

# PUBLIC HEALTH REPORTS

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VOL. 51

JANUARY 24, 1936

NO. 4

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## DIETS OF LOW-INCOME FAMILIES SURVEYED IN 1933<sup>1</sup>

### Health and Depression Studies No. 3

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A survey of the food supply of families at various lower income levels was made in the spring of 1933 in nine localities—Baltimore, Birmingham, Cleveland, Detroit, New York, Pittsburgh, Syracuse, a cotton-mill area in South Carolina, and a coal-mining district in West Virginia. The investigation was a part of the study of the health of low-income families which was conducted by the United States Public Health Service in cooperation with the Milbank Memorial Fund. Records of the family food supply for a period of 1 week were obtained for about 100 families in each locality except New York, where 276 records were taken. The foods used during 1 week do not afford sufficient data to evaluate precisely the dietary of *individual* families with respect to the adequacy of specific nutrients, though they do give a general indication of the use of certain foods or food groups, such as milk, meats, bread, vegetables, fruits, etc. However, the averages of the food supply for *groups* of families of comparable economic status are reasonably reliable, even for this short period, and from them one may draw certain conclusions as to the type of dietary which prevailed in these low-income families and the nutritional deficiencies which are most likely to arise from such a diet.

The families for which food records were obtained were drawn from the larger sample of approximately 1,000 families which were canvassed in each community for the general study of illness. The

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<sup>1</sup> From the Office of Statistical Investigations, U. S. Public Health Service, and the Division of Research, Milbank Memorial Fund.

This is the third of a series of papers on sickness and medical care in relation to income, unemployment, and other related economic factors among groups of white wage-earning families. The 2 preceding papers are:

(1) Relation of sickness to income and income change in 10 surveyed communities. By G. St. J. Perrott and Selwyn D. Collins. Pub. Health Rep., vol. 50, no. 18, pp. 595-622.

(2) Heights and weights of the children of the depression poor. By Carroll E. Palmer. Pub. Health Rep. vol. 50, no. 33, pp. 1106-1113.

Earlier preliminary papers giving results for parts of the surveyed group are listed in the first paper in this series.

families in the total sample included all white families living in certain blocks or streets in the poorer neighborhoods but not in the "slum" districts. After classifying the families in the general study very roughly according to their 1932 income, a few families were drawn from those at different income levels to obtain approximately equal numbers throughout the range of income reported by the total group. The families so drawn were revisited and the informant was questioned about the food bought and amounts used during the preceding week. For the same week, data were obtained concerning the amount of wages or other funds available for expenditures. In all localities except New York City, the data were collected within the period April 24 to May 19; in New York the visiting was continued until the end of June.

After classifying the families according to their weekly income per person, the average quantities of various foods or groups of foods were computed for families in each income class in each of the localities. Since in five of the cities, Baltimore, Cleveland, Detroit, Pittsburgh, and Syracuse, these tabulations showed no basic differences in food habits of the families, the data have been combined into one group of 472 families which, it is believed, are fairly typical of low-income families of the large industrial cities in the North. The seasonal difference in the records for New York and the fact that income requirements for an adequate food supply seemed to be slightly higher made it appear desirable to present the New York data separately. The other three localities were characterized by a diet basically different from that in the Northern cities, as it contained large amounts of fat meat, biscuit or corn bread, and sirup, which are all typical of the diet of the low-income southern family; but among these three communities there were also recognizable differences, and their data therefore, are considered separately.

#### ENERGY VALUE OF FOOD SUPPLY

The quantity of food needed to provide the energy used by individuals of specific age, sex, and body weight, and engaged in a certain type of activity, has been carefully measured and is expressed in terms of the calories available in the food to supply this energy; but in the present study, average needs must be used for measuring the requirements of groups of individuals. Various standards for average calories needed by persons of a specific sex and age have been prepared; the particular one used in this study was furnished by the

Bureau of Home Economics of the United States Department of Agriculture.<sup>2</sup> A daily supply of 3,000 calories is taken as adequate for the moderately active adult male. Using this amount as a base, the energy needs of persons of each sex and age are expressed as a percentage. For each 100 percent or equivalent of an adult male in the population (adult male unit), there should be food yielding 3,000 calories per day. The scale of proportional requirements by sex and age used was found to give average requirements for population groups very close to those based on other scales, in spite of slight differences in the allowances for some age groups.

Various nutritionists have outlined diets which supply what are considered more nearly marginal requirements for family groups. Many of these would yield from 2,600 to 2,700 calories per day per adult male unit on the basis of the scale of proportional requirements by sex and age used in this study. Although it is impossible to set an absolute minimum calorie requirement below which the food supply cannot fall without endangering health, an average daily energy supply of about 2,700 calories per adult male unit seems to be a reasonable minimum for ordinary population groups, and an adequate supply of 3,000 calories is desirable to assure full provision for growing children and protection of the health of adults.

*The five northern cities.*—When the income for the week was \$3 or more per person, the average family in these five cities had a food supply which furnished something over 3,000 calories per day per equivalent adult male (table 1). Below this income level the calories available from the average food supply were less than 3,000. For families whose income was \$2 to \$3 the calories averaged 2,800, and for those with less than \$2 the calories averaged 2,470 per day. Fam-

<sup>2</sup> The scale for relative allowances of calories for individuals by sex, age, and activity furnished by the Bureau of Home Economics is as follows:

Age (years) and activity	Relative allowance (percent)		Age	Relative allowance (percent)	
	Men	Women		Men	Women
14.....	100	90	Under 2 years.....	30	30
15.....	100	80	2 to 3 years.....	40	40
16 to 17.....	110-130	80	4 to 5 years.....	50	50
18 to 59, moderate activity.....	100	90	6 to 7 years.....	60	60
18 to 59, light activity.....	90	80	8 years.....	70	70
18 to 59, sedentary.....	80	70	9 to 10 years.....	80	70
60 or older, moderate activity.....	90	80	11 to 12 years.....	90	80
60 or older, sedentary.....	80	70	13 years.....	90	90

In computations for the present study, all men and women aged 18 to 59 were counted as moderately active. See explanatory note at end of article.

ilies on relief <sup>3</sup> had a food supply yielding 2,700 calories per day, approximately equal to minimum requirements and higher than that of the lowest income nonrelief group.

TABLE 1.—Average calories per day per adult male unit and distribution of families according to caloric value of the food supply for families of various incomes. (Based on records of a week's food supply for 472 families in Baltimore, Cleveland, Detroit, Pittsburgh, and Syracuse, April–May 1933)

Weekly income per capita	Number of families	Calories per day per adult male unit <sup>1</sup>	Percent of families having specified calories			
			Less than 2,200	2,200 to 2,699	2,700 to 3,399	3,400 or more
Relief.....	177	2,700	24.9	32.2	25.4	17.5
Less than \$2.....	77	2,470	27.5	33.8	31.2	7.8
\$2 to \$2.99.....	60	2,800	16.7	35.0	28.3	20.0
\$3 to \$3.99.....	46	3,180	13.0	8.7	41.3	37.0
\$4 or more.....	112	3,350	4.5	17.0	33.0	45.5

<sup>1</sup> Average of the calories per day per adult male unit for each family, i. e., each family has the same weight in the average regardless of its size.

Within each income class, the calories in the food supply of the individual family <sup>4</sup> varied over a wide range, and the distribution of families according to the caloric value of their food supply also is shown in table 1. About one-fifth of the families with \$3 or more per week reported food yielding less than 2,700 calories per day, but three-fifths of the families with less than \$2 and nearly as large a proportion of the families on relief had less than 2,700 calories. In the lowest income and relief groups, about one-fourth of the families had less than 2,200 calories per day per adult male unit, and some of these families reported very acute food shortages. It seems very probable that there were many families which were seriously undernourished.

Large families in each income class were more likely to have an insufficient quantity of food than small families, as shown in table 2. Families with not more than four persons with a weekly income of less than \$3 per person had an average food supply that was fairly adequate, but larger families had less than 2,600 calories. The very large families on relief seem to have fared especially badly. Relief families consisting of 8 or more persons reported, on the average, a food supply furnishing only 2,430 calories per adult male per day, but those of 5 to 7 persons had 2,670 calories.

<sup>3</sup> All families on relief are grouped together, although some had cash relief, with and without work, others received grocery orders, a few families received food boxes, and some had combinations of cash and supplementary food. They represent an unselected cross-section of families receiving aid from some organized agency.

<sup>4</sup> As the food records are for 1 week and the food supply of families with such limited incomes may vary considerably from week to week, we cannot assume that these families had the same food supply over long periods, even though practically all of them reported it as "usual." Also, there is opportunity both for relatively large error in the reporting and in the estimating of weights of items for which only price or number of units, such as cans, packages, etc., was stated. These errors tend to compensate each other when we consider the food supply of groups of families but cannot do so in a 1 week's record for an individual family.

**TABLE 2.—Calories in food supply of families according to size of family and income. (Based on records of a week's food supply for 472 families in Baltimore, Cleveland, Detroit, Pittsburgh, and Syracuse, April–May 1933)**

Size of family	Average calories daily per adult male unit			Number of families		
	Relief families	Under \$3 per person per week	\$3 or more per person per week	Relief families	Under \$3 per person per week	\$3 or more per person per week
1 to 4 persons.....	2,910	2,880	3,400	62	37	89
5, 6, or 7 persons.....	2,670	2,530	3,180	81	70	57
8 or more persons.....	2,430	2,570	3,190	34	30	12

*New York City.*—In table 3 are shown the calories per day per adult male unit for the average family in a specific income class in New York City and the distribution of families according to the supply of calories. Families with an income of \$4 to \$6 per person per week reported a food supply which, on the average, would furnish 3,000 calories per day per adult male unit, adequate for standard energy requirements, and those with higher incomes had a food supply which averaged 3,340 calories.

**TABLE 3.—Average daily supply of calories per adult male unit and distribution of families according to calorie supply for families of various low incomes in New York City, May–June 1933**

Weekly income per capita	Number of families	Calories per day per adult male unit	Percent of families having specified calories			
			Under 2,200	2,200 to 2,699	2,700 to 3,399	3,400 or more
Home relief.....	56	2,790	28.6	19.6	33.9	17.9
Work-relief wage.....	27	2,450	44.4	29.6	14.8	11.1
Less than \$3.....	33	2,390	39.5	31.6	23.7	5.3
\$3 to \$3.99.....	35	2,420	45.7	14.3	37.1	2.9
\$4 to \$5.99.....	64	3,000	17.2	20.3	37.5	25.0
\$6 or more.....	56	3,340	5.4	19.7	37.5	37.5

For families with \$3 to \$4 and lower incomes, the average fuel value of the food supply was approximately 20 percent less than 3,000 calories. Families on work relief reported a diet yielding about the same number of calories per adult male unit as other low-income families. This is consistent with their income, inasmuch as these families received \$11.25 per week regardless of the number of persons. For these low-income groups the available energy value was considerably less than average minimum needs.

Families on home relief, i. e., receiving food orders, reported a more adequate amount of food than either the work-relief families or the nonrelief families with less than \$4. The calories per adult male unit averaged 2,790 which, as stated above, is a little higher than the energy value of diets planned by nutrition experts to provide a

limited or marginal diet that will prevent serious undernutrition if a proper choice of foods is made.

The distribution according to their individual calorie supply indicates that 60 to 75 percent of the families with less than \$4 per person per week had less than the restricted or marginal standard for calorie needs, and that 40 to 46 percent had less than 2,200 calories per day per adult male unit. These are much higher proportions than were found in the "five cities", where 17 percent of the \$2 to \$3 income class and 27 percent of the under \$2 class had less than 2,200 calories. Among home relief families, the corresponding percentage was 29. Even among families with \$4 to \$6 per person per week in New York, there were 17 percent that reported a food supply yielding less than 2,200 calories.

Size of family showed an inverse relationship to the adequacy of the amount of food among relief families and those of higher income but not among lower income families, as shown in table 4. Home relief families of 2 to 4 persons were well supplied and had adequate calories, but larger families had much less food per adult male unit. Among families with less than \$4 per person, the smaller families of 2 to 4 persons had slightly less food than the families of 5 to 7 persons. The explanation probably is that the small family with a total income of \$6 to \$10 a week has to use a large share of it for rent and has little left for food, while the larger family in this per capita class may have a total income two or three times as high out of which it pays little, if any, more for rent.

TABLE 4.—*Calories in food supply of families according to size of family and income, in New York City, May-June 1933*

Size of family	Average calories daily per adult male unit			Number of families		
	Home-relief families	Under \$4 per person per week <sup>1</sup>	\$4 or more per person per week	Home-relief families	Under \$4 per person per week <sup>1</sup>	\$4 or more per person per week
2, 3, or 4 persons.....	3, 180	2, 390	3, 360	22	21	70
5, 6, or 7 persons.....	2, 650	2, 550	2, 860	25	55	48
8 or more persons.....	2, 210	2, 180	-----	9	24	2

<sup>1</sup> Including work-relief families.

*Birmingham.*—More families in the Birmingham survey reported relatively high incomes than in the other cities, except New York, and tabulations are given (table 5) for an upper income class of \$6 or more per person per week. There were 24 families receiving relief which consisted of food allowances from the Red Cross. The average calories in the food supply reported by the families in each income class and by relief families approximately equaled or exceeded the standard requirement of 3,000 calories per day per adult male.

Because of the small number of families in each income class, caution must be used in considering these families as typical of low-income families in this city.

TABLE 5.—Average calories per day per equivalent adult male in a week's food supply of families of different economic status in Birmingham, Ala., May 1933

Weekly income per capita	Number of families	Number of persons	Number of adult male units	Calories per day per adult male unit
Relief (food).....	24	134	104.1	2,960
Less than \$2.....	15	79	62.3	3,240
\$2 to \$2.99.....	8	46	35.4	3,410
\$3 to \$3.99.....	10	48	36.6	3,320
\$4 to \$5.99.....	13	69	53.2	3,560
\$6 or more.....	17	74	52.0	3,740

*Mill villages in South Carolina.*—Diet records were obtained for 102 families in 4 cotton-mill villages near Greenville, S. C. The mills were running at the time the data on food supply were collected, and all families had some earned income. Three families used flour donated by the Red Cross, but these families have been counted with other families in the same income group. The owning of cows is a common practice in many mill villages, and 27 of the families in our study had a cow. For these families the food records were tabulated separately.

For each income group the calories averaged much more than 3,000 per day per equivalent adult male (table 6). Families with more than \$3 per week per person and those owning cows had a food supply yielding over 4,000 calories. The typical diet includes large amounts of fat meat, flour, and cornmeal, foods of high caloric value; but it is likely that there was some overstatement of the amounts consumed of these articles which are bought usually in large quantities. In the case of families which owned cows, it is very probable that some of the milk was wasted and also that the estimate of the daily amount given by the cow was a little high.

TABLE 6.—Average calories per day per equivalent adult male in a week's food supply of families of different economic status in South Carolina cotton-mill villages, May 1933

Weekly income per capita and cow-ownership	Number of families	Number of persons	Number of adult male units	Calories per day per adult male unit
Families owning cow:				
Less than \$2.....	13	95	67.5	4,120
\$2 or more.....	14	88	69.8	4,460
Families without cows:				
Less than \$2.....	22	147	112.3	3,520
\$2 to \$2.99.....	24	148	117.2	3,930
\$3 to \$3.99.....	15	80	61.5	4,140
\$4 or more.....	14	62	48.7	4,930

The food supply of families in seven cotton-mill villages in the same section of South Carolina was studied in 1916 by Goldberger, Wheeler, and Sydenstricker.<sup>5</sup> They obtained a record, from the local stores, of food purchased in a 2-week period between April 16 and June 15, supplemented by a report from the family of other items. These data did not include home-grown garden produce. In their report the average calories per day per adult male unit were 4,267 for 60 highest income families, and 3,836 for 184 low-income families; but when these averages are adjusted to the scale of adult units used in the present study, the calories in the 1916 study would be about 3,800 and 3,400, respectively.

*Coal-mining towns in West Virginia.*—The food records for 101 coal miners' families were taken in several mining towns near Morgantown, W. Va. There were no families living wholly on organized relief, but approximately one-half of all families in the survey and three-fourths of those with less income than \$2 per person in the week of record were given flour or milk or both.

TABLE 7.—Average calories per day per equivalent adult male in a week's food supply of families of different economic status in several mining towns in West Virginia, April 1933

Relief class and weekly income per capita	Number of families	Number of persons	Number of adult male units	Calories per day per adult male unit
Relief families: <sup>1</sup>				
Flour and milk.....	18	114	78.5	3,440
Flour only.....	17	94	77.7	2,910
Milk only.....	10	69	49.2	3,540
No relief:				
Less than \$2.....	12	64	46.5	3,150
\$2 to \$2.99.....	18	97	75.3	3,830
\$3 to \$3.99.....	7	42	21.0	4,070
\$4 or more <sup>2</sup> .....	19	76	60.0	3,930

<sup>1</sup> None of these had an income of \$3 or more per week per capita.

<sup>2</sup> Includes 4 families which had flour that had been given to them.

The average food supply of families in each income group would furnish adequate calories (table 7). For families with more than \$2 per person per week the calories averaged 3,830 to 4,070 daily per equivalent adult male, and for families with less than \$2 the calories averaged 3,150. For families given free flour or milk, or both, the average supply of calories varied from 2,910 to 3,540.

#### AVERAGE DIETARIES ACCORDING TO INCOME

In addition to sufficient energy value, the human body must be provided with an adequate supply of each of a number of essential nutrients. Care in the selection of foods is necessary to assure required amounts of each of the food factors essential for a balanced

<sup>5</sup> Goldberger, Joseph, Wheeler, G. A., and Sydenstricker, Edgar: A study of the relation of diet to pellagra incidence. Pub. Health Rep., Mar. 19, 1920. (Reprint No. 587.)



diet, especially of the mineral elements and vitamins which are important to insure health and proper growth of children. An adequate supply of milk, vegetables, fruits, and eggs should be the first concern of the family, as these are the principal sources of most minerals and vitamins; the remainder of the diet can be determined by individual preference and funds available.

For the purpose of judging the approximate adequacy of various food elements in the dietary of these families, the amounts of specific kinds of food reported are compared with amounts recommended as providing at a minimum cost an adequate supply of the essential nutrients, though not a liberal or optimal supply. A further comparison is made with a more restricted dietary which is designed to furnish "approximately the minimum requirements of the body for the various nutrients, but allows little margin for safety. \* \* \* It represents quantities of 'protective' and other foods below which it is not safe to reduce the food supply."<sup>6</sup> From the requirements for each type of food given by Stiebeling and Ward<sup>7</sup> to supply persons of each sex and different ages with an adequate diet at minimum cost, an average amount per week per adult male unit was computed, which is used as a standard for a minimum cost adequate dietary. Similarly, average amounts in the restricted dietary were computed to obtain a standard with which amounts actually purchased can be compared.

These standards cannot be absolute and, of course, some substitutions and variations are possible without destroying the nutritional balance. For example, a dietary at a higher level of cost probably will include more liberal quantities of fresh and canned vegetables and fruits, and more meat; these will be offset by reduced consumption of other foods, such as dried legumes and fruits, potatoes, and bread. However, the quantities of milk, vegetables, fruits, and eggs in the restricted standard are a minimum and should not be replaced by other foods.

*The five cities.*—The average amounts of specific foods or groups of foods reported by families in each income class are shown for the five cities and for New York City in figure 1.<sup>8</sup> The amount used can be

<sup>6</sup> See Stiebeling, Hazel K., and Ward, Medora M.: Diets at 4 levels of nutritive content and cost. U. S. Department of Agriculture Circular No. 296, p. 4.

<sup>7</sup> *Idem*, pp. 14-19.

Since the required amounts of each nutrient do not vary by sex and age according to the adult male unit scale, which is based on calories needed, an average dietary for families or groups of persons should be adjusted for specific needs. The amounts of specific foods recommended for a specific sex-age group for a restricted diet and for a minimum-cost diet were weighted according to the sex-age composition of the population of different income classes, and the total was divided by the number of adult male units in the population. For most foods the average per adult male unit for different income classes was affected very little by differences in the age composition, and a single average was taken as the standard for comparison with amounts actually purchased. Since the average quantity of milk varied considerably for different income groups, the specific average for each income class has been used for comparison.

<sup>8</sup> The data on which this chart is based have been published in earlier articles, viz, Diets of low-income families in New York City, Milbank Memorial Fund *Quarterly*, October 1933; and Diets of urban families with low incomes, *ibid.*, October 1934.

compared readily with both the adequate and restricted standard for each food, as these are indicated in the chart. All foods are included except milk and cheese; the average supply of these is given in table 8.

Families in the five cities with \$3 to \$4, and \$4 or more income per person per week had as much as, or more than, the adequate standard for all foods except dried legumes, dried fruits, and milk. The foods used in greatest excess of the required amounts were meat and fish, eggs, and sweets. Although substitution of milk and fresh vegetables for some of this excess would give a more liberal supply of calcium and vitamins, and although a less expensive diet could have been provided by using more dried fruits and legumes, the foods actually used would provide a satisfactory diet.

Families with lower incomes had the same type of diet as that of the higher-income families but used less of each kind of food, instead of reshaping their diet to insure adequate amounts of "protective" foods and to obtain the best nutritional values for their money. The average amounts of meat and fish, eggs, potatoes, and sugary foods reported by families with \$2 to \$3 and those on relief were considerably more than the *adequate* standard, but the amounts of milk, dried legumes, dried fruits, and cereals were less than the *restricted* standard, and the supplies of fresh and canned vegetables and fruits were only slightly above or about equal to the *restricted* standard.

Families with less than \$2 per person per week had still less milk, fresh and canned vegetables and fruits, and did not increase their supply of dried legumes, dried fruits, or cereals.

The milk supply of families of different incomes is shown in table 8 in two ways—first, the average amount per adult male unit, and, second, the percentage of families having specified amounts per week per child under 17 years of age. Present nutritional standards emphasize the consumption of milk by adults. In the adequate standard dietary used for comparison, there is included a pint of milk a day for all adults, in addition to three-fourths of a quart or a quart for children, according to their age; in the restricted dietary there is a pint for children and women and a half pint for men. However, an inquiry as to who in the family drank milk indicated that most of the milk was consumed by the children. Nutritionally, it is of special importance to them and the adequacy of the supply for children seems the most significant consideration.

For every income class the average milk supply was less than the adequate standard per adult male unit. However, for families with \$3 to \$4 and with \$4 or more per person per week, the supply exceeded the restricted standard and also was more than enough to provide a quart of milk a day for all children under 17 years of age. But as

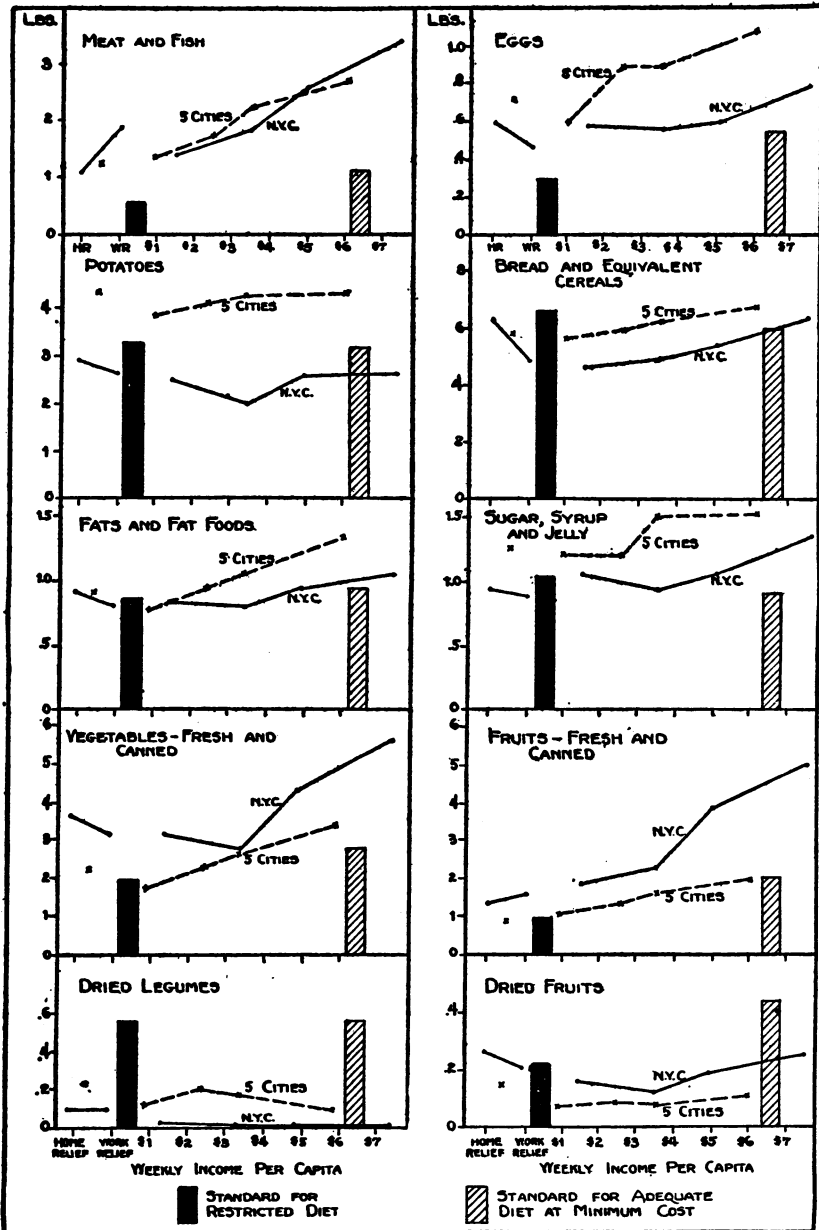


FIGURE 1.—Average number of pounds, per week per adult male unit, of specific foods or groups of foods reported by families of different incomes in New York City, May-June 1933, and in a group of 5 large industrial cities, April-May 1933, compared with recommended amounts in 2 low-cost diets. The height of the bar indicates the recommended amount; its position on the income scale has no significance.

income decreased the amount of milk purchased decreased, and the average supply for the lower-income families was from 17 to 36 percent less than the restricted standard.

TABLE 8.—*Weekly milk supply of families according to income in Baltimore, Cleveland, Detroit, Pittsburgh, and Syracuse, April–May 1933*

Weekly income per capita	Quarts weekly per adult male unit			Number of families with children	Percent of families having specified quarts weekly per child under 17 years of age		
	Standard		Average for observed families <sup>1</sup>		Less than 3	3 to 5.9	6 or more
	Adequate	Restricted					
Relief.....	6.31	3.95	3.29	166	24.7	53.0	22.3
Under \$2.....	5.98	3.76	2.42	75	46.7	33.3	20.0
\$2 to \$2.99.....	5.81	3.64	2.87	57	26.3	49.1	24.6
\$3 to \$3.99.....	5.83	3.72	3.80	41	12.2	39.1	48.8
\$4 or more.....	5.46	3.55	4.06	100	12.0	30.0	58.0

<sup>1</sup> Includes fresh and canned milk and equivalent amounts of cheese.

Considering the milk supply of individual families, we find that 25 percent of the relief families and 47 percent of families with income less than \$2 purchased less than 3 quarts of milk per week for each child under 17 years of age; in these families, even if the children consumed all of the milk, they had less than the restricted standard for children. The percentage of families inadequately supplied with milk was much lower as family income increased. This is shown clearly in figure 3 as well as in table 8.

The shortage of milk is undoubtedly the most serious lack in the dietary of these families. As stated by Sherman,<sup>9</sup> "A liberal level of milk consumption is highly desirable for several reasons—among them, because it is the surest means of providing an adequate intake of calcium well balanced with desirable amounts of phosphorus, of protein, and of the vitamins." In the restricted standard dietary milk is the source of about two-thirds of the total calcium supply; the remainder is obtained largely from vegetables and fruits. Since the average supply of these foods was low, the calcium in the average diet of the relief families is from 5 to 10 percent less than the amount in this restricted dietary, and that in the average diet of families in the \$2-income class was approximately 15 percent less. For families with income less than \$2, not only is the calcium content of the diet approximately 25 percent less and the phosphorus content about 15 percent less than in the restricted dietary, but there is also a strong likelihood that vitamins A, C, and D are below the standard for safety.<sup>10</sup>

<sup>9</sup> Sherman, Henry C.: Chemistry of food and nutrition, p. 292. The Macmillan Co., New York, 1932.

<sup>10</sup> The data were incomplete with respect to the use of whole-grain cereals, and it is not possible to estimate the sufficiency of the supply of vitamin B.

*New York City.*—The average amounts of specific foods or groups of foods reported by families in each income class in New York City are shown in figure 1 and the milk supply is given in table 9.

TABLE 9.—*Weekly milk supply of families according to income in New York City, May-June 1933*

Weekly income per capita	Quarts weekly per adult male unit		Number of families with children	Percent of families having specified quarts weekly per child under 17 years of age			
	Standard			Average for observed families †	Less than 3	3 to 5.9	6 or more
	Adequate	Restricted					
Home relief.....	6.30	3.93	4.37	56	14.3	41.1	44.7
Work relief.....	5.96	3.71	3.80	27	14.8	37.0	48.1
Less than \$3.00.....	5.80	3.72	3.97	37	13.5	27.0	59.5
\$3 to \$3.99.....	6.14	3.81	4.63	35	8.6	34.3	57.2
\$4 to \$5.99.....	5.58	3.74	5.29	64	4.7	26.6	68.7
\$6 or more.....	5.16	3.40	5.16	56	3.6	7.1	89.3

<sup>1</sup> Includes fresh and canned milk and equivalent amounts of cheese.

A few general indications stand out clearly in this chart. For families in each income class the average supply of all foods except bread and cereals, potatoes, dried legumes, and dried fruits equaled or exceeded the *restricted* standard and, with minor exceptions, the *adequate* standard. The slight deficiency in the use of dried fruits was offset by a liberal use of fresh and canned fruits. While the amount of meat and fish purchased by families in the lower income classes was much less than that purchased by neighbors of high income, the average amount was twice as high as the restricted standard <sup>11</sup> and slightly above the adequate standard. Eggs were used also in greater amounts than required.

The work-relief families had a diet very similar to that of nonrelief families of lowest incomes, but in the diet of home-relief families the amounts of various foods were more nearly those recommended in the standard. Thus, the quantity of meat was less and the quantity of cereal foods and potatoes was more than that reported by other low-income families; the cheaper dried fruits were substituted to a greater extent for fresh and canned fruits.

The average milk supply of families with incomes of \$4 to \$6 per person per week was only slightly less than the *adequate* standard per adult male unit. For lower-income families and both relief groups the average amount equaled or exceeded the *restricted* standard for milk. As shown in figure 3 and table 9, the proportion of families with less than 3 quarts weekly per child was small, 14 percent

<sup>11</sup> The amount of meat and fish allowed by this restricted emergency diet is only a little more than half that allowed by some standard diets for relief families. Thus, the bulletin on Food Allowances, issued by the Temporary Emergency Relief Administration of New York, Aug. 15, 1932, recommended approximately 1 pound of meat and fish per equivalent adult male.

of the relief families and 15 percent of those with incomes of less than \$3 per person. At every income level fewer New York City families were inadequately supplied than families in the "five cities."

The average dietary in New York City, even in the case of the lowest-income group, included at least the minimum provision of "protective" foods. The canvass period was, however, more favorable to the use of fresh vegetables and fruits than that in any other community in the study, since the market was supplied with a variety of fresh foods at reasonable prices late in May and in June. Nevertheless, because of its very low energy value, the average food supply of families with income less than \$4 weekly per person was not nutritionally adequate. Less meat and more cereal foods, less of the relatively expensive fruits, and more dried legumes and dried fruits would have given better nutritional value for the same money.

*Birmingham.*—The average diet of families in each income class in Birmingham was very high in fatty foods and, except for relief families, in sugars, and moderately high in cereal foods, as shown in figure 2. Large quantities of eggs were included in the food supply of all but relief families, and they had slightly more than the restricted standard. The use of vegetables by relief families and those with income less than \$2 per person per week was below the *adequate* but slightly above the *restricted* standard. Families with \$2 to \$3 per person per week and those of higher incomes had, on the average, quantities of vegetables and fruits that were adequate. Lean meat and fish were used in smaller quantities than by families of similar income in the northern cities in our study, but only the relief families had less than the restricted standard.

The milk supply of families with less than \$4 per person per week averaged less than the restricted standard (table 10) and was about equal to an average of 1 pint daily per child under 17 years of age, with none for other members of the family. Relief families had an average of only half as much milk as the other low-income families and one-third the quantity in the restricted dietary. Most relief families were given canned milk; 1 family was given some fresh milk, 2 families had a little cash income during the week and bought milk, and 1 family kept a cow. Families with incomes of \$4 or more had enough milk to provide a quart a day for the children, but less than the adequate standard.

The distribution of families according to the weekly milk supply shows that 70 percent of the families with a weekly income of \$6 or more per person had 6 quarts or more per child under 17 years of age and only 12 percent had less than 3 quarts per child. Of the families with income less than \$3 per person, 50 percent had less than 3 quarts per child per week.

TABLE 10.—*Weekly milk supply of families according to income in Birmingham, Ala., May 1935*

Weekly income per capita	Quarts weekly per adult male unit			Number of families with children	Percent of families having specified quarts weekly per child under 17 years of age		
	Standard		Average for observed families <sup>1</sup>		Less than 3	3 to 5.9	6 or more
	Adequate	Re-stricted					
Relief.....	6.08	3.87	1.47	24	83.3	16.7	0
Less than \$2.00.....	5.69	3.72	2.85	14	50.0	28.6	21.4
\$2 to \$2.99.....	6.12	3.81	3.06	8	50.0	50.0	0
\$3 to \$3.99.....	5.82	3.73	3.19	10	30.0	30.0	40.0
\$4 to \$5.99.....	5.43	3.36	3.93	13	7.7	53.8	88.5
\$6 or more.....	5.63	3.66	4.70	17	11.8	17.6	70.6

<sup>1</sup> Includes fresh and canned milk and equivalent amounts of cheese.

Although the average dietary of the families on very limited incomes probably provided approximately minimum amounts of the various essential nutrients, the excess amounts of fat meat and sweets and the very limited quantities of milk and vegetables make the dietary one of poor nutritional balance.

*South Carolina cotton-mill villages.*—Large quantities of flour and corn meal, lard and salt pork, and sugar were used by families of every income in the cotton-mill villages in South Carolina, as is evident from figure 2. Eggs were used in approximately adequate amounts by low-income families and in very large quantities by families in the higher income classes; little lean meat, fowl, or fish was used, and the average weekly amount for families with income less than \$2 per person per week was only 0.44 pound per adult male unit, or 20 percent less than the restricted standard. Families with income less than \$2 also used much less than the recommended quantity of fruits, either fresh or dried, but had nearly adequate amounts of fresh <sup>12</sup> and canned vegetables, and fully adequate quantities of dried legumes. As income increased, the use of fresh vegetables and fruits increased.

Except for families who owned a cow, the milk supply was not adequate. Families with incomes of \$4 or more per person per week purchased an average amount slightly above the restricted standard, but lower income groups had much less milk, and those with less than \$2 had less than half the restricted standard. Three-fourths of the families in this low-income group purchased less than 3 quarts of

<sup>12</sup> About one-half the families had turnip greens, lettuce, onions, or radishes from their own or a neighbor's garden and reported only that they had enough for "1 mess" or "2 messes", etc. Amounts were estimated arbitrarily on the basis of the number of persons in the family, which had the effect of eliminating differences between families in amounts used. It is believed that the estimates were conservatively low, and the garden produce thus estimated formed only a small part of the total for vegetables.

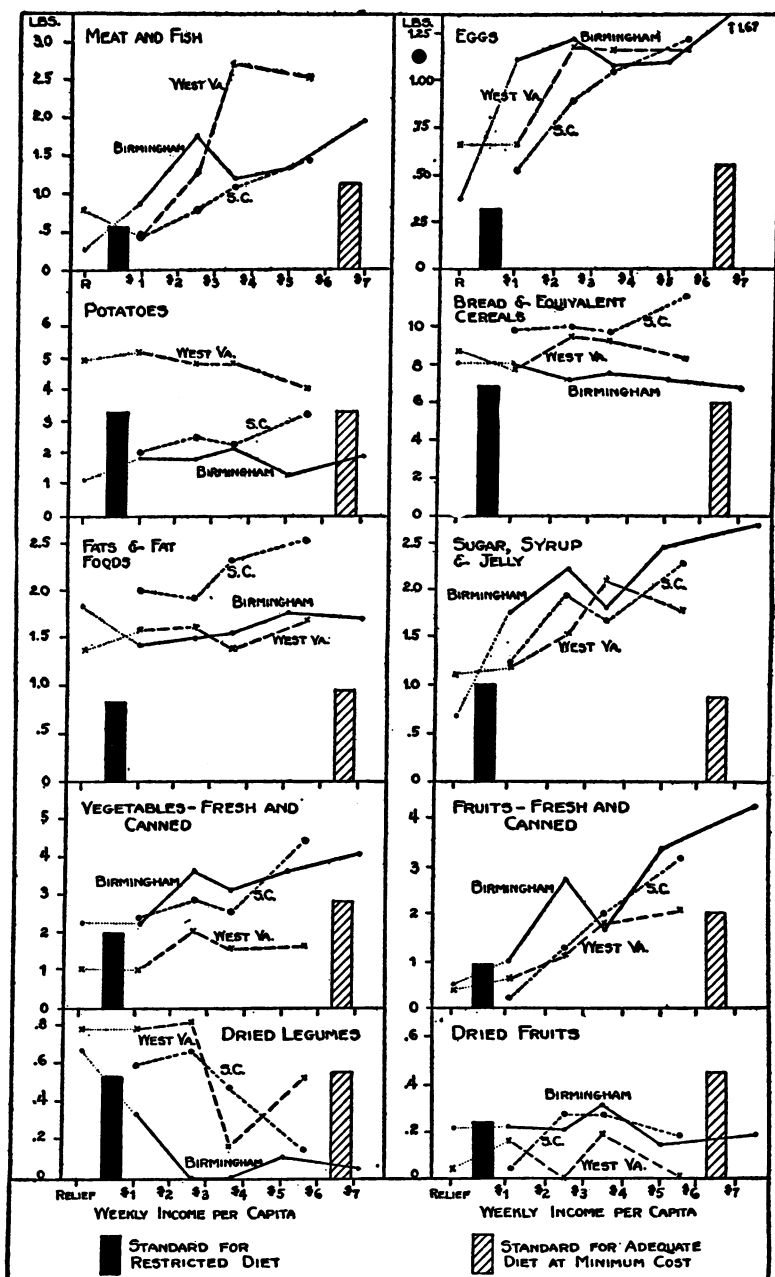


FIGURE 2.—Average number of pounds per week, per adult male unit, of specific foods or groups of foods reported by families of different incomes in Birmingham, cotton-mill villages in South Carolina, and mining towns in West Virginia, April-May 1933, compared with recommended amounts in 2 low-cost diets. The height of the bar indicates the recommended amount; its position on the income scale has no significance.



milk per week for each child under 17 years of age (table 11 and fig. 3). Among the 27 cow-owning families, only 4 had less than 6 quarts of milk per child per week.

TABLE 11.—*Weekly milk supply according to income of families which did not own a cow, in cotton-mill villages in South Carolina, May 1933*

Weekly income per capita	Quarts weekly per adult male unit			Number of families with children	Percent of families having specified quarts weekly per child under 17 years of age		
	Standard		Average for observed families <sup>1</sup>		Less than 3	3 to 5.9	6 or more
	Adequate	Restricted					
Less than \$2.00.....	6.85	4.09	1.54	22	77.3	18.2	4.5
\$2 to \$2.99.....	6.29	4.00	2.13	24	70.8	20.8	8.3
\$3 to \$3.99.....	6.09	3.89	2.90	15	40.0	40.0	20.0
\$4 or more.....	5.58	3.66	3.87	13	15.4	23.1	61.5

<sup>1</sup> Includes fresh and canned milk, equivalent buttermilk and butter, and equivalent cheese.

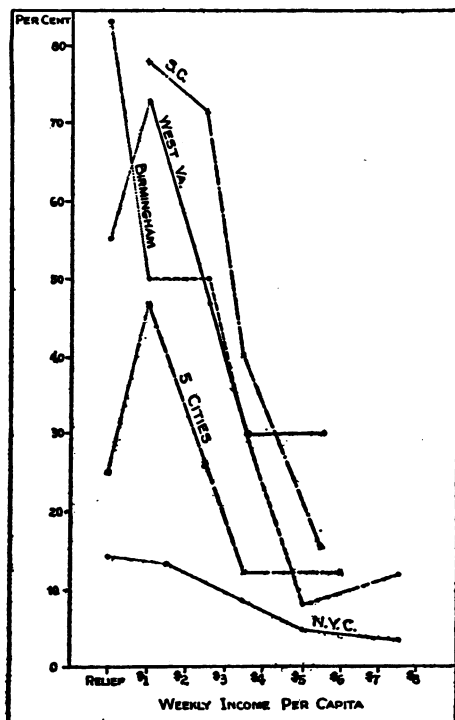


FIGURE 3.—Percent of families of various incomes which had a weekly milk supply of less than 3 quarts per child under 17 years of age in New York City, in a group of 5 large industrial cities, in Birmingham, in cotton-mill villages in South Carolina, and in mining towns in West Virginia in the spring of 1933.

It is of interest to compare the average food supply of these 102 mill-village families with that reported for approximately the same season by Goldberger, Wheeler, and Sydenstricker for 743 families in

1916. Average weekly supplies of various foods per adult male unit are shown in table 12. With respect to most basic items, including lard and fat meat, cereal foods, and lean meat, the amounts reported in the present study are strikingly similar to those found in the 1916 study. The quantity of sugar reported in 1933, however, is twice that of 1916. The supply of potatoes, fresh and canned vegetables, and fruits is about double that given for 1916 and probably reflects an improvement in the supplies in the local stores in addition to the omission in the 1916 study of home-produced vegetables. The milk supply also averaged about one-third more in 1933 than in 1916; this, in part at least, is a result of the fact that 27 percent of the families studied in 1933 owned a cow as against 20 percent in 1916. Eggs, also, were used in greater quantities than in 1916. The increased use of protective foods by the mill-village families is of particular interest, because pellagra is endemic in the mill villages, and educational campaigns on the relation of diet to pellagra have been carried on in recent years.

TABLE 12.—*Comparison of food supply in 1933 of families in cotton-mill villages in South Carolina with that in 1916*<sup>1</sup>

Article of food	Approximate pounds per week per adult male unit	
	102 households in 4 villages in 1933	743 households in 7 villages in 1916
Milk (quarts).....	4.23	3.10
Meat, fowl, fish.....	.98	.87
Eggs.....	.85	.59
Cheese.....	.08	.03
Fats.....	1.71	1.79
Cereals.....	7.91	8.18
Sugar.....	1.25	.64
Sirup and preserves.....	.47	.33
Potatoes, Irish and sweet.....	2.35	1.16
Vegetables, fresh and canned.....	2.81	1.46
Vegetables, dried.....	.46	.44
Fruits, fresh and canned.....	1.37	.65
Fruits, dried.....	.16	.13

<sup>1</sup> The 1916 data are from a study of the Relation of Diet to Pellagra Incidence, by Goldberger, Joseph, Wheeler, G. A., and Sydenstricker, Edgar. Pub. Health Rep., Mar. 19, 1920 (Reprint No. 587). The amounts given in the report (pp. 49 and 50 of the reprint) were average daily number of grams per adult male unit (Atwater scale), and these have been converted to pounds per week and adjusted for the average difference in the Atwater scale and the scale used in this study.

<sup>2</sup> Includes bacon, but not salt pork, and pork sausage, fresh and cured.

*Coal-mining towns in West Virginia.*—For families in each income class in the mining communities in West Virginia the average amounts of cereal foods, fats, sugar, potatoes, and dried vegetables were very large. These staple foods, together with a liberal supply of eggs, were the principal items in the dietary of this mining district. Families with income less than \$2 per week per person and those receiving food relief had approximately one-half the restricted standard for fresh

and canned vegetables and fruits. Families in higher income classes also had less than the restricted standard of fresh and canned vegetables, but the supply of fruits equalled or exceeded this standard. Very little lean meat, less than the restricted standard, was used by the lowest-income families, but those with incomes of \$4 or more had twice the adequate standard.

For no income group was the average supply of milk equal to the standard for a restricted dietary. Only 11 percent of families receiving free milk had 6 quarts a week per child, and 56 percent had less than 3 quarts.<sup>13</sup> When milk was not donated, less than 3 quarts per week per child was used by 73 percent of families with income less than \$2 per week per person, and by 30 percent of the families with \$3 or more (table 13).

TABLE 13.—Weekly milk supply of families according to income in mining towns in West Virginia, April 1933

Weekly income per capita	Quarts weekly per adult male unit			Number of families with children	Percent of families having specified quarts weekly per child under 17 years of age		
	Standard		Average for observed families <sup>1</sup>		Less than 3	3 to 5.9	6 or more
	Adequate	Re-stricted					
Under \$3 (milk donated)-----	7.52	4.45	2.78	27	55.6	33.3	11.1
Under \$3 (flour donated)-----	5.71	3.80	2.03	16	56.3	25.0	18.7
Under \$2-----	7.25	4.24	1.82	11	72.7	27.3	0
\$2 to \$2.99-----	6.43	3.90	2.93	17	47.1	29.4	23.5
\$3 or more-----	6.30	3.93	3.24	23	30.4	52.2	17.4

<sup>1</sup> Includes fresh and canned milk and equivalent amounts of cheese.

#### SICKNESS AND FOOD SUPPLY

No attempt has been made to correlate the family dietary with the sickness records obtained for the 3 months immediately preceding the health survey of which these data on food supply were a part. When the food records were collected, it was expected only that they would give an indication of whether nutritional deficiencies might be a factor contributing to ill health in these cities. Although housing and other factors in the standard of living also are adversely affected by low income, the very marked association between income and the adequacy of the diet and the well-known inverse correlation between income and the incidence of illness give good reason to believe that there is some association between sickness and diet.

The incidence of sickness in each surveyed city is given in a preceding report.<sup>14</sup> Sickness showed a consistent correlation with the eco-

<sup>13</sup> Milk was also given to many children at school, but the amounts were not recorded.

<sup>14</sup> Rates for various income and employment groups in each city are included in the first report in this series. See footnote 1.

nomie status of the families, the lower the income the higher the sickness rate, and also a striking association with unemployment, families with no employed workers having about 50 percent more cases of disabling illness than those with a full-time worker. These results are consistent with the situation found in the food supply, which, at income levels of less than \$3 or \$4 per person per week showed a marked tendency to be poorly balanced, to include less than "safe" requirements of milk and other "protective" foods, and to be insufficient in quantity. Sickness rates in the early spring of 1933 were highest in families with less than an annual income of \$150 per person in 1932.

Specific food deficiency diseases were not found among the illnesses reported by the families surveyed in these cities, with the exception of some cases of pellagra in South Carolina. The relationship between the diet and sickness, if it is accepted that there was some association, would seem to be more a matter of lowered vitality and reduced resistance to disease.

#### SUMMARY

Records of a week's food supply for families at several low income levels or on relief in five large industrial cities, in New York City, in Birmingham, in South Carolina cotton-mill villages, and in a mining district of West Virginia were collected in the spring of 1933.

The average energy value of the food supply was nearly 20 percent below the adequate standard of 3,000 calories per day per adult male unit for families in the five cities with a weekly income of less than \$2 per person, and about one-fourth of these families had less than 2,200 calories daily. The calorie supply was similarly low for families in New York City with incomes less than \$4 weekly per person. Relief families, except those on work relief in New York City, had a higher average supply of calories than the poorest non-relief groups, but 25 percent in the five cities and 29 percent in New York had less than 2,200 calories per adult male unit. The average caloric value of the food supply of families at the lowest income levels in the other three communities equalled or exceeded the adequate standard, owing to the general use of large quantities of fat meat, flour or other cereal foods, and sugar.

A greatly diminished use of milk, vegetables, and fruits was associated with lower incomes in all the communities in the study. In the five cities the average supply of milk purchased by families with income less than \$2 per capita per week was one-third less than minimum requirements, and average amounts of fresh and canned vegetables and fruits were about equal to minimum needs. Bread and cereals were also used in smaller amounts than is recommended for a low-cost diet. On the other hand, amounts of meat and fish, eggs, and sugary foods purchased, though less than amounts purchased

by higher-income families, exceeded the quantities recommended for an adequate low-cost diet. The result was a dietary low in calcium and vitamins.

In New York City the average dietary of the lowest-income families included adequate quantities of fresh and canned vegetables and minimum amounts of milk. However, the period of canvass in New York City extended later into the spring season than did that in the five cities. In these families which had a food supply with less caloric value than the minimum need, the use of such cheap high-caloric foods as bread and cereals, dried legumes, and potatoes was less than is recommended for a low-cost diet.

The families in the mining towns of West Virginia and the cotton-mill villages of South Carolina whose weekly income was less than \$2 per person purchased less than half the requirements for milk in a restricted diet and also used too little fruit. The average amount of fresh and canned vegetables reported by families in the mining towns was below minimum requirements, and that for mill-village families approximately equalled the minimum requirements.

In Birmingham the food supply of the lowest-income families was deficient chiefly in milk.

(EXPLANATORY NOTE: In this study all men and women from 18 to 59 years of age were counted as moderately active; for 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; and boys 16 or 17 years of age at work were given an allowance of 120 and those in school or at home 110. For men who were unemployed, throughout the week, the allowance is a little high, and for those employed at heavy work it is too low; but it did not seem practicable to attempt to make an adjustment for the amount of activity. For average requirements of family groups, the adjustment would make very little difference, probably not more than 2 or 3 percent, in view of the large amount of part-time employment as well as unemployment and the fact that employed males comprise only 20 to 25 percent of the population. For some individual families, the equivalent adult male requirement used is no doubt much too low.)

## DEATHS DURING WEEK ENDED JANUARY 4, 1936

[From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Jan. 4, 1936	Correspond- ing week, 1935
Data from 86 large cities of the United States:		
Total deaths.....	9, 909	9, 698
Deaths per 1,000 population, annual basis.....	13. 8	13. 5
Deaths under 1 year of age.....	598	610
Deaths under 1 year of age per 1,000 estimated live births.....	54	56
Data from industrial insurance companies:		
Policies in force.....	67, 860, 830	67, 105, 928
Number of death claims.....	11, 468	10, 739
Death claims per 1,000 policies in force, annual rate.....	8. 8	8. 3

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

#### Reports for Weeks Ended Jan. 11, 1936, and Jan. 12, 1935

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 11, 1936, and Jan. 12, 1935*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935
<b>New England States:</b>								
Maine.....	4	2	5	3	235	12	0	0
New Hampshire.....					42	24	0	0
Vermont.....	2				117	4	0	0
Massachusetts.....	12	12			269	287	5	0
Rhode Island.....		6		5	138	13	0	0
Connecticut.....	4	4	1	239	87	429	1	0
<b>Middle Atlantic States:</b>								
New York.....	43	64	1 17	1 52	971	1, 110	19	2
New Jersey.....	15	27	14	323	41	66	3	0
Pennsylvania.....	84	73			365	1, 799	10	3
<b>East North Central States:</b>								
Ohio.....	45	67	14	990	73	586	6	10
Indiana.....	51	52	30	137	11	499	3	1
Illinois.....	77	45	57	227	67	1, 760	13	3
Michigan.....	9	12	1	52	82	252	3	2
Wisconsin.....	2	6	35	30	77	626	2	2
<b>West North Central States:</b>								
Minnesota.....		7			122	1, 199	1	2
Iowa.....	12	14	2	50	11	1, 483	5	1
Missouri.....	37	39	215	364	16	193	1	1
North Dakota.....		1		7	27	203	1	0
South Dakota.....	1	3			26	68	0	0
Nebraska.....	9	4			79	172	0	4
Kansas.....	12	18	32	21	18	468	3	0
<b>South Atlantic States:</b>								
Delaware.....	1			11	203		0	0
Maryland <sup>2</sup> .....	14	10	24	389	98	139	6	3
District of Columbia.....	22	6	1	22	2	9	5	0
Virginia.....	25	32			19	312	3	7
West Virginia.....	15	32	87	158	2	479	7	1
North Carolina.....	21	30	9	491	13	689	3	3
South Carolina <sup>3</sup> .....	1	5	401	1, 832	7	7	0	0
Georgia <sup>3</sup> .....	13	10	276	1, 944			3	1
Florida <sup>3</sup> .....	7	9	5	14	1	31	2	0

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers  
for weeks ended Jan. 11, 1936, and Jan. 12, 1935—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935
East South Central States:								
Kentucky.....	32	38	79	316	83	650	8	4
Tennessee.....	37	28	131	387	1	42	10	5
Alabama <sup>1</sup> .....	20	20	352	521	21	143	4	3
Mississippi <sup>2,3</sup> .....	6	15					1	0
West South Central States:								
Arkansas.....	16	20	94	161		26	8	0
Louisiana.....	13	49	15	16	23	56	1	1
Oklahoma <sup>4</sup> .....	15	17	183	120	1	23	16	3
Texas <sup>5</sup> .....	74	77	271	338	23	51	11	3
Mountain States:								
Montana.....		4	7	482	9	108	1	1
Idaho.....	2			4	61	11	0	0
Wyoming.....	1				4	12	0	0
Colorado.....	7	12			5	624	1	1
New Mexico.....	4	11	12	9	2	41	1	1
Arizona.....	7	1	95	67	1	8	3	0
Utah <sup>1</sup> .....					3	6	0	0
Pacific States:								
Washington.....		5		3	338	58	0	0
Oregon.....	12	1	24	96	686	40	0	0
California.....	32	49	63	142	733	144	4	2
Total.....	816	937	2,561	10,023	5,203	14,952	174	70
First 2 weeks of year.....	1,516	1,780	4,347	16,988	8,412	25,274	304	138

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935
New England States:								
Maine.....	1	0	15	22	0	0	0	1
New Hampshire.....	0	0	6	6	0	0	0	0
Vermont.....	0	0	12	27	0	0	1	0
Massachusetts.....	1	0	330	169	0	0	0	0
Rhode Island.....	0	0	28	14	0	0	1	0
Connecticut.....	0	0	78	61	0	0	3	3
Middle Atlantic States:								
New York.....	0	2	754	627	0	0	10	9
New Jersey.....	2	0	158	128	0	0	4	4
Pennsylvania.....	3	1	536	660	0	0	9	3
East North Central States:								
Ohio.....	1	3	346	805	0	2	3	4
Indiana.....	0	0	269		3	5	0	2
Illinois.....	0	0	708	748	19	0	5	5
Michigan.....	0	0	346	304	0	1	2	8
Wisconsin.....	0	0	495	585	13	21	1	0
West North Central States:								
Minnesota.....	0	0	358	147	7	3	1	0
Iowa.....	0	0	185	88	12	2	0	1
Missouri.....	0	0	273	81	0	5	1	7
North Dakota.....	0	0	104	78	16	0	0	0
South Dakota.....	0	0	100	18	27	14	0	1
Nebraska.....	0	0	160	67	56	39	1	0
Kansas.....	0	0	143	131	13	1	8	2
South Atlantic States:								
Delaware.....	0	0	15	13	0	0	0	1
Maryland <sup>1,2</sup> .....	1	0	96	100	0	0	6	4
District of Columbia.....	0	0	24	27	0	0	5	0
Virginia.....	0	0	66	72	0	0	1	5
West Virginia.....	0	1	53	136	0	1	0	7
North Carolina.....	1	0	31	69	1	0	1	7
South Carolina <sup>3</sup> .....	2	0	6	9	0	0	0	1
Georgia <sup>4</sup> .....	0	0	18	20	4	0	3	4
Florida <sup>5</sup> .....	0	1	5	16	0	0	1	0

See footnotes at end of table.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended Jan. 11, 1936, and Jan. 12, 1935—Continued*

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935	Week ended Jan. 11, 1936	Week ended Jan. 12, 1935
<b>East South Central States:</b>								
Kentucky.....	0	0	86	92	1	0	7	12
Tennessee.....	1	0	50	61	0	1	0	4
Alabama <sup>2</sup> .....	0	0	24	24	0	0	2	1
Mississippi <sup>2,3</sup> .....	0	0	10	24	0	1	5	1
<b>West South Central States:</b>								
Arkansas.....	0	0	11	11	0	4	3	7
Louisiana.....	0	1	18	48	1	1	4	12
Oklahoma <sup>4</sup> .....	0	1	36	60	0	1	6	7
Texas <sup>3</sup> .....	0	3	90	53	0	4	4	46
<b>Mountain States:</b>								
Montana.....	0	1	211	23	34	0	2	1
Idaho.....	1	0	54	3	2	0	1	1
Wyoming.....	0	0	91	6	0	8	0	0
Colorado.....	0	0	167	269	0	4	0	0
New Mexico.....	0	0	37	23	0	0	6	3
Arizona.....	0	0	33	23	0	0	0	0
Utah <sup>1</sup> .....	0	0	97	26	0	0	0	0
<b>Pacific States:</b>								
Washington.....	0	3	69	48	31	109	2	1
Oregon.....	1	1	53	95	2	3	3	0
California.....	7	13	323	247	12	10	9	4
<b>Total.....</b>	<b>22</b>	<b>31</b>	<b>7, 176</b>	<b>6, 364</b>	<b>254</b>	<b>240</b>	<b>121</b>	<b>179</b>
<b>First 2 weeks of year.....</b>	<b>43</b>	<b>60</b>	<b>13, 217</b>	<b>11, 664</b>	<b>417</b>	<b>415</b>	<b>220</b>	<b>387</b>

<sup>1</sup> New York City only.

<sup>2</sup> Week ended earlier than Saturday.

<sup>3</sup> Typhus fever, week ended Jan. 11, 1936, 22 cases, as follows: Maryland, 1; South Carolina, 1; Georgia, 7; Florida, 1; Alabama, 9; Mississippi, 1; Texas, 2.

<sup>4</sup> Exclusive of Oklahoma City and Tulsa.

## SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of cases reported monthly by States is published weekly and covers only those States from which reports are received during the current week:

State	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Mala- ria	Meas- les	Pel- lagra	Polio- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
<i>December 1935</i>										
Connecticut.....	2	24	44	-----	382	-----	6	191	0	4
Florida.....	1	45	12	214	3	1	0	31	0	8
Maine.....	1	11	5	-----	878	-----	16	103	0	11
Missouri.....	17	215	515	17	46	-----	4	656	10	14
Nebraska.....	5	24	-----	-----	129	-----	0	807	192	1
North Carolina.....	6	186	58	-----	29	18	13	273	2	19
West Virginia.....	12	95	352	-----	25	-----	0	293	1	9
Wyoming.....	-----	1	2	-----	13	-----	0	331	7	1

### December 1935

Chicken pox:	Cases	Epidemic encephalitis:	Cases	Mumps—Con.	Cases
Connecticut.....	668	Connecticut.....	1	West Virginia.....	97
Florida.....	23	Missouri.....	2	Wyoming.....	39
Maine.....	271	German measles:		Ophthalmia neonatorum:	
Missouri.....	375	Connecticut.....	183	North Carolina.....	2
Nebraska.....	177	Maine.....	11	Paratyphoid fever:	
North Carolina.....	426	North Carolina.....	9	Connecticut.....	2
West Virginia.....	366	Mumps:		North Carolina.....	1
Wyoming.....	58	Connecticut.....	325	Rabies in animals:	
Dengue:		Florida.....	37	Missouri.....	2
Florida.....	1	Maine.....	678	Rabies in man:	
Dysentery:		Missouri.....	399	North Carolina.....	1
Florida (amoebic).....	1	Nebraska.....	75		
Missouri.....	3				



## December 1935—Continued

	Cases	Trichinosis:	Cases	Undulant fever—Con.	Cases
Rocky Mountain spotted fever:		Connecticut.....	3	Nebraska.....	1
North Carolina.....	2	Tularaemia:		North Carolina.....	1
Septic sore throat:		Missouri.....	1	Vincent's infection:	
Connecticut.....	6	Wyoming.....	1	Maine.....	5
Maine.....	2	Typhus fever:		Whooping cough:	
Missouri.....	72	Florida.....	2	Connecticut.....	386
Nebraska.....	2	North Carolina.....	3	Florida.....	18
North Carolina.....	15	Undulant fever:		Maine.....	212
Wyoming.....	18	Connecticut.....	8	Missouri.....	156
Tetanus:		Maine.....	1	Nebraska.....	33
Connecticut.....	2	Missouri.....	2	North Carolina.....	130
Trachoma:				West Virginia.....	29
Missouri.....	59			Wyoming.....	29

## CASES OF VENEREAL DISEASES REPORTED FOR NOVEMBER 1935

These reports are published monthly for the information of health officers in order to furnish current data as to the prevalence of the venereal diseases. The figures are taken from reports received from State and city health officers. They are preliminary and are therefore subject to correction. It is hoped that the publication of these reports will stimulate more complete reporting of these diseases.

## Reports from States

	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Alabama.....	802	2.96	278	1.03
Arizona.....	37	.81	120	2.63
Arkansas.....	212	1.13	106	.57
California.....	1,199	1.95	1,376	2.23
Colorado.....	37	.35	30	.28
Connecticut.....	181	1.09	158	.95
Delaware.....	142	5.87	46	1.90
District of Columbia.....	165	3.32	149	3.00
Florida.....	235	1.49	91	.58
Georgia.....	914	3.14	479	1.65
Idaho.....	0	0	0	0
Illinois.....	1,309	1.66	1,099	1.38
Indiana.....	215	.65	124	.38
Iowa <sup>1</sup> .....	102	.41	149	.60
Kansas.....	88	.46	65	.34
Kentucky.....	264	.99	214	.81
Louisiana <sup>1</sup> .....	128	.59	81	.37
Maine.....	47	.58	39	.49
Maryland.....	644	3.85	234	1.40
Massachusetts.....	464	1.07	476	1.10
Michigan.....	455	.89	489	.96
Minnesota.....	261	1.00	299	1.15
Mississippi.....	1,023	4.97	1,804	8.77
Missouri.....	815	2.22	690	1.88
Montana <sup>1</sup> .....	20	.37	36	.67
Nebraska.....	25	.18	67	.48
Nevada <sup>1</sup> .....				
New Hampshire.....	15	.32	33	.70
New Jersey.....	535	1.26	313	.74
New Mexico <sup>1</sup> .....	51	1.17	28	.64
New York <sup>1</sup> .....	4,465	3.42	1,087	.83
North Carolina.....	1,304	3.95	467	1.41
North Dakota.....	25	.36	114	1.66
Ohio <sup>1</sup> .....	526	.77	257	.38
Oklahoma <sup>1</sup> .....	182	.74	153	.62
Oregon.....	52	.53	153	1.55
Pennsylvania.....	390	.39	188	.19
Rhode Island.....	134	1.90	61	.87
South Carolina <sup>1</sup> .....	281	1.61	347	1.98
South Dakota.....	6	.09	39	.55
Tennessee.....	887	3.31	813	3.04
Texas <sup>1</sup> .....	156	.26	46	.08
Utah <sup>1</sup> .....				
Vermont.....	26	.72	37	1.02
Virginia.....	515	2.11	328	1.34
Washington.....	172	1.07	207	1.29
West Virginia.....	184	1.03	97	.54
Wisconsin <sup>1</sup> .....	28	.09	179	.60
Wyoming <sup>1</sup> .....				
Total.....	19,708	1.57	13,636	1.09

<sup>1</sup>Incomplete.<sup>2</sup>Not reporting.<sup>3</sup>Only cases of syphilis in the infectious stage are reported.

## Reports from cities of 200,000 population or over

	Syphilis		Gonorrhea	
	Cases reported during month	Monthly case rates per 10,000 population	Cases reported during month	Monthly case rates per 10,000 population
Akron, Ohio.....	11	0.40	16	0.59
Atlanta, Ga.....	169	5.89	134	4.67
Baltimore, Md.....	359	4.35	139	1.68
Birmingham, Ala.....	123	4.36	136	4.82
Boston, Mass.....	157	1.99	182	2.30
Buffalo, N. Y.....	145	2.45	92	1.55
Chicago, Ill.....	809	2.27	805	2.26
Cincinnati, Ohio.....	54	1.16	39	.84
Cleveland, Ohio.....	251	2.70	98	1.05
Columbus, Ohio.....	26	.85	35	1.14
Dallas, Tex.....	123	4.25	10	.35
Dayton, Ohio.....	1	.05	0	0
Denver, Colo. <sup>4</sup> .....				
Detroit, Mich.....	263	1.52	280	1.62
Houston, Tex. <sup>5</sup> .....	196	5.85	65	1.94
Indianapolis, Ind.....	24	.64	68	1.80
Jersey City, N. J.....	1	.03	0	0
Kansas City, Mo.....	66	1.57	10	.24
Los Angeles, Calif.....	518	3.62	409	2.86
Louisville, Ky.....	304	9.38	144	4.44
Memphis, Tenn.....	246	9.21	88	3.30
Milwaukee, Wis.....	6	.10	42	.69
Minneapolis, Minn.....	65	1.34	115	2.36
Newark, N. J. <sup>4</sup> .....				
New Orleans, La.....	70	1.46	68	1.42
New York, N. Y.....	3,803	5.21	840	1.15
Oakland, Calif.....	21	.69	46	1.52
Omaha, Nebr.....	8	.36	6	.27
Philadelphia, Pa.....	210	1.06	32	.16
Pittsburgh, Pa.....	63	.92	41	.60
Portland, Oreg.....	40	1.27	88	2.80
Providence, R. I.....	65	2.51	27	1.04
Rochester, N. Y.....	70	2.08	66	1.96
St. Louis, Mo.....	520	6.22	522	6.25
St. Paul, Minn.....	33	1.17	35	1.24
San Antonio, Tex. <sup>4</sup> .....				
San Francisco, Calif.....	118	1.76	118	1.76
Seattle, Wash.....	139	3.66	149	3.92
Syracuse, N. Y. <sup>6</sup> .....	23	1.06	41	1.88
Toledo, Ohio.....	37	1.22	33	1.08
Washington, D. C. <sup>7</sup> .....	165	3.32	149	3.00

<sup>2</sup> Not reporting.<sup>4</sup> No report for current month.<sup>5</sup> Data for Jefferson Davis and Hermann hospitals; physicians are not compelled to report venereal diseases.<sup>6</sup> Reported by Syracuse Free Dispensary.<sup>7</sup> Reported by Social Hygiene Clinic.

## WEEKLY REPORT FROM CITIES

City reports for week ended Jan. 4, 1936

This table summarizes the reports received weekly from a selected list of 140 cities for the purpose of showing a cross section of the current urban incidence of the communicable diseases listed in the table. Weekly reports are received from about 700 cities, from which the data are tabulated and filed for reference.

State and city	Diph- theria cases	Influenza		Meas- les cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Maine:											
Portland.....	0	-----	0	1	2	0	0	0	0	10	28
New Hampshire:											
Concord.....	0	-----	0	0	3	1	0	2	0	0	11
Nashua.....	0	-----	-----	0	-----	0	0	-----	0	0	-----
Vermont:											
Barre.....	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	2
Burlington.....	0	-----	0	0	0	1	0	0	0	0	13
Rutland.....	0	-----	0	2	0	4	0	0	0	0	6
Massachusetts:											
Boston.....	0	-----	1	28	39	61	0	19	0	6	270
Fall River.....	0	-----	1	1	8	2	0	2	0	0	36
Springfield.....	1	-----	0	0	6	4	0	0	0	12	52
Worcester.....	0	-----	0	0	10	27	0	0	0	4	64
Rhode Island:											
Pawtucket.....	0	-----	0	0	0	0	0	0	0	0	18
Providence.....	0	-----	1	36	16	11	0	0	0	3	85
Connecticut:											
Bridgeport.....	0	1	1	0	7	6	0	0	1	0	44
Hartford.....	0	-----	0	3	2	1	0	0	0	16	30
New Haven.....	0	-----	1	0	7	0	0	1	1	9	75
New York:											
Buffalo.....	0	-----	0	30	23	46	0	3	0	4	162
New York.....	34	21	-----	212	-----	171	0	-----	3	64	-----
Rochester.....	0	-----	0	2	8	5	0	3	0	2	93
Syracuse.....	0	-----	1	1	10	7	0	1	0	9	56
New Jersey:											
Camden.....	1	-----	0	0	4	5	0	0	1	0	34
Newark.....	1	2	0	3	20	27	0	8	0	16	134
Trenton.....	0	1	0	0	2	0	0	4	0	2	46
Pennsylvania:											
Philadelphia.....	7	8	4	114	38	76	0	28	0	45	564
Pittsburgh.....	3	1	0	19	36	58	0	7	0	10	193
Reading.....	0	-----	0	3	4	2	0	0	0	2	36
Scranton.....	2	-----	-----	8	0	4	0	-----	0	0	-----
Ohio:											
Cincinnati.....	14	-----	4	0	13	10	0	7	0	1	140
Cleveland.....	5	38	2	5	33	20	0	13	0	31	220
Columbus.....	5	3	3	0	9	14	0	5	0	3	112
Toledo.....	0	-----	-----	19	4	1	0	8	0	0	70
Indiana:											
Anderson.....	0	-----	0	0	2	2	0	0	0	2	8
Fort Wayne.....	3	-----	0	0	2	5	0	1	0	0	23
Indianapolis.....	2	-----	1	0	26	16	0	1	0	5	123
Muncie.....	0	-----	0	0	2	2	0	2	0	0	13
South Bend.....	0	-----	1	0	3	4	0	0	0	1	23
Terre Haute.....	0	-----	0	0	0	2	0	0	0	0	23
Illinois:											
Alton.....	2	-----	0	0	2	1	0	0	0	0	15
Chicago.....	13	8	1	11	71	207	0	38	1	126	710
Elgin.....	0	-----	0	0	1	1	0	0	0	1	10
Moline.....	0	3	0	0	0	8	0	0	0	0	9
Springfield.....	0	-----	0	0	3	4	0	0	0	0	26
Michigan:											
Detroit.....	6	-----	4	10	52	54	0	13	0	70	319
Flint.....	1	-----	2	7	9	9	-----	-----	-----	7	32
Grand Rapids.....	0	-----	0	2	1	13	0	1	0	6	38
Wisconsin:											
Kenosha.....	0	-----	0	1	0	4	0	0	0	8	3
Milwaukee.....	1	2	2	4	11	38	0	3	0	76	114
Racine.....	0	-----	0	0	0	16	0	0	1	5	11
Superior.....	0	-----	0	0	0	3	0	0	0	0	8
Minnesota:											
Duluth.....	0	-----	0	2	0	1	0	1	0	0	20
Minneapolis.....	0	-----	1	10	11	118	0	2	1	0	117
St. Paul.....	1	-----	0	12	8	25	0	1	1	4	64

## City reports for week ended Jan. 4, 1936—Continued

State and city	Diph- theria cases	Influenza		Meas- sles cases	Pneu- monia deaths	Scar- let fever cases	Small- pox cases	Tuber- culosis deaths	Ty- phoid fever cases	Whoop- ing cough cases	Deaths, all causes
		Cases	Deaths								
Iowa:											
Cedar Rapids....	0			0		2	0		0	2	
Davenport.....	0			0		6	0		0	0	
Des Moines.....	2			0		4	0		0	1	30
Sioux City.....	1			0		6	1		0	0	
Waterloo.....	2			0		1	0		0	2	
Missouri:											
Kansas City....	2		0	1	19	19	0	1	0	0	117
St. Joseph.....	0		0	1	2	3	0	1	0	0	17
St. Louis.....	5		1	4	17	36	0	8	0	3	263
North Dakota:											
Fargo.....	0		0	0	0	3	0	1	0	0	5
Grand Forks....	0			0		0	0		0	0	
Minot.....	0		0	0	0	0	0	0	0	0	6
South Dakota:											
Aberdeen.....	0			0		1	0		0	0	
Nebraska:											
Omaha.....	1		0	7	13	101	6	1	0	0	71
Kansas:											
Lawrence.....	0		0	1	0	1	0	0	0	0	4
Topeka.....					2	6					10
Wichita.....	0		0	0	8	7	0	0	0	2	36
Delaware:											
Wilmington....	1		0	2	2	1	0	0	0	2	29
Maryland:											
Baltimore.....	2	5	0	6	28	25	0	9	0	9	250
Cumberland....	1		0	0	0	3	0	0	0	0	13
Frederick.....	0		0	0	0	0	0	0	0	0	3
District of Colum- bia:											
Washington....	18	4	4	5	29	18	0	9	1	3	186
Virginia:											
Lynchburg.....	1		0	0	1	0	0	0	0	0	12
Richmond.....	0		0	2	8	6	0	3	0	1	71
Roanoke.....	0		1	0	2	3	0	0	0	0	16
West Virginia:											
Charleston.....	0		0	0	3	5	0	0	0	0	11
Huntington....	0			0		3	0		0	0	
Wheeling.....	0		0	0	3	3	0	0	0	0	25
North Carolina:											
Gastonia.....	1		0	0	0	0	0	0	0	0	5
Raleigh.....	0		0	0	1	1	0	0	0	0	9
Wilmington....	0		0	0	2	0	0	0	0	0	19
Winston-Salem..	0	1	0	1	1	2	0	0	0	0	13
South Carolina:											
Charleston.....	0	23	1	1	5	1	0	1	0	0	32
Columbia.....					10						34
Florence.....	0		0	0	0	0	0	0	0	0	6
Greenville....	0		0	1	2	0	0	0	0	0	7
Georgia:											
Atlanta.....	2	46	2	0	18	9	0	2	1	0	54
Brunswick.....	0	1	1	0	0	0	0	0	0	0	7
Savannah.....	1	33	4	0	8	6	0	0	0	0	60
Florida:											
Miami.....	1		0	1	1	2	0	2	0	0	40
Tampa.....	0	1	1	0	2	3	0	0	0	0	33
Kentucky:											
Ashland.....	1			0		0	0		0	0	
Covington.....	2		0	1	4	2	0	0	0	0	25
Lexington.....	0		0	0	3	2	0	2	0	0	26
Louisville....	2	4	0	1	6	11	0	5	0	3	72
Tennessee:											
Knoxville.....	0	13	1	0	5	0	0	0	0	0	51
Memphis.....	5		5	0	15	8	0	7	0	1	115
Nashville.....	2		5	0	13	0	0	3	0	0	60
Alabama:											
Birmingham....	4	9	2	0	16	3	0	5	0	0	88
Mobile.....	1	2	1	0	1	0	0	1	0	0	23
Montgomery....	1	4		0		0	0		1	0	
Arkansas:											
Fort Smith....	0			0		0	0		0	0	
Little Rock....	0		0	0	7	6	0	0	0	0	7
Louisiana:											
Lake Charles... New Orleans....	1 2		0 2	0 9	0 21	0 7	0 0	0 12	0 0	0 2	10 186
Shreveport....	2		0	1	8	5	0	5	0	0	50
Oklahoma:											
Oklahoma City..	1	17	0	0	6	6	0	1	0	3	43

## City reports for week ended Jan. 4, 1936—Continued

State and city	Diphtheria cases	Influenza		Measles cases	Pneumonia deaths	Scarlet fever cases	Small-pox cases	Tuberculosis deaths	Typhoid fever cases	Whooping cough cases	Deaths, all causes
		Cases	Deaths								
<b>Texas:</b>											
Dallas.....	4	2	1	0	12	3	0	2	0	0	78
Fort Worth.....	1		2	0	5	7	0	0	1	0	48
Galveston.....	1		0	0	1	3	0	1	0	0	14
Houston.....	5		1	1	9	2	0	2	0	0	80
San Antonio.....	8		2	0	14	3	0	8	0	0	85
<b>Montana:</b>											
Billings.....	0		0	0	3	30	0	0	0	1	8
Great Falls.....	0		0	0	0	4	0	0	0	3	2
Helena.....	0	1	1	2	1	1	0	0	0	0	6
Missoula.....	0		0	0	2	21	0	0	0	0	8
<b>Idaho:</b>											
Boise.....	0		0	7	2	6	0	0	0	0	14
<b>Colorado:</b>											
Colorado Springs.....	1		0	1	1	9	0	0	0	3	19
Denver.....	3		5	4	19	30	1	6	1	9	117
Pueblo.....	1		0	0	2	13	0	0	0	0	9
<b>New Mexico:</b>											
Albuquerque.....	0	2	0	0	3	14	0	4	0	3	19
<b>Utah:</b>											
Salt Lake City.....	0		0	1	2	49	0	1	0	7	38
<b>Nevada:</b>											
Reno.....											
<b>Washington:</b>											
Seattle.....	0		2	19	13	12	0	3	0	2	102
Spokane.....	0		0	5	5	3	1	0	0	1	32
Tacoma.....											
<b>Oregon:</b>											
Portland.....	0		1	135	9	18	0	1	1	2	87
Salem.....	0	1		0		0	0		0	0	
<b>California:</b>											
Los Angeles.....	7	26	3	56	31	42	1	21	1	22	351
Sacramento.....	2		0	0	10	22	0	2	0	2	40
San Francisco.....	2	8	0	83	23	32	0	7	2	8	193

State and city	Meningococcus meningitis		Polio-myelitis cases	State and city	Meningococcus meningitis		Polio-myelitis cases
	Cases	Deaths			Cases	Deaths	
<b>Massachusetts:</b>				<b>District of Columbia:</b>			
Boston.....	0	0	1	Washington.....	2	1	0
Worcester.....	1	0	0	<b>Virginia:</b>			
<b>Rhode Island:</b>				Roanoke.....	0	1	0
Providence.....	2	2	0	<b>Georgia:</b>			
<b>New York:</b>				Atlanta.....	2	1	0
New York.....	11		0	<b>Tennessee:</b>			
<b>Pennsylvania:</b>				Knoxville.....	0	1	0
Philadelphia.....	1	1	1	Memphis.....	1	0	0
Pittsburgh.....	0	1	0	Nashville.....	1	0	0
<b>Ohio:</b>				<b>Alabama:</b>			
Cincinnati.....	2	2	0	Birmingham.....	1	0	0
Cleveland.....	2	2	0	<b>Louisiana:</b>			
<b>Indiana:</b>				New Orleans.....	1	0	0
Anderson.....	0	0	1	Shreveport.....	0	2	0
Indianapolis.....	1	0	0	<b>Texas:</b>			
<b>Illinois:</b>				Galveston.....	1	0	0
Chicago.....	4	4	0	Houston.....	0	2	0
<b>Michigan:</b>				<b>Colorado:</b>			
Detroit.....	1	2	0	Denver.....	2	0	0
<b>Wisconsin:</b>				<b>New Mexico:</b>			
Milwaukee.....	1	1	0	Albuquerque.....	1	0	0
<b>Iowa:</b>				<b>Washington:</b>			
Des Moines.....	2	0	0	Seattle.....	1	0	0
<b>Missouri:</b>				<b>Oregon:</b>			
Kansas City.....	2	0	0	Portland.....	1	0	0
St. Louis.....	2	0	0	<b>California:</b>			
<b>Nebraska:</b>				Los Angeles.....	7	3	4
Omaha.....	0	1	0	San Francisco.....	0	1	0
<b>Maryland:</b>							
Baltimore.....	7	6	0				

*Pellagra*.—Cases: Charleston, S. C., 1; Atlanta, 2; Montgomery, 2; New Orleans, 1; San Francisco, 1.  
*Typhus fever*.—Cases: Savannah, 1; Tampa, 1; Mobile, 2.

## FOREIGN AND INSULAR

### CUBA

*Habana—Communicable diseases—4 weeks ended December 21, 1935.*—During the 4 weeks ended December 21, 1935, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis.....	1	-----	Scarlet fever.....	1	-----
Diphtheria.....	16	2	Tuberculosis.....	43	12
Leprosy.....	1	-----	Typhoid fever.....	75	11
Malaria.....	1 229	2			

<sup>1</sup> Includes imported cases.

### JAMAICA

*Communicable diseases—4 weeks ended December 28, 1935.*—During the 4 weeks ended December 28, 1935, cases of certain communicable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other localities	Disease	Kingston	Other localities
Chickenpox.....	3	6	Puerperal fever.....	-----	1
Dysentery.....	10	9	Scarlet fever.....	-----	1
Erysipelas.....	1	3	Tuberculosis.....	28	75
Leprosy.....	-----	2	Typhoid fever.....	26	103

### NORWAY

*Arendal District—Scarlet fever.*—According to a report dated December 17, 1935, an epidemic of scarlet fever had occurred in Arendal district in southern Norway, where between 90 and 100 cases had been reported. The disease is said to be of a mild form and no deaths had occurred.

### CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

NOTE.—A table giving current information of the world prevalence of quarantinable diseases appeared in the PUBLIC HEALTH REPORTS for December 27, 1935, pages 1834-1848. A similar cumulative table will appear in the PUBLIC HEALTH REPORTS to be issued January 31, 1936, and thereafter, at least for the time being, in the issue published on the last Friday of each month.

### Plague

*Brazil—Bahia State—January Catuny.*—During the month of December 1935, 20 cases of plague were reported in the neighborhood of January Catuny, Bahia State, Brazil.

*Hawaii Territory—Hawaii Island—Hamakua District—Paauhau Sector.*—On December 31, 1935, 1 plague-infected rat was reported in the Paauhau Sector, Hamakua District, Hawaii Island, Hawaii Territory.

**Yellow Fever**

*Ivory Coast.*—Yellow fever has been reported in the Ivory Coast, as follows: During December 1935, 1 fatal case at Indenie Circle; on November 8, 1935, 1 case with 1 death at Sassandra.