

## DIETS OF LOW-INCOME FAMILIES IN NEW YORK CITY<sup>1</sup>

by DOROTHY G. WIEHL

THE importance of adequate food for families suffering severe economic strain in ameliorating the potential effects of poverty on health is well recognized, and charitable and relief agencies have concentrated on aiding families to maintain minimum food standards during the present emergency which has so seriously reduced standards of living. Nutritionists have been called upon to recommend minimum cost diets which would provide marginal food requirements and an effort has been made to teach the relief families how to buy and what to buy in order to make the very limited relief funds provide a diet yielding the necessary calories, vitamins, and mineral elements. Many families not on relief have an equal necessity to economize on food, even though they reduce their standard of living in other respects and spend a larger and larger proportion of their funds on food. They have not had the same advice on planning their food budgets that is given to relief families and of course do not have the restrictions on choice of food which has frequently been imposed on the relief families. Any consideration of the health of the population seriously affected by the current depression should include a study of the evidence of serious under-nutrition or food deficiency.

This report on the dietary of groups of low-income non-relief families and relief families in a poor district of New York City is one of a series giving the results of the study of the health of wage-earning families made by the United States Public Health Service and the Milbank Memorial Fund. It presents a preliminary analysis of the food con-

<sup>1</sup>From the Division of Research, Milbank Memorial Fund.

sumption of 277 families during one week. These families are about one-fourth of the total families included in the sickness survey in New York City.

During April, 1933, enumerators visited about 1,200 families to obtain sickness and income data. The families were selected at random from an East Side area in the Bellevue district of Manhattan which the 1930 Census had shown to be an area of low rents. It is a white district with few Jewish families. In about two-thirds of the families, the head was foreign born; in 20 per cent, the head was native born of foreign or mixed parentage; and in 12 per cent, native born of native parentage. About one-half of the foreign born were Italians and a similar proportion of the native born of foreign-born parents were of Italian parentage. No other nationality was represented to any predominant extent.

After the families in the sickness survey were classified according to income in 1932, an approximately equal number of families were drawn at random from each broad income class for which diet records were to be obtained. The collection of diet records began the last of April and was not completed until late in June. The investigator went over with the housewife a list of all the basic foods and lists of vegetables and fruits and entered the amount consumed by the family in the week preceding the date of visit. With careful questioning as to whether the family did or did not have a particular food in the preceding week and, if so, how much, it is believed that a reasonably accurate record is obtained of the family food supply for the week. Questions were asked also as to which members of the household drank milk and ate oranges, the number of meals eaten away from home by any of the family, and whether this week was typical of the family's diet.

A record of the foods consumed by a family during one week obviously cannot give a complete cross-section of that

family's diet. It does give some indication of the amount of food being consumed and of the family's dietary habits with respect to the major food groups, such as their consumption of cereal foods, sweets, fats, vegetables and fruits, and meats. In the case of milk, the supply probably varies only slightly, but the kinds of vegetables and fruits eaten may be very different from week to week, especially with changing seasons. The average consumption of various foods for groups of families of similar economic status probably represents the typical dietary of the majority of the families in the group more closely than an individual family's food consumption for a single week typifies its average diet.

#### ECONOMIC CLASSIFICATION

On the basis of the family income for the week for which the diet schedule was taken, the families have been grouped into six economic classes, two classes of families on relief and four of those not on relief.

For the families not receiving relief, the income per capita for the week was computed using that week's wages. When families earned rent by doing janitor service, the value of the rent was prorated for a week and added to the income. While the earnings, in some instances, may vary considerably from week to week, most wage-earners apparently were earning about the same amount each week though many were employed only part time. Furthermore, in low-income families, the immediate or present earnings probably influence the food supply more than an average income over a longer period of time. When no one was working, the family was classified on the basis of the funds borrowed or used from savings; such families mostly fall in the lowest economic group. The classification used is: (1) families with less than \$3.00 per capita per week, or the nearly destitute and "very poor;" (2) those

with \$3.00 to \$3.99 per week, or "poor;" (3) those with \$4.00 to \$5.99 per week, or "moderately poor;" (4) those with \$6.00 or more per capita per week, or "relatively comfortable."

The two groups of families on relief are those receiving "home relief" or food orders and those on work relief. All families receiving food orders regularly were put in the home-relief group, even though they earned some money at odd jobs, or someone was working regularly but, because of the size of the family, it was evidently dependent on this aid. But families who received an occasional Red Cross food box or Salvation Army box were not classed as "home-relief" families if they had a steady source of income. A very few families dependent on aid from charitable organizations other than the City Home Relief Bureau were put in the "home-relief" group. All of these families received regularly aid to an amount calculated to provide specifically for the food needs of the family, and may from time to time have had additional aid in the form of rent, gas or electricity payments, and clothes. Most of the families on work relief received \$45.00 per month, and correspond to the lowest income group of families not on relief.

#### METHOD OF ESTIMATING THE FOOD REQUIREMENTS

The amount of food needed by a family or by any group of individuals varies according to the age and sex composition of the group. The usual method of measuring the needs of different persons is to express the food requirements of each person in terms of or as a fractional part of the food required by an adult male. The scale of relative allowances of calories for persons of each sex and different ages used by the United States Bureau of Home Economics has been followed in this study.<sup>2</sup> The calories needed by an adult man at moderate

<sup>2</sup>The scale for relative allowances of calories for individuals by sex, age and

muscular work are taken as a standard and equal 100 and the relative need of persons of each other age and sex is given as a percentage of this standard. By summing the percentages required by each member of the family, the number of equivalent adult males is obtained. This number multiplied by the calories in the standard for an adult male (3,000 per day) gives the total calories needed by a family; or, the total calories in a given food supply divided by the number of equivalent adult males indicates the average caloric value per adult male. The same relative allowances are used for protein and vitamin requirements but the relative allowances for mineral elements in the diet, such as calcium, phosphorus, and iron are different.

In the calculation of equivalent adult male units in the families in this study, 100 was used for all men from 18 to 59 years of age and 90 for all women, since the amount of muscular activity was unknown. For men who were unemployed throughout the week, this allowance is a little high but it did not seem practicable to attempt to make an adjustment as percentages of the standard for an adult man at moderate muscular work furnished by the Bureau of Home Economics is as follows:

AGE AND ACTIVITY	RELATIVE ALLOWANCE—PER CENT	
	Men	Women
Under 2 years	30	30
2-3	40	40
4-5	50	50
6-7	60	60
8	70	70
9-10	80	70
11-12	90	80
13	90	90
14	100	90
15	100	80
16-17	110-130	80
18-59—sedentary	80	70
18-59—light	90	80
18-59—moderate	100	90
60 and over—moderate	90	80
60 and over—sedentary	80	70

ment for the amount of activity. If we assumed that the relative allowance for the unemployed male was 80 (allowance for sedentary males and probably low even for unemployed persons) instead of 100, this would reduce the requirement for most families less than 5 per cent since the average adult male units per family was 438. In the case of men and women 60 years of age or over the relative allowance used was 90 and 80 respectively for those employed and 80 and 70 respectively for those at home. Also for boys 16 or 17 years of age a difference was made on the basis of whether the boy was employed or not; boys at work were given an allowance of 120 and those in school or at home 110.

An adjustment in the estimate of the weekly food supply needed by a family was made for meals taken outside the home by deducting a proportionate amount from the equivalent adult male unit or percentage on the basis of the number of meals. Thus, if a man bought his lunch five days a week but ate the remaining meals during the week at home, his equivalent adult male unit was reduced to 16 twenty-firsts of 100 or 76. Similar proportionate reductions were made for children furnished lunch by the school and for adults receiving meals in connection with their occupation.

#### AVERAGE CALORIES IN DIETS OF DIFFERENT INCOME GROUPS

There is general agreement that a daily food supply furnishing at least 3,000 calories or heat units is needed by the average man employed at moderate work for eight hours a day and surveys of the actual diets of various groups indicate that a diet yielding something more than 3,000 calories is normal under favorable conditions.<sup>3</sup> The average calories

<sup>3</sup>The study of the food consumption for one year of 100 families of employees of the Ford Motor Company in 1929 showed that their diet yielded an average of 3,236 calories per day per equivalent male unit. These families had been

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INCOME GROUP	NUMBER OF FAMILIES	NUMBER OF EQUIVALENT MALE UNITS	CALORIES PER DAY PER MALE UNIT
Home-relief families	56	246.4	2,665
Work-relief families	27	131.3	2,361
Income per capita per week:			
Under \$3.00	38	200.7	2,327
\$3.00 to \$3.99	35	172.9	2,359
\$4.00 to \$5.99	64	266.1	2,897
\$6.00 or more	57	194.7	3,356

Table 1. Average calories per day per equivalent male unit in a week's food supply of families of different economic status in a low-income district in New York City.

per day per male unit in the diets of the families in the six different income groups are shown in Table 1.

The calories in the food supply have been calculated by applying average calorific values to pounds of foods of the various general types shown in Table 2. The amount of each food consumed was reported in pounds only when that is the usual unit of purchase. For foods reported according to various other units, the amounts were converted into pounds and the accuracy of the weight must vary considerably for individual families. In the case of canned and packaged foods, the price, which was usually given, indicated the size, and the net weight could be computed with a high degree of accuracy. But in the case of fresh vegetables and fruits reported in such units as a bunch of carrots, a head of cabbage, a dozen oranges, et cetera, average weights had to be applied. Usually the price paid was stated and with the aid of price lists from several neighborhood stores, it is believed that fairly accurate estimates were possible in most instances.

selected so that their annual incomes were similar and the average for the group was \$1,711. See: Standard of Living of Employees of Ford Motor Company in Detroit. *Monthly Labor Review* (June, 1930) of the Bureau of Labor Statistics, United States Department of Labor.

Furthermore, inaccuracies for individual families should tend to balance and reduce the error in the average values.

Only families with an income of \$6.00 or more per person per week reported a food supply fully adequate for standard energy requirements. The average of 3,356 calories per male unit for this income group is very close to the higher energy value recommended by several authorities. It is also very near to the average of 3,236 calories reported for the employees of the Ford Company in Detroit, a group for which the average per capita income per week was \$7.30. The families with \$4.00 to \$6.00 per person per week reported a food supply slightly below standard for energy value (2,897 calories per male unit) but this should prevent under-nutrition if foods are well chosen to give a balanced diet.

The average fuel value of the food supply for families having less than \$4.00 per person per week was approximately 20 per cent below the minimum standard. Families on work relief reported a diet yielding the same number of calories per male unit as other low-income families. This is consistent with their income inasmuch as practically all of these families had less than \$4.00 per person per week.

Home-relief families reported a more adequate amount of food than either the work-relief families or the families with less than \$4.00 per person per week, although the calories per male unit averaged about 10 per cent less than the standard of 3,000 calories. The monetary value of food tickets issued to home-relief families is determined by nutrition experts to provide adequate cheap food to prevent serious under-nutrition if a proper choice of foods is made. The fuel value of the diet reported by these home-relief families is marginal and while it should maintain most persons without loss of weight, it would not build up the body or overcome past effects of a deficient food supply.



KINDS OF FOODS PURCHASED BY FAMILIES  
OF DIFFERENT INCOMES

A balanced diet must contain some of each of the five general groups of foods; namely, (1) milk, meat, and other protein foods, (2) fats, (3) cereals, (4) sugars, and (5) vegetables and fruits. Many studies have determined the approximate amount of each group needed to provide all the substances needed to make a diet wholesome unless some special condition exists, such as an extremely restricted choice in one or more groups; or the complete lack of certain foods essential to provide some protective element such as a specific vitamin. Therefore, it is possible to evaluate the quality as well as the quantity of the food supply of the families in these different income groups by comparing their consumption of the various kinds of foods with a standard dietary. There is, however, no one standard for a balanced diet but many, since most substances required by the human body are found in a wide variety of foods and many substitutes are possible. For example, it is estimated that the average adult requires about one gram of protein per day per kilogram of body weight,<sup>4</sup> but this may be derived chiefly from meats or flesh foods, or from other foods, such as cheese, beans, peas, and nuts, which contain efficient proteins. Therefore, when the diet of a group is compared with a standard, allowance must be made for the substitution of foods and such substitutions must be evaluated for their efficiency in providing specific elements.

In Table 2, the average consumption of each general group of foods and of several classes of foods within the groups is given and compared with recommended amounts. Two stand-

<sup>4</sup>Sherman, Henry C.: *Chemistry of Food and Nutrition*. New York, The Macmillan Company, 1932, p. 511.

ards are shown, one for adequate diets at low cost<sup>5</sup> and the other for a balanced diet at moderate cost.<sup>6</sup>

Table 2. Average weekly consumption of various foods per adult male reported by families on relief and by non-relief low-income families in New York City, 1933.

TYPE OF FOOD	POUNDS PER WEEK PER MALE UNIT FOR SPECIFIED ECONOMIC GROUP							
	Standard Low Income <sup>1</sup>	Home Relief	Work Relief	Weekly Income per Capita				Standard Moderate Income <sup>2</sup>
				Less than \$3.00	\$3.00-\$3.99	\$4.00-\$5.99	\$6.00 or more	
<i>Protein Foods</i>								
Milk—qts.	4.5 - 5.2	3.83	3.48	3.62	4.31	4.94	4.68	3.5 - 5.0
Total meat, fish, eggs, cheese	1.5 - 2.0	1.87	2.49	2.13	2.53	3.35	4.39	3.5 - 4.5
Meat (exc. pork)		.63	1.27	.73	1.02	1.51	1.86	
Pork (exc. sausage and bacon)		.15	.29	.14	.25	.31	.49	
Fowl	1.0 - 1.5	.02	.10	.22	.23	.37	.67	3.0 - 4.0
Fish		.29	.25	.34	.40	.44	.42	
Eggs	.2 - .3	.61	.48	.59	.53	.61	.80	.4
Cheese		.25	.17	.10	.11	.11	.15	.25
<i>Fats and Fat Foods—Total</i>								
Lard and substitutes	.8 - 1.0	.90	.79	.83	.77	.94	1.05	1.0 - 1.5
Olive oil		.3	.09	.11	.09	.10	.09	.3
Bacon and pork sausage		.35	.21	.25	.18	.21	.20	
Butter	.3	.10	.17	.10	.09	.08	.12	.2 - .3
Cream	.3	.35	.31	.34	.36	.47	.55	.5
		0	.01	.03	.05	.08	.09	.2 - .3
<i>Cereal Foods—Total</i>								
Flour and cereals	5.0 - 6.0	5.71	4.48	4.26	4.43	5.09	5.82	3.3 - 4.3
Bread		1.83	1.32	1.32	1.14	1.33	1.55	1.3
Cakes and pie		3.79	3.08	2.80	3.11	3.57	3.06	2.6
		.09	.08	.14	.18	.19	.31	
<i>Sugary Foods—Total</i>								
Sugar and candy	.8 - 1.3	.96	.88	1.06	.94	1.06	1.34	1.2 - 1.5
Syrup and honey	.3 - .6	.81	.74	.97	.75	.90	1.11	.8 - 1.0
Jelly and preserves	.6	.05	.02	.02	.05	.03	.06	.4
Cocoa		.07	.10	.06	.13	.12	.15	.1
		.03	.02	.01	.01	*	.02	
<i>Vegetables and Fruits—Total</i>								
Potatoes	8.8 - 10.0	8.24	7.69	7.72	7.18	11.38	13.95	14.0 - 18.0
Tomatoes, canned-fresh		3.5	2.87	2.64	2.50	1.98	3.01	3.7
Green leafy vegetables		1.5	.75	.72	.76	.71	.91	.99
Other veg. canned-fresh	1.0 - 1.3	1.04	1.09	.91	.75	1.20	1.59	.3
Dried vegetables	1.5 - 1.8	1.83	1.35	1.44	1.28	2.24	3.07	5.0 - 8.0
Fruits—canned or fresh	.3 - .6	.09	.09	.02	.01	.01	.01	.4
Fruits—dried	1.0	1.39	1.58	1.92	2.32	3.81	4.97	4.5 - 5.5
	.3	.27	.22	.17	.13	.20	.26	.2

<sup>1</sup>Derived from data in Miscellaneous Publication No. 113, of the United States Department of Agriculture, April, 1931. Hazel K. Stiebelling and Miriam Birdseye: Adequate Diets for Families with Limited Incomes.

<sup>2</sup>Derived from data in Farmers' Bulletin No. 1313, United States Department of Agriculture, May, 1928. Caroline L. Hunt: Good Proportions in the Diet.

\*Less than .005.

<sup>5</sup>Derived from data in Miscellaneous Publication No. 113, of the United States Department of Agriculture, April, 1931. Hazel K. Stiebelling and Miriam Birdseye: Adequate Diets for Families with Limited Incomes.

<sup>6</sup>Derived from data in Farmers' Bulletin No. 1313, United States Department of Agriculture, May, 1928. Caroline L. Hunt: Good Proportions in the Diet.

Some of the more outstanding indications in Table 2 may be summarized here.

1. For families in the highest income class the average consumption of foods in each of the general groups closely approximates the standard for persons of moderate income. Each group of foods is adequately represented in the diet. The amount of bread is rather high which could account for the high caloric value of the dietary of this group noted above. The use of milk and meat is liberal and the different types of vegetables and fruits are well represented.

2. In the diet of the medium-income class, the average consumption of each group of foods except milk was slightly less than in that of the highest income class, but all groups of foods were well represented. The use of vegetables and fruits was less than the recommended amount for moderate-income diets but more than the allowance for a restricted low-income diet.

3. The two low-income classes and the work-relief families had very similar diets as well as approximately equal numbers of calories. Their use of vegetables and fruits, of cereal foods, and of milk was lower than the quantities recommended for a low-income diet and their use of meat and eggs was somewhat higher than the recommended amounts, though less than that of higher income families.

4. For the home-relief families, the average amounts of different groups of foods corresponds closely to the recommended amounts in the low-income standard except that the milk consumption is a little low. These families receive advice on how to spend the value of their food ticket and are restricted in the amount of meat.

5. The average consumption of tomatoes for all income classes was fairly high, though less than the low-income dietary calls for.

6. The consumption of green leafy vegetables for all income classes was close to the low-income standard. The season was favorable to the use of leafy vegetables: spinach, dandelion greens, and new cabbages were cheap and plentiful. The cheapness of many fresh vegetables in May and June also would account for the very low consumption of dried vegetables.

Table 3. Proportion of total calories derived from various groups of foods in the reported diets of New York City families in different income classes compared with proportions in a well planned diet and in the average American dietary.

INCOME CLASS	CALORIES DERIVED FROM					
	Cereals	Milk and Cheese	Lean Meat, Fish, Eggs	Vegetables and Fruit	Fats	Sugars
Minimum cost diet, adequate for 2 moderately active adults and 3 children <sup>1</sup>	32	24	8	14	15	7
Average American dietary <sup>2</sup>	38	8	21	12	10	10
Home-relief families	41	14	7	12	17	9
Work-relief families	36	14	13	12	16	9
Non-relief—per capita income per week:						
Less than \$3.00	35	15	10	12	17	11
\$3.00-\$3.99	35	17	12	10	16	10
\$4.00-\$5.99	33	16	14	13	15	9
\$6.00 or more	33	13	16	14	14	10

<sup>1</sup>From a table furnished by The Bureau of Home Economics, U. S. Department of Agriculture, to be published soon in Circular No. 296, by Hazel K. Stiebelling and Medora M. Ward. In higher cost diets, the percentage of calories from meats, vegetables and fruits increases and that from cereal foods correspondingly decreases; the percentage from fats and sugars remains about constant.

Since all families in our study had at least one child and the average persons per family was 5.3, the standard distribution for a 5 person family with 3 children is used for comparison.

<sup>2</sup>Sherman, Henry C.: Chemistry of Food and Nutrition. New York, The Macmillan Company, 1932, p. 523.

## PROPORTION OF CALORIES FROM VARIOUS FOODS

In planning diets at various costs that would provide the nutritional needs of families of different composition, the nutritionists have developed tables which give the percentage of total calories in the diet to be derived from each group of foods. When bodily needs for various foods and protective substances are taken into consideration, as well as relative costs of different foods, these proportions represent the desirable distribution of foods in the diet. It is of interest to compare the proportionate use of different food groups by these New York City families with the proportions in a balanced diet planned for the use of low-income families and with the average American dietary as indicated by 224 studies. It is apparent from Table 3 that in a balanced minimum cost diet, cereals and milk and cheese are predominant and that the average American diet is built more on cereals and meat.

The New York families, especially those with less than \$4.00 per person per week, derived too small a proportion of their calories from milk and milk products and vegetables and fruits, and too great a proportion from lean meat, fish and eggs, and sugars, according to the nutritionists' standards for a balanced low-income diet. The food budget of the families on a more liberal diet had a better representation of milk and vegetables and fruits than the average American diet.

## DIET OF ITALIAN FAMILIES

Since about 40 per cent of the families in the study were Italian, the average dietary of the Italian group was computed and is given in Table 4. While Italians have certain dietary customs, such as the use of olive oil, their consumption of the various food groups was very close to that for all the families in the study, except that the supply of vege-

TYPE OF FOOD	POUNDS PER WEEK PER MALE UNIT				
	Home Relief	Work Relief	Weekly Income per Capita		
			Less than \$4.00	\$4.00 to \$5.99	\$6.00 or more
<i>Protein Foods</i>					
Milk—quarts	3.49	3.50	3.86	4.37	3.58
Total meat, fish, eggs, and cheese	1.68	2.32	2.32	2.89	4.05
Lean meat and fish	.97	1.62	1.62	2.19	3.02
Eggs	.54	.55	.59	.57	.84
Cheese	.17	.15	.11	.13	.19
<i>Fats and Fat Foods—Total</i>	.98	.75	.87	.99	1.44
Lard and substitutes	.04	.04	.08	.04	.06
Oil	.56	.33	.40	.46	.72
Bacon and pork sausage	.12	.15	.13	.13	.29
Butter	.26	.23	.25	.36	.36
Cream	0	0	.01	0	.01
<i>Cereal Foods—Total</i>	5.59	3.98	4.53	4.70	5.83
Flour and cereals	1.83	1.48	1.42	1.40	1.85
Bread	3.68	2.50	3.02	3.19	3.80
Cakes and pie	.08	0	.09	.11	.17
<i>Sugary Foods—Total</i>	.83	.79	.81	.82	.98
<i>Vegetables and Fruits—Total</i>	7.27	7.26	6.24	8.64	9.72
Potatoes	2.52	2.35	1.63	2.37	2.15
Tomatoes, canned—fresh	.83	.88	.82	.94	.98
Green leafy vegetables	.98	1.04	.91	.91	1.31
Other veg. canned—fresh	1.52	1.12	1.06	1.61	2.46
Dried vegetables	.07	.09	.01	.02	0
Fruits—canned or fresh	1.12	1.59	1.70	2.64	2.54
Fruits—dried	.23	.19	.11	.15	.28
Average calories per day	2,568	2,198	2,333	2,622	3,238
Number of families	29	15	33	23	13

Table 4. Average weekly consumption of various foods (per adult male) by Italian families of various income classes in New York City, May-June, 1933.

tables and fruits was low. The comments made above with regard to the differences in the diets of the various income classes would apply, in general, to the Italian families.

The consumption of tomatoes and green leafy vegetables by the Italian families compared very favorably with the averages shown in Table 2, and the relatively low consumption of the vegetable and fruit group was due chiefly to a lower consumption of potatoes and fruits. The Italian families seem to increase their consumption of fats, especially olive oil and sausage, when they have funds for a liberal diet, more than the other families in the study, but the increase in the use of sugars was less than that reported by the non-Italian families. However, there were only thirteen Italian families with more than \$6.00 per person per week, which is too few to give very dependable indications of the dietary of this class.

#### CONSUMPTION OF MILK

Milk is such an important source of calcium and other substances essential to growth as well as a good source of efficient protein that the recommendation of a quart of milk a day for every growing child has become basic in planning diets. As stated previously, the milk consumption by any family is fairly regular and a week's supply may be taken as typical. Therefore, in Table 5, the use of milk by individual families is shown according to the quarts of milk per child 16 years of age or less. Most of the milk was fluid milk but evaporated and condensed milk are included.

The use of milk increased very definitely with income and nearly nine out of ten families in the highest income class had six quarts or more per week for each child 16 years of age or younger.

More relief families, both those on home relief and those on work relief, than non-relief families of lowest income reported less than six quarts per week per child.

It seems safe to conclude that most of these families use

fairly adequate amounts of milk when funds are available but when their incomes are reduced they tend to cut the milk supply too much to keep the diet "safe" for children.

SUMMARY

The average food budget for a week reported by low-income families residing in an East Side district of New York City indicated that:

1. Families with less than \$4.00 per person per week had

Table 5. Milk supply per week of families in various low-income classes in New York City.

INCOME CLASS	QUARTS OF MILK PER WEEK PER PERSON 16 YEARS OF AGE OR LESS					
	Any Number	None	Less Than 3	3.0-5.9	6.0-8.9	9.0 or More

PER CENT OF FAMILIES USING SPECIFIED NUMBER OF QUARTS

Home-relief families	100.1	0	14.3	41.1	17.9	26.8
Work-relief families	99.9	0	14.8	37.0	25.9	22.2
Income per capita per week						
Under \$4.00	100.1	1.4	9.7	30.6	40.3	18.1
\$4.00-\$5.99	99.9	0	4.7	26.6	23.4	45.3
\$6.00 or more	99.9	1.7	1.7	7.0	31.6	57.9

NUMBER OF FAMILIES

Home-relief families	56	0	8	23	10	15
Work-relief families	27	0	4	10	7	6
Income per capita per week						
Under \$4.00	72 <sup>1</sup>	1	7	22	29	13
\$4.00-\$5.99	64	0	3	17	15	29
\$6.00 or more	57	1	1	4	18	33

<sup>1</sup>In one family all children were over 16 years of age.



a diet yielding 20 per cent less energy value than the 3,000 calories per man per day recommended as a minimum for normal requirements by most nutrition authorities.

2. Families on home relief (food allowances) had a diet about 10 per cent below the standard for energy value and those on work relief a diet 20 per cent below the standard.

3. As income declined, the average consumption of each type of food in the dietary was reduced, but the greatest reductions were in the use of milk, meat, fish, eggs, and vegetables and fruits. The resulting diet lacks balance, and nutritional deficiencies are likely to occur according to standards for adequate diets approved by nutritionists.

4. The diet of the families on home relief contained much better proportions of the various nutrients than that of work-relief families or of families with less than \$4.00 per capita per week, but the milk supply was somewhat below that recommended for a low-income diet.