B,1		
7									E,3		
8									E,1		

Part of this class has gone to the Sherman fair.

TABLE 14--Continued

A part of this class has gone to the Sherman fair

TABLE 14--Continued

Date	April 26, 1948	No. Enrolled	19	Day's Attendance	14
Grade	12th	No. Sack Lunches	0	No. Eating Elsewhere	3

SERVING TYPE "A"	Kraut	Wieners	Corn	Greased potatoes	Marga- Rolls	Milk	Baked Apples	Orange Juice	
LUNCH SERVING IN OZ.									
EXTRA SERVINGS	A	B	C	D	E	F	G	H	
Plates					PLATE WASTE				EX. SERV. COMMENTS
1									
2					2				
3					1/2				
4		2					1 1/2		E,2
5							1		E,3
6							5		
7							1	3	
8	1/4						1		E,1
9									E,4

Most of this class has gone to the Sherman fair.

TABLE 14--Continued

Date	April 27, 1948	No. Enrolled	19	Day's Attendance	7
Grade	10th	No. Sack Lunches	0	No. Eating Elsewhere	0

Part of this class has gone to the Sherman fair

TABLE 14--Continued

Date	April 27, 1948	No. Enrolled	19	Day's Attendance	2
Grade	11th	No. Sack Lunches	0	No. Eating Elsewhere	0

Part of this class has gone to the Sherman fair.

TABLE 14--Continued

Date	April 27, 1948	No. Enrolled	19	Day's Attendance	12
Grade	12th	No. Sack Lunches	0	No. Eating Elsewhere	1

SERVING TYPE "A" LUNCH	MENU							EX. SERV. COMBINS
	Beef balls	Potato salad	Hominy	Raisin pie	Marga- rine	Milk	Grape fruit juice	
SERVING IN OZ.	3	4	2	4	2	2t	8	6
EXTRA SERVINGS	A	B	C	D	E	F	G	H
Plates								
1	2	1	1	1			3	
2		1						E,1
3		1	1					E,2
4			1					
5		1/4	1	3 1/2				
6		1/4	1				3	E,3
7		1/4					6	E,2
8			1/2	1				
9	1	1/4	2	1				E,1
10								E,1
11					1/4			

Part of this class has gone to the Sherman fair

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