

To the Graduate Council:

We are submitting herewith a research problem written by Mrs. Elizabeth Broadbent entitled "The Breakfast Patterns of Children, Grades One Through Six, in the Woodlawn School." We recommend that it be accepted for three quarter hour's credit in partial fulfillment of the requirements for the degree under Plan 1B for the degree of Master of Arts with a major in education and a minor in a distributive content area.

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THE BREAKFAST PATTERNS OF CHILDREN,  
GRADES ONE THROUGH SIX, IN THE WOODLAWN SCHOOL

A research problem submitted to

The Graduate Faculty of Austin Peay State College

in partial fulfillment of the  
requirements for the degree of

MASTER OF ARTS IN EDUCATION

1953

by

Elizabeth Broadbent  
B.S., Austin Peay State College, 1949

AUSTIN PEAY  
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# ACKNOWLEDGEMENT

The writer wishes to express her appreciation for the guidance given by Dr. Loraine Stowe and Miss Willie Stevens in the preparation of this research problem.



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## CHAPTER I

### THE PROBLEM

#### Statement of the Problem

Studies of dietary patterns in different sections of the country have shown that breakfast habits and nutritional status of many children are far from adequate.

The purpose of this study is to determine whether the breakfast patterns of the children in grades one through six in the Woodlawn School, Woodlawn, Tennessee, are adequate patterns as compared with the basic breakfast foods recommended by the Food and Nutrition Board of the Nutritional Research Council of the American Dietetic Association.

#### Limitations of the Study

Since this study is an endeavor to determine the breakfast patterns in the diets of school children, grades one through six, attention has only been given to the number of servings of the different foods eaten and no attempt has been made to determine the essential food elements, calories, or vitamins included in the meals. The study treats a small sampling of children in only one school. The information was obtained by use of a record sheet survey which is subject to considerable error, especially in the hands of children. However, data thus obtained seems indicative of dietary practices.



## REASONS FOR MAKING THE STUDY

## Importance of An Adequate Breakfast

Satisfactory dietary intake is one of the most important phases of healthful living. According to McLester, disorders of every degree of severity accompany malnutrition.<sup>1</sup>

Data from a survey conducted by the Education Section, Department of Public Services, General Mills, Inc., presents an impressive and convincing picture of the need for better nutrition among school children.<sup>2</sup>

Dr. Lydia Roberts says "From many standpoints breakfast is the most important meal of the day. The body has been without food for ten to twelve hours and should be supplied with the nutrients needed for the morning's activities."<sup>3</sup>

According to Dr. Kilander, breakfast breaks the longest fast. Inadequate breakfast may contribute to fatigue and lessen efficiency for the industrial worker, the homemaker and the student. No breakfast at all, or a breakfast consisting of a cup of coffee and a doughnut, makes it difficult

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1. James S. McLester, Nutrition and Diet in Health and Disease, pp. 367-369. Philadelphia: W. B. Saunders Co., 1940.

2. What Children Eat, pp. 1-2. Education Section, Department of Public Services. Minneapolis, Minnesota: General Mills, Inc., 1951.

3. Tested School and Community Breakfast Program Activities, p. 4. Chicago: Cereal Institute, Inc., 1951.



to meet all the nutrition requirements for the day in the remaining meals.<sup>4</sup>

Although breakfasts are eaten at home the effects of missed breakfasts may show up in the classroom in the form of tiredness, headache, and poor concentration during the morning hours.

Dr. E. V. McCollum, of The Johns Hopkins University, says:

To a very large degree, the well-being of people generally depends on the quality and quantity of food they eat. In the case of children growth must be taken into consideration. An adequate diet is of first importance to every child. Food habits are formed early in life. Failure to eat an adequate meal after a twelve hour lapse from the previous evening's dinner, results in undue fatigue and increased accident rates both at home and elsewhere.<sup>5</sup>

Surveys made by nutrition leaders show that authorities consider breakfast highly important as indicated by a study made at Purdue University.

In 1946 under the direction of the Department of Foods and Nutrition, Purdue University, a breakfast questionnaire was sent to persons of national reputation in the field of medicine, nutrition, dietetics, public health, and home economics. They were asked: "What, if any, might be the harmful effects of the 'no breakfast' or 'light breakfast' habit?"

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4. Holger Frederick Kilander, Nutrition for Health, pp. 173-175. New York: McGraw-Hill Book Co., 1951.

5. A Basic Breakfast Pattern, p. 3. Chicago: Cereal Institute, Inc., 1951.

The reply showed that the "no breakfast" or "light breakfast" habit was considered by fifty-nine per cent to result in inadequate total nutritive intake; seventy-four per cent, to contribute to fatigue; nineteen per cent, to lowered resistance to disease; twenty-two per cent, to irritability; twelve per cent, to headaches; eight per cent, to hypoglycemia (low blood sugar level) and hunger; and twenty per cent said it burdened other meals. They all agreed that everyone should have a good breakfast. Their remarks on the harmful effects of the "no breakfast" or "light breakfast" habit were:

1. The total day's diet might well be deficient in some or all of the essential nutrients.
2. It would result in lessened efficiency, especially during the morning hours; in fatigue; in irritability; and over-eating at other meals.
3. One needs breakfast to replenish the body's fuel and nutrient reserves after twelve to fourteen hours fasting.<sup>6</sup>

According to Rosenau:

The school age is the period of physical and mental growth and development. A generous diet, consisting of such staple articles of food as milk, cereals, eggs, fresh fruits, vegetables, bread, butter, and meat, varied by judicious selection, meets the needs of the growing child.

Many children come to school hungry--in fact without any breakfast. Often this meal consists of carbohydrates only.

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6. Ibid., pp. 3-4.



The common causes of malnutrition in children are not enough calories per day; unbalanced diets; bad dietetic habits; the omission of cereals and milk from the diet; and other bad habits.<sup>7</sup>

The study of the dietary practices of the women of Purdue University in June, 1947, caused research workers to wonder whether the poor dietary practices of the students were acquired after they came to college or if the foundations for them were laid in earlier years.

In trying to find the answer, a seven-day dietary survey was made using about 1,300 school children, most of whom were from nine to fourteen years of age.

The standards employed in the Purdue University study were used to evaluate the breakfast habits of the children. They consisted of basic breakfast patterns including four food groups: Fruit or fruit juice, cereal with milk, an egg, milk or cocoa, whole grain enriched bread with butter or fortified margarine.

This survey revealed that poor breakfast habits and unsatisfactory food practices in general are developed at an early age.<sup>8</sup>

Lela E. Boaher says, by providing the body with approximately one-fourth to one-eighth of all the necessary

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7. Milton J. Rosenau, Preventive Medicine and Hygiene, pp. 1351-1352. New York: D. Appleton-Century Co., 1935.

8. Patricia Joyce Jackson, "About Poor Breakfast Habits," Journal of Home Economics, 40 (June, 1948), 317.



nutrients at breakfast one is taking a highly practical and sensible step in the direction of spacing meal-times to the best advantage.<sup>9</sup>

From June, 1945, to June, 1950, the Education Section of General Mills, Inc. classified the diets of 59,727 pupils and found forty per cent to be poor, twenty-seven per cent to be fair, and only thirty-three per cent were considered good.

Breakfasts were considered to be unnecessarily poor. More children were found to have good total diets than good breakfasts. Only twelve per cent of 37,511 children in thirty-eight states had good breakfasts. Forty per cent had no eggs, fifty-seven per cent no butter, and thirty per cent had no fruit. Only fourteen per cent had adequate servings of eggs, sixteen per cent adequate butter, thirty per cent adequate fruit, forty-six per cent adequate cereal, fifty-six per cent adequate milk, and sixty per cent adequate bread.<sup>10</sup>

### Standard Breakfast Patterns

Nutritionists agree generally that to be adequate a breakfast must provide about one-third to one-fourth of the total food needs for the day, including calories, minerals, proteins, and vitamins.

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9. Progress Through Research, Research Bulletin, Vol. IV, No. III. Minneapolis: General Mills, Inc., 1950. p. 3.

10. What Do Children Eat, p. 6. Minneapolis: General Mills, Inc., 1951.

The tastes and needs of people will of course vary. The average breakfast menu, however, might well contain the following foods chosen from the Basic Seven Food Groups recommended by the Food and Nutrition Board of the National Research Council of the American Dietetic Association:

1. Fruit: Citrus or other fresh fruit in season, dried or canned fruit or tomato juice. (Group two or three)
2. Whole Grain, Restored, or Enriched Cereal: Ready to eat or hot cereal with milk--sugar if desired. (Group six and four)
3. Egg: With or without bacon. (Group five)
4. Bread made with Enriched or Whole Grain Flour: Toast, bread, rolls, muffins, biscuits, waffles, griddle-cakes, or French toast. (Group six)
5. Butter or Fortified Margarine. (Group seven)
6. Sweet spreads: Marmalade, jelly, jam, syrup, or preserves.
7. Milk for Children. (Group four)<sup>11</sup>

A nation-wide research study made by the Foods and Nutrition Department of Purdue University in 1946 established for the first time an authoritative basic breakfast pattern.

A basic breakfast:

1. Provides one-fourth to one-third of the day's total food requirements and makes contribution of most essential nutrients.
2. Includes the basic foods--fruit, breakfast cereal, milk, egg, bread and butter. These foods form a nutritional basis for an adequate breakfast.

Such a breakfast is termed "basic" because it contains the foods which should be included in every morning meal. It is a basis on which a breakfast of any desired size may easily be developed.

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11. The Teacher's Guidebook, pp. 31-32. Minneapolis: General Mills, Inc., 1946.



The recommended breakfast for the school child seven to nine years of age, supplying a close approach to the ideal one-third of the daily requirement, would consist of the following pattern:

Orange juice, four ounces  
 Cereal, one ounce  
 Whole milk, four ounces (with cereal)  
 Sugar, one teaspoon  
 Toast (enriched white), two slices  
 Butter, five grams  
 Whole milk, eight ounces

Total calories needed, 2,000. One-third supplied by breakfast, 667.

For the school child ten to twelve years of age:

Orange juice, four ounces  
 Cereal, one ounce  
 Whole milk, four ounces (with cereal)  
 Sugar, one teaspoon  
 One egg  
 Toast, (enriched white), two slices  
 Jelly, one tablespoon  
 Whole milk, eight ounces

Total calories needed, 2,500. One-third supplied by breakfast, 833.

For the school child thirteen to fifteen years of age:

Orange juice, four ounces  
 Cereal, two ounces  
 Whole milk, eight ounces (with cereal)  
 Sugar, two teaspoons  
 One egg  
 Toast (enriched white), two slices  
 Butter, five grams  
 Whole milk, eight ounces

Total calories needed, 2,600. One-third supplied by breakfast, 867.

This basic breakfast pattern has gained wide acceptance for these four reasons:

1. The pattern's nutritional contribution is excellent, qualitatively as well as quantitatively; it provides all the nutrients necessary for growth and development.



2. This basic breakfast pattern allows wide menu variability.
3. It requires a minimum of time for preparation.
4. It is economical to serve.<sup>12</sup>

Thus it seems that the foods recommended as basic for a good breakfast are nutritionally excellent, provide great variety of choice, are easily prepared and economical to serve.

#### Indications of Inadequate Breakfasts Among Children in the Woodlawn School

The writer's personal observations led to the assumption that many of the children in Woodlawn School were not eating adequate breakfasts. This assumption was substantiated by the opinions expressed by the other teachers of the school, who were more directly connected with some of the students than was the writer.

Some of the outstanding observations indicate that many of the children were restless, and showed signs of hunger before lunch time. Often they inquired how long it would be before they would have lunch.

Before and at the time of the survey a large number of the children were underweight when their weights were compared with height-weight tables recommended as being ideal by the Statistical Bureau of the Metropolitan Life Insurance Company.

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12. A Basic Breakfast Pattern, pp. 8-14. Chicago: Cereal Institute, Inc., 1951.

Other observations leading to the previous assumption were general undernourished appearance, listlessness, and poor condition of hair, skin, and teeth.

The children of the ... of the ... School, ... three days were ... by each child

... include all the ... three-day period

... nutrition experts ... three-day period

... a picture of ... seven-day

... according to

... sheets

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... p. 2. ...

## CHAPTER III

### METHOD OF ATTACKING THE PROBLEM

#### Method of Collecting Data

In order to study the breakfast patterns of the children in grades one through six in the Woodlawn School, Woodlawn, Tennessee, breakfast records for three days were secured by means of the record sheet filled out by each child under the supervision of the teacher.

The record sheets were prepared to include all the foods eaten at each breakfast during a three-day period beginning May 3, 1953.

A three-day period was used because nutrition experts have found that food records kept for a three-day period beginning on Sunday give practically as accurate a picture of children's eating habits as records kept for a seven-day period.<sup>13</sup>

The record sheets classified the children according to age, sex, farm and non-farm children.

There were one hundred and fifty-three record sheets distributed among the children. All of the record sheets were returned with adequate information for use.

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13. Direction Concerning Use of Food Records, p. 2. Department of Public Services. Minneapolis: General Mills, Inc., 1947.



## Treatment of Data

The record sheets were analyzed with regard to frequency of occurrence of the basic breakfast foods recommended by the Food and Nutrition Board of the National Research Council of the American Dietetic Association. The basic breakfast foods are: fruit or fruit juice, cereal, milk, eggs, bread and butter.

One hundred and fifty-three children were used in the survey, including sixty-five girls and eighty-eight boys, eighty-nine whose parents were not farmers, and sixty-four whose parents were farmers.

Data obtained from the record sheets was recorded on tabulation sheets as individual children, and according to sex, farm and non-farm children and according to the basic breakfast foods.

From the tabulation sheets tables were constructed showing number and percentages of all children--boys, girls, children whose parents were farmers and children whose parents were non-farmers--having adequate and inadequate servings of the basic foods.

## PRESENTATION AND ANALYSIS OF DATA

## Quantities of Basic Breakfast Foods Consumed

The data presented in tables 1, 2, 3, 4, 5, and 6 shows the number and percentages of all children, girls, boys, farm and non-farm children, having different quantities of the basic breakfast foods--fruit or fruit juices, cereal, milk, eggs, bread, and butter--during the three-day period.

Only five of the 153 children had adequate servings of fruit or fruit juices; thirty-two had adequate servings of cereal; forty-five had adequate servings of milk; forty-two had adequate servings of eggs; eighty-nine had adequate servings of bread; and forty-seven had adequate servings of butter.

More than twenty-five per cent of the children had no servings of fruit or fruit juices, cereal, milk, eggs and butter, and slightly more than twelve per cent had no bread.

There was very little difference in the number of boys and girls having adequate servings of fruit or fruit juices, cereal and milk; however, more girls had adequate servings of eggs, bread and butter.

In general more farm children had adequate servings of the basic breakfast foods than did the non-farm children.



TABLE 1

NUMBER AND PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF FRUIT OR FRUIT JUICES DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				Total Children
	3 Servings	2 Servings	1 Serving	0 Serving	
All Children	5	18	32	98	153
Per Cent	3.27	11.77	20.91	64.05	
Girls	2	5	19	39	65
Per Cent	3.08	7.69	29.23	60	
Boys	3	13	13	59	88
Per Cent	3.41	14.77	14.77	67.05	
Farm	1	11	10	42	64
Per Cent	1.56	17.19	15.62	65.63	
Non-Farm	4	7	22	56	89
Per Cent	4.49	7.87	24.72	62.92	

TABLE 2

NUMBER AND PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF CEREAL DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				
	3 Servings	2 Servings	1 Serving	0 Serving	Total Children
All Children	32	33	30	58	153
Per Cent	20.91	21.57	19.61	37.91	
Girls	13	14	14	24	65
Per Cent	20	21.54	21.54	36.92	
Boys	19	19	16	34	88
Per Cent	21.59	21.59	18.18	38.64	
Farm	15	11	12	26	64
Per Cent	23.44	17.19	18.75	40.62	
Non-Farm	17	22	18	32	89
Per Cent	19.10	24.72	20.24	35.94	



TABLE 4

PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF EGGS DURING THREE DAYS

TABLE 3

NUMBER AND PERCENTAGES OF CHILDREN DRINKING DIFFERENT  
QUANTITIES OF MILK DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				Total Children
	3 Servings	2 Servings	1 Serving	0 Serving	
All Children	55	21	29	48	153
Per Cent	35.95	13.73	18.95	31.37	
Girls	25	9	12	19	65
Per Cent	38.46	13.85	18.46	29.23	
Boys	30	12	17	29	88
Per Cent	34.09	13.64	19.32	32.95	
Farm	33	8	8	15	64
Per Cent	51.56	12.50	12.50	23.44	
Non-Farm	22	13	21	33	89
Per Cent	24.72	14.61	23.59	37.08	

TABLE 4

NUMBER AND PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF EGGS DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				
	3 Servings	2 Servings	1 Serving	0 Serving	Total Children
All Children	42	35	32	44	153
Per Cent	27.45	22.87	20.91	28.77	
Girls	21	15	12	17	65
Per Cent	32.31	23.08	18.46	26.15	
Boys	21	20	20	27	88
Per Cent	23.86	22.73	22.73	30.68	
Farm	20	16	11	17	64
Per Cent	31.25	25	17.19	26.56	
Non-Farm	22	19	21	27	89
Per Cent	24.72	21.35	23.59	30.34	



TABLE 5

NUMBER AND PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF BREAD DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				Total Children
	3 Servings	2 Servings	1 Serving	0 Serving	
All Children	89	32	13	19	153
Per Cent	58.17	20.91	8.50	12.42	
Girls	46	9	4	6	65
Per Cent	70.77	13.85	6.15	9.23	
Boys	43	23	9	13	88
Per Cent	48.86	26.14	10.23	14.77	
Farm	41	11	4	8	64
Per Cent	64.06	17.19	6.25	12.50	
Non-Farm	48	21	9	11	89
Per Cent	53.93	23.60	10.11	12.36	

TABLE 6

NUMBER AND PERCENTAGES OF CHILDREN EATING DIFFERENT  
QUANTITIES OF BUTTER DURING THREE DAYS

Groups of Children	Number and Percentage of Each Group				Total
	3 Servings	2 Servings	1 Serving	0 Serving	
All Children	47	36	24	46	153
Per Cent	30.72	23.53	15.69	30.06	
Girls	23	15	10	17	65
Per Cent	35.38	23.08	15.39	26.15	
Boys	24	21	14	29	88
Per Cent	27.27	23.86	15.91	32.96	
Farm	25	15	8	16	64
Per Cent	39.06	23.44	12.50	25	
Non-Farm	22	21	16	30	89
Per Cent	24.72	23.59	17.98	33.71	



## Children Having Inadequate Servings of Basic Breakfast Foods

Table 7 shows the number and percentages of children having inadequate servings of the basic breakfast foods during the three-day period.

The findings in Table 7 indicate high percentages of inadequacies among all children. Fruit was the most frequently omitted breakfast food. However, cereal, eggs, and butter were frequently omitted.

There was no significant difference in numbers of boys and girls having inadequate servings of the basic breakfast foods with the exception of milk. More boys had inadequate servings of milk than did the girls. In general more of the non-farm children had inadequate servings of all the basic breakfast foods than did farm children.

	44	67	44	67
	57.69	75.14	68.75	75.28
25	12	45	23	41
	19.83	51.14	35.95	46.07
	42	64	39	67
	64.61	72.73	60.94	76.40

TABLE 7  
 NUMBER AND PERCENTAGES OF CHILDREN  
 HAVING INADEQUATE SERVINGS OF THE BASIC BREAKFAST FOODS  
 DURING THREE DAYS

Foods	Number and Percentages Having Inadequate Servings				
	All Children	Girls	Boys	Farm Children	Non-Farm Children
Fruit	148 96.73	63 96.92	85 96.59	63 98.44	85 95.51
Cereal	121 79.08	52 80	69 78.41	49 76.56	72 80.89
Milk	98 64.07	40 61.54	58 65.91	31 48.44	67 75.28
Eggs	111 72.55	44 67.69	67 76.14	44 68.75	67 75.28
Bread	64 41.83	19 29.23	45 51.14	23 35.95	41 46.07
Butter	106 69.28	42 64.61	64 72.73	39 60.94	67 76.40



# Children Having Good, Fair, and Poor Breakfast Patterns

Table 8 shows the number and percentages of children having good, fair and poor breakfast patterns.

Only three, or 1.96 per cent, of the 153 children ate good breakfasts; sixty-six, or 43.14 per cent, ate fair breakfasts; and eighty-four, or 59.90 per cent, ate poor breakfasts.

Two girls and one boy ate good breakfasts; however, considerably more girls ate fair breakfasts than did boys, and more boys had poor breakfasts than did girls.

Two farm children and one non-farm child had good breakfasts. More farm children had fair breakfasts and more non-farm children had poor breakfasts.

Total scores for 3-day period---15-18  
9-14 servings = Fair; 5 servings

TABLE 8

NUMBER AND PERCENTAGES OF CHILDREN HAVING GOOD, FAIR, AND POOR BREAKFAST PATTERNS\*

Groups of Children	Breakfast Pattern, Number, and Percentage		
	Good	Fair	Poor
All Children	3	66	84
Per Cent	1.96	43.14	54.90
Girls	2	33	30
Per Cent	3.08	50.77	46.15
Boys	1	33	54
Per Cent	1.13	37.50	61.37
Farm	2	34	28
Per Cent	3.13	53.12	43.75
Non-Farm	1	32	56
Per Cent	1.12	35.96	62.92

\*How Classified: Total scores for 3-day period---15-18 servings = Good; 9-14 servings = Fair; 8 servings and below = Poor



## Other Foods Eaten by Children

Some of the children listed meats and energy foods such as jams, jellies, syrups, and gravy as part of their breakfast diets. No tabulation was made of the frequency of such foods because the National Research Council of the American Dietetic Association says that the energy foods listed above may be eaten in addition to the basic foods, but not in place of them.

## Children Eating No Breakfast

Although a majority of the breakfast patterns were inadequate, only eight children--seven boys and one girl--ate no breakfast during the three-day period. Six of those going to school without breakfast were non-farm children.

Conclusions

Although the study indicates that many of the school children are not getting an adequate breakfast diet, the most common being inadequate servings of fruit or cereal, eggs and butter. Over fifty per cent of the children were not getting adequate amounts of milk. Forty per cent had inadequate servings of fruit. The non-farm children have had less frequent servings of the basic foods than the farm children and the non-farm children less frequent servings of the energy foods than the farm children.

## CHAPTER V

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Summary

An analysis of the data recorded in the tables in Chapter IV indicates inadequacies in the breakfast patterns of the children, grades one through six, in the Woodlawn School, Woodlawn, Tennessee.

The foods found to be most frequently inadequate were fruits or fruit juices, cereal, eggs and butter.

Adequate servings were slightly more frequent among girls than boys and more frequent among farm than non-farm children.

#### Conclusions

In general, the study indicates that many of the school children were not getting an adequate breakfast diet, the most frequent cause being inadequate servings of fruit or fruit juices, cereal, eggs and butter. Over fifty per cent of the children were not getting adequate amounts of milk and approximately forty per cent had inadequate servings of bread.

Boys seem to have had less frequent servings of the basic foods than girls and the non-farm children less frequent servings than the farm children.



Three children had good breakfasts during the three-day period, sixty-six had fair breakfasts, and eighty-four had poor breakfasts.

According to the recommendations of the Food and Nutrition Board of the National Research Council of the American Dietetic Association, the breakfast patterns of the children, grades one through six, of the Woodlawn School, are inadequate.

#### Recommendations

It is believed that the breakfast patterns of the children of the Woodlawn School may be improved by the following procedures:

1. Classroom nutrition teaching directed toward better breakfasts.
2. In-service education for teachers in a well organized nutrition program.
3. Organization of a community-wide nutritional council.
4. Active participation of all teachers in a program of nutrition education in the school.
5. A good breakfast program sponsored by the Parent-Teacher Association.

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# APPENDIX A

Teachers Helping in Survey: \_\_\_\_\_ Boy \_\_\_\_\_ Girl (Circle one)

Miss Betty Jo Davenport, 507 Main St., Clarksville

Mrs. A. A. Dinwiddie, Route 5, Clarksville

Mrs. Nell Harris, Route 5, Clarksville

Mrs. Aaron Minniehan, Route 1, Woodlawn

\_\_\_\_\_ get home after school?

\_\_\_\_\_ usually go to bed at night?

\_\_\_\_\_ usually get up in the morning?

\_\_\_\_\_ location of your parents?

THIS IS A TABLE FOR BREAKFAST AND THE AMOUNTS

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

## APPENDIX B

1. Name \_\_\_\_\_
2. Boy Girl (Circle one)
3. Grade \_\_\_\_\_
3. Height \_\_\_\_\_
4. Weight \_\_\_\_\_ pounds
5. Age: \_\_\_\_\_ years
6. Birth date \_\_\_\_\_
7. Date of Sunday the record was started \_\_\_\_\_
8. Name of School \_\_\_\_\_
9. What time do you leave home in the morning? \_\_\_\_\_
10. What time do you get home after school? \_\_\_\_\_
11. What time do you usually go to bed at night? \_\_\_\_\_
12. What time do you usually get up in the morning? \_\_\_\_\_
13. What is the occupation of your parents? \_\_\_\_\_

THESE ARE THE FOODS I ATE FOR BREAKFAST AND THE AMOUNTS

### SUNDAY

- |          |          |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

### MONDAY

- |          |          |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

### TUESDAY

- |          |          |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |



BREAKFAST SURVEY SHEET FOR CHECKING FOODS

PUPILS ATE FOR BREAKFAST

School \_\_\_\_\_ Grade \_\_\_\_\_ Teacher \_\_\_\_\_

Directions: Place an "X" in the box under each food listed on the Pupil's Three-Day Food Record for the days indicated by "S," "M," "T." Count the "X's" for each food and for each day. Place the numbers in proper "Total" columns.

Pupil's Number	Days	Milk	Eggs	Fruit	Cereal	Bread	Butter	Total Score
1.	S							
	M							
	T							
1.Total								
2.	S							
	M							
	T							
2.Total								
3.	S							
	M							
	T							
3.Total								
4.	S							
	M							
	T							
4.Total								
5.	S							
	M							
	T							
5.Total								
6.	S							
	M							
	T							
6.Total								
7.	S							
	M							
	T							
7.Total								
8.	S							
	M							
	T							
8.Total								
9.	S							
	M							
	T							
9.Total								
10.	S							
	M							
	T							
10.Total								
11.	S							
	M							
	T							
11.Total								

Pupil's Number	Days	Milk	Eggs	Fruit	Cereal	Bread	Butter	Total Score
12.	S							
	M							
	T							
12.Total								
13.	S							
	M							
	T							
13.Total								
14.	S							
	M							
	T							
14.Total								
15.	S							
	M							
	T							
15.Total								
16.	S							
	M							
	T							
16.Total								
17.	S							
	M							
	T							
17.Total								
18.	S							
	M							
	T							
18.Total								
19.	S							
	M							
	T							
19.Total								
20.	S							
	M							
	T							
20.Total								
21.	S							
	M							
	T							
21.Total								
22.	S							
	M							
	T							
22.Total								

## APPENDIX D

## SUMMARY SHEET FOR RECORDING RESULTS FROM BREAKFAST SURVEY

School \_\_\_\_\_ Grade \_\_\_\_\_ Teacher \_\_\_\_\_

Directions: 1. Copy total scores for each pupil from the Breakfast Survey Sheet

Pupil's Number	Milk	Eggs	Fruit	Cereal	Bread	Butter	Total Scores
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							
32							
33							
34							
35							
36							
37							
38							

Number of Pupils \_\_\_\_\_

Table 1. Classification of Breakfasts

	Good	Fair	Poor
Number			
Per Cent			

Table 2. Pupils Reporting Daily Occurrence of Various Foods

	Number	Per Cent
Milk		
Eggs		
Fruit		
Cereal		
Bread		
Butter		

Table 3. Pupils Reporting No Servings of Various Foods

	Number	Per Cent
Milk		
Eggs		
Fruit		
Cereal		
Bread		
Butter		

To classify breakfasts: Total scores for three days of 15-18 are considered good; 9-14 fair; 8 and below, poor. Enter number under each classification in Table 1. (For any one day, scores of 5 or 6 are good; 3 or 4, fair; and 2 or less, poor.)

Count the number of pupils with a score of "3" under each food. Enter this number for each food in the proper box in Table 2.

Count the number of pupils with a score of "0" under each food. Enter this number for each food in the proper box in Table 3.