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THE SCHOOL LUNCH PROGRAM

AND

AGRICULTURAL SURPLUS DISPOSAL

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THE BUREAU OF AGRICULTURAL ECONOMICS
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THE SCHOOL LUNCH PROGRAM AND AGRICULTURAL SURPLUS DISPOSAL

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All Federal agencies and many State and local organizations interested in child nutrition have given cooperation in this study. The names of the many persons cooperating are omitted only for the sake of brevity. Special mention must be made of the assistance given by the Surplus Marketing Administration and Work Projects Administration in supplying essential statistics, arranging for the field trips, and offering additional information in the preparation of the report. Other Federal agencies that were of assistance are: The National Youth Administration, the Children's Bureau of the Department of Labor, the Home Economics Division of the Office of Education, and the Child Hygiene Division of the United States Public Health Service.

Foreword

The American public has become greatly concerned with two related problems. First, we are finding more and more evidence that many families, because either their knowledge or their income is inadequate, do not buy enough good food for proper nutrition and sound health. As was made abundantly clear at the National Nutrition Conference for Defense, called by the President last May, a large proportion of our people are not well fed.

Second, this situation greatly limits the market for farm products; it thus can be an important cause of low prices at the farm. In many cases, prices at the farm have been so low that the farmer could not afford to harvest and ship crops already grown. Defense activity is currently providing an expanding market for many farm products. The basic problem remains, however, and can be expected to recur in intensified form after defense, unless intelligent plans are made in advance to meet it.

Farmers and consumers alike want to see these twin problems licked. The Department of Agriculture has been developing several programs for this purpose. A special report, "Economic Analysis of the Food Stamp Plan," published last fall, discusses one of them in some detail. The present report deals with another approach—through school lunches which provide better diets for our children and at the same time help move foods into consumption.

The Department of Agriculture strongly believes that programs like these can be of great benefit both to farmers and to consumers. They can make farmers more prosperous, for they can be an effective way of raising farmers' incomes when regular market outlets prove inadequate. And they can help make our people stronger and healthier, a vital factor in mobilizing the full resources of the Nation for defense, and a long-range measure for achieving that high level of social well-being for which America stands.

It is increasingly clear that some shifts in agricultural production in this country are inevitable. If we are to feed Britain and other countries resisting aggression and at the same time provide our own consumers with proper diets, we must grow less cotton, tobacco, wheat, and other crops, a substantial part of which were formerly exported, and we must grow and market more foods needed by our own people and those of the countries we are supplying.

The School Lunch Program, the Food Stamp Plan, and other marketing programs to step up demand can be of great help in this direction because they will make it profitable for many farmers to shift production to these needed foods. Thus they are important parts in the long-range program of agricultural adjustment in the United States.

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School Lunches as a Part of Farm Policy

Feeding needy children at school, originally by private charities and later at public expense, has been an established practice in most European countries for many years. In the United States, the serving of free or low-cost meals in certain schools was begun by private welfare agencies in many cities before the World War. But before the depression of the 1930's, school lunches in this country usually took the form of cafeteria service, mainly in high schools, for the convenience of children who lived too far from school to go home for the noon meal, and who could afford to buy it, or an arrangement by which children in small rural schools could have a hot dish at noon during the winter to supplement cold lunches brought from home. Free or low-cost meals for undernourished children remained, for the most part, a matter of private charity, not public policy.

Underfed Children, Unemployed Workers, and Underpaid Farmers

The depression changed this. Amid the general privation and suffering the plight of millions of underfed children was striking. It challenged the generous instincts of the country even more urgently than did the plight of adult citizens. It presented the Nation with a social problem of the first magnitude: To protect the younger generation, and through it the generations to come, from the economic disintegration into which the older generation was precipitated. School lunches offered one way of doing something to save the Nation's children.

* * * * *

Unemployment was the outstanding symbol of economic collapse during the depression. Millions of workers in private industry were turned out of their jobs by employers who had no profitable markets for the goods and services these workers might have produced. The goods and services ceased to be produced—and the workers who made them ceased to have incomes.

* * * * *

Among all sectors of the American economy, however, few were harder hit than agriculture. Even during the 1920's farmers had been in economic straits. In the face of the contracting markets of the 1930's, both at home and abroad, American agriculture maintained its production more fully than almost any other industry. Prices of farm products consequently fell even lower than those of most other goods. At times some farm products found no market at all. And year after year many crops paid their producers hardly enough for bare subsistence.

A Single Attack on a Threefold Problem

A Government intent on applying common sense to uncommon problems undertook to make these problems help solve each other. First, it initiated a vast program to provide useful employment for idle workers in the construction of public works and the development of public services. The preparation of lunches for underfed school children was included. Under the Community Service Division of the Work Projects Administration this service has been organized and integrated into a unified program through which almost 65,000 workers prepared and served school lunches for about 2 million school children throughout the country in March 1941. The National Youth Administration, as one of its services, also employs youths who are without other work to help in school-lunch projects.

The Government likewise undertook direct action to move foods from farmers who could not use them to consumers who were going hungry for lack of them. In the Agricultural Adjustment Act of 1935 and subsequent amendments, Congress authorized a broad program to encourage the domestic

consumption of agricultural commodities, especially "among persons in low-income groups." Under this program, surplus farm products have been diverted from normal trade channels by Government purchases and distributed free to persons who are unable to buy them, including needy and undernourished school children.

For the first 4 years the distribution of surplus foods to school-lunch projects was distinctly secondary to distribution among needy families. But in August 1939 the Surplus Marketing Administration of the Department of Agriculture announced the expansion of its program to aid school-lunch work and appointed special personnel in the States to facilitate the expansion. The results are shown in table 1 and figure 1, in terms of the numbers of children and schools participating in the program and the pounds and value of the food they received in March of each year since 1937, March usually being the peak month of the year's program. During March 1941 nearly 4¾ million children were served daily lunches that included over 4¼ million dollars' worth of surplus foods. From 1939 to 1941 there was more than a fivefold increase in the number of children served and a tenfold increase in the value of food so distributed.

TABLE 1.—*Statistics of expansion of the Surplus Marketing Administration School Lunch Program, March of each year, 1937–41*

Month of March	Children	Schools	Food distributed	Estimated retail value of food distributed
Year	*Number*	*Number*	*Pounds*	*Dollars*
1937	342,031	3,839	1,192,256	85,062
1938	567,000	11,021	3,944,770	201,318
1939	892,259	14,075	5,244,211	408,804
1940	2,483,578	35,658	14,704,698	1,177,233
1941	4,715,311	66,783	56,000,589	4,368,371

Surplus Marketing Administration.

The program has expanded in other directions. A policy was introduced in the summer of 1940 of supplying foods for vacation-playground lunches and children's summer camps. A supplementary School Milk Program, started in eight of the larger cities, provides children with milk at school either free or at a special price of a cent for a half pint. Further expansion of this milk program is planned.

Thus a unique contribution to the school-lunch movement has developed: A dual program of Federal aid to school feeding, initiated neither as a child-welfare nor an educational program, but as agricultural policy on the one hand, and unemployment relief on the other. This material aid by the Federal Government has helped to spread school-lunch work in thousands of communities throughout the country and to make free lunches available to millions of undernourished children who previously went hungry. Now that the defense crisis focuses increasing attention upon health and nutrition, this work seems destined to expand. The time has come, therefore, to examine its achievements and potentialities.

Scope of the Study

The supplying of surplus foods through the Surplus Marketing Administration is the primary concern of this report. Against a background discussion of the school-lunch movement in terms of nutritional need among children in the United States and previous experience with school feeding both here and abroad, it describes the S. M. A. program in operation, with emphasis upon its integration with the activities both of W. P. A. and of the other agencies and organizations, public and private, local, State, and national, that are active in school-lunch work, and attempts an evaluation of the program both as agricultural policy and as a contribution to child welfare.

Does the School Lunch Program of the Surplus Marketing Administration help farmers? For it has been undertaken, after all, as a part of our agricultural policy. Has it significantly attacked the problem of child malnutrition? For that is certainly no less important an aim. What problems have been raised by its operation; and what modifications might adapt it better to either or both of its objectives? What are its potentialities; and what place should it have in the years ahead? These are the kind of questions to which this report addresses itself.

STATISTICS OF EXPANSION OF THE SURPLUS MARKETING ADMINISTRATION SCHOOL LUNCH PROGRAM, MARCH OF EACH YEAR, 1937–41

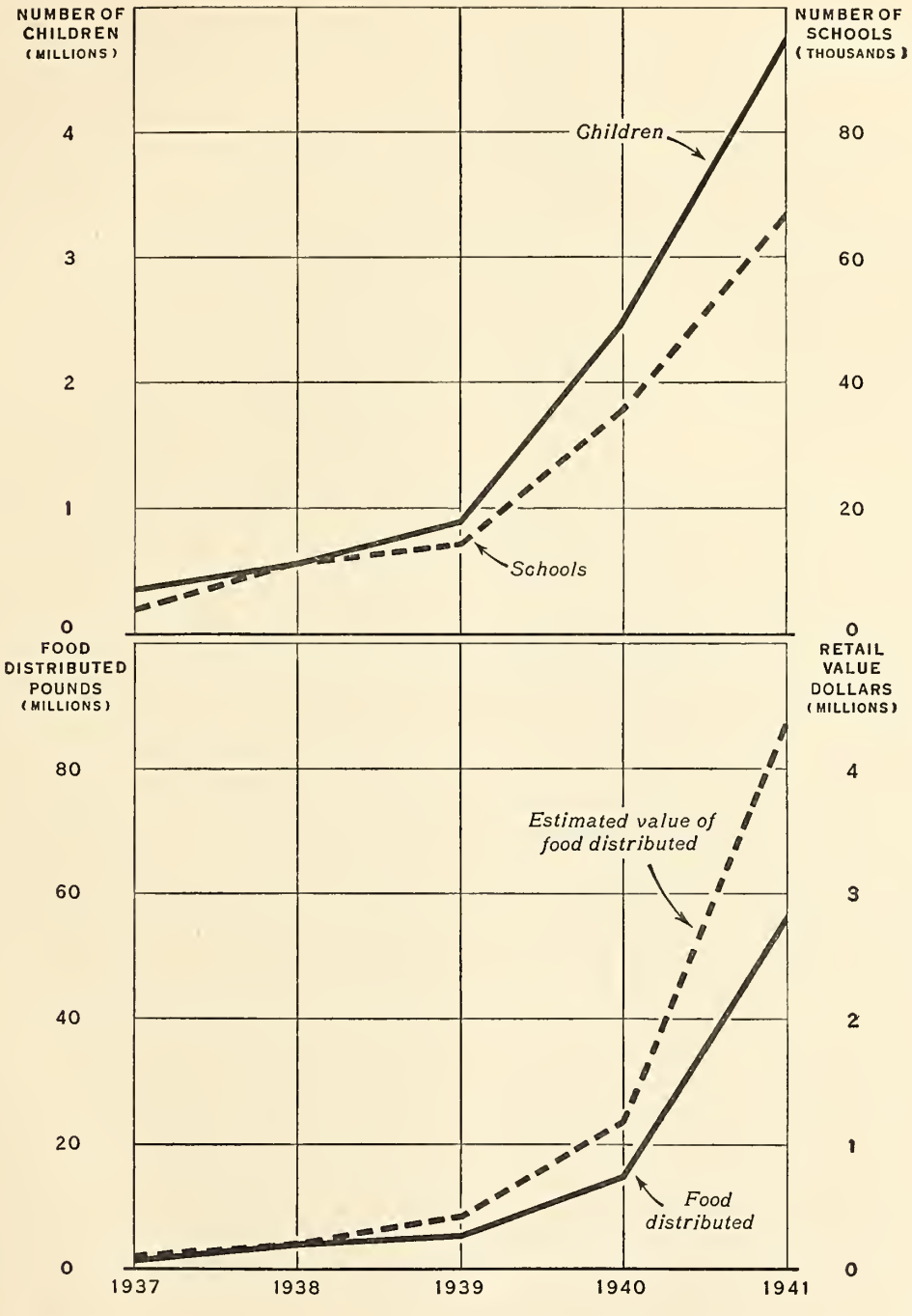

FIGURE 1.—Especially since the appointment of special personnel by the Surplus Marketing Administration in 1939 to facilitate the expansion of the program, there has been rapid increase in the number of schools and children served and in the quantity and value of the foods supplied. (March is usually the peak month of the year's program. See table 1.)

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Malnutrition and the School Lunch Program

The School Lunch Program is but one of the many possible outlets for surplus farm products. Only in the last 2 years has it become a sizable outlet. Likewise, serving school lunches is but one of many possible uses for W. P. A. labor. It is desirable, therefore, to investigate first the need for this program—the extent of undernourishment among the Nation's children, and the necessity and desirability of Federal action to combat it.

Modern Standards of Nutrition

Not many years ago we would have sought to ascertain the number of undernourished children in the country by merely weighing the children and measuring their heights and comparing the results with so-called normal height-and-weight charts. Undernourishment was then thought of mainly as a matter of being more than a certain percentage below average in height or weight.

With the rapid progress of the science of nutrition the problem has become much less simple. On the one hand, the old height-and-weight standards have lost prestige. It is realized today that types of physique vary too much to permit the application of a single standard to all children. A child may be underweight by the old standards and still be in sound health.

On the other hand, it has been established that foods contain a multitude of vitamins, minerals, and other substances, each with specific vital tasks to fulfill for proper body functioning. Hence good nutrition is no longer merely a question of having enough food. It means having the right kinds of food, a balanced diet including, especially, enough of the protective foods. A child may have so-called normal weight and still be poorly fed.

Emphasis has thus shifted from *undernourishment* to *malnutrition*. A child need not be visibly part-starved to be malnourished. Modern tests of nutritional status involve such items as measurement of the degree of calcification of skeletal growth areas, dental examination, study of posture, or measurement of ability to see in the dark.

Medical science is finding nutrition an important factor in the incidence or intensity of an increasing number of diseases and disorders. Minor dietary inadequacies are now recognized as contributing causes of irritability, lassitude, and other ills, mental or nervous or physical. They may not commonly be called sickness, but they do mean failure to enjoy sound and robust health.

In the case of school children these health deficiencies mean inability to concentrate on studies, lack of interest in school work, and other undesirable attitudes. A child so handicapped cannot take full advantage of the educational opportunities provided him at the community's expense. He grows into adulthood ill-equipped in both mind and body for making his own way in society.

In the light of such discoveries modern nutritionists are turning more and more from minimal standards of diet, the food intake that will sustain life and prevent obvious deficiency diseases, to optimal standards, the food intake that will make possible the full measure of physical and mental vitality and stamina of which a person is capable. A diet of this kind for every child would seem to be a proper goal in a society that is based on equality of opportunity. But in the United States we appear to be falling far short of providing for every child a diet that meets even minimal standards, to say nothing of optimal.

Malnutrition Among School Children

No precise estimate exists today of the number of children in this country who are malnourished. The new criteria for detect-

ing malnutrition are far less simple than the old and have so far been applied only in local studies. Adequate data on the physical status of the Nation's children are therefore not available. But there is abundant evidence that malnutrition is a serious social problem in the United States, particularly among children (*13*,[1] *p. 29; 3, p. 16*).

In a Nation-wide dietary survey made in 1935–36 the Bureau of Home Economics found that only 27 percent of our families had diets that could be rated as good, while 38 percent had diets classified as fair, and 35 percent had diets classified as poor (*16, pp. 7, 10*). Diets providing a wide margin of safety above average minimum requirements were classified as good; those providing a limited margin of safety, fair; and those in need of improvement with respect to one or more nutrients, poor.

Of the families that lived in cities and villages, 20 percent had diets rated good; 45 percent, fair; and 35 percent, poor. Of the families on farms, one-half had good diets; one-fourth, fair; and one-fourth, poor. Although a larger proportion of the farm families had satisfactory diets, because they used home-produced food, very substantial numbers even in this group failed to obtain enough food of the right kinds for proper nutrition.

The dietary problem was especially acute among low-income families. Of those spending about $1.75 per person per week for food, 75 percent had diets classed as poor. Among those spending about $3.15, this proportion was only 12 percent. Expenditure of $1.75 per person per week for food was about the average for nonrelief families in the $500 to $1,000 range of yearly incomes. Expenditure of $3.15 was not far from the average for $2,000 to $3,000 families.

Data specifically on the diets of the children themselves in families at different income levels are given in a recent study made in an eastern industrial city (*21*). Average consumption of milk and green vegetables among children in families with yearly incomes below $1,000 was less than half that of children in families with incomes over $2,500 per year, and consumption of citrus fruits was less than one-third. In place of these protective foods, the children in poor families ate more bread and potatoes.

Such studies suggest that most children in urban families with incomes under $1,000 per year have inadequate diets, and probably, also, a large proportion of those in families receiving less than $1,500. Their diets are inadequate in terms of minimum, not optimum, standards. How many American children come from families below these income levels?

Distribution of Children by Family Income

Perhaps the best picture of the distribution of children among urban families of different income is provided by the National Health Survey conducted by the United States Public Health Service in the winter of 1935–36. This survey (*6*), which covered all levels of income, included 703,000 families—2½ million persons in 83 cities in 18 States. Of the 650,000 children covered in the study, more than one-fourth were in families receiving some type of relief. Over 70 percent of the children surveyed were in families with incomes below $1,500 a year (table 2).

The striking inverse relationship between size of family and size of income is shown in table 3. About one-fourth of the children, for example, were in families with four or more children. Of these, 42 percent were in relief families, and 81 percent in homes with incomes less than $1,500.

Although children made up less than 26 percent of all persons included in this survey, they made up 37 percent of all persons in relief families.

The national distribution of income in 1935–36, estimated on the basis of the Study of Consumer Purchases, is reported in Consumer Incomes in the United States (*19*). No separation of children from adults is undertaken in this report, but the distribution in terms of families is significant. More than 16 percent of all families in the Nation received relief at some time during the year. Of nonrelief families, 32 percent of 3- to 6-

[1] Italic numbers in parentheses refer to literature cited, p. 66.

TABLE 2.—*Percentage distribution of individuals in urban families, by age groups and economic status of family*

Age groups (years)	All individuals	Economic status of family							
		Individuals in relief families	Individuals in nonrelief families with indicated incomes						
			All	Under $1,000	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $4,999	$5,000 and over
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
All ages	100.0	18.9	81.1	24.0	22.4	16.4	11.6	4.6	2.1
Under 16	100.0	26.5	73.5	22.2	22.3	14.9	9.5	3.2	1.4
16–24	100.0	19.0	81.0	24.4	22.1	16.1	11.6	4.8	2.0
25–44	100.0	15.1	84.9	23.3	24.0	18.0	12.7	4.8	2.1
45–59	100.0	15.6	84.4	24.0	21.3	17.1	13.2	5.9	2.9
60–64	100.0	14.6	85.4	29.1	20.6	15.4	11.8	5.5	3.0
65 and over	100.0	16.3	83.7	33.9	19.2	13.3	10.1	4.5	2.7

Social Security Bulletin, May 1939 (*6, p. 30*).

person families had incomes below $1,000, and 38 percent of families of 7 or more. Nearly another fourth of the families in each group had incomes between $1,000 and $1,500.

Such figures emphasize the concentration of the Nation's children in relief and low-income families where diets are least adequate. They leave little room for doubt that there is a serious problem of child nutrition in this country—or at least there was in 1936.

Today the situation is probably somewhat improved, but certainly the problem has not disappeared. Table 4 gives estimates of the numbers of children included in important relief categories during 1939. Although it omits minor categories such as Old Age Assistance, Aid to the Blind, recipients of private charities, and families receiving surplus commodities as their only form of public aid, it shows a total of nearly 6¾ million children in relief families, about 18 percent of all the children in the country. If the poorly nourished children in low-income families not on relief were added, the resulting total would certainly show upwards of 9 or 10 million children in the United States who have deficient diets.

TABLE 3.—*Percentage distribution of children under 16 in urban families, by number of children and economic status of family*

Children per family (number)	All children		Economic status of family							
	Total	Percentage of total	All children	Children in relief families	Children in nonrelief families with indicated incomes					
					Under $1,000	$1,000 to $1,499	$1,500 to $1,999	$2,000 to $2,999	$3,000 to $4,999	$5,000 and over
	Number	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1 or more	630,994	100.0	100.0	26.5	22.1	22.3	14.9	9.5	3.3	1.4
2 or more	472,776	74.9	100.0	29.8	21.3	21.8	14.2	8.8	2.9	1.2
3 or more	287,328	45.5	100.0	36.1	20.9	20.4	12.3	7.2	2.2	.9
4 or more	162,393	25.7	100.0	42.3	20.2	18.7	10.5	5.9	1.7	.7
5 or more	88,065	14.0	100.0	47.8	19.3	17.0	9.2	5.0	1.2	.5
6 or more	44,720	7.1	100.0	52.1	17.7	15.5	8.7	4.6	.9	.5
7 or more	20,030	3.2	100.0	55.6	16.3	13.6	8.8	4.4	.9	.4
8 or more	8,018	1.3	100.0	57.2	16.0	12.7	9.1	4.2	.6	.2
9 or more	2,682	.4	100.0	58.4	14.1	12.4	10.4	4.0	.4	.3

Social Security Bulletin, May 1939 (*6, p. 32*).

TABLE 4.—*Estimated number of children under 16 in families receiving public assistance during the calendar year 1939* [1]

Type of assistance	Children under 16	Percentage of total children in the United States under 16 [2]
	Number	*Percent*
Work Projects Administration wages	3,600,000	10.1
General relief, State and local	2,165,000	6.1
Aid to dependent children	735,000	2.1
Farm Security Administration grants [3]	200,000	.6
Total	6,700,000	18.9

[1] Estimates made from monthly statistics of public assistance appearing in the Social Security Bulletin and relief-caseload data of the Surplus Marketing Administration.

[2] Statistics as of 1940 census.

[3] Includes only the emergency loans supplementary to those for equipment and advice on home and farm management of the rural rehabilitation program. The Farm Security Administration estimates of the number of children under 16 in families receiving the latter type of loans were 1,175,000 in March and 1,150,000 in August 1939.

Causes of Child Malnutrition

Malnutrition is of course closely associated with poverty. But poverty is by no means an exclusive cause of it. The Bureau of Home Economics survey (*16, pp. 21, 23*) showed that some families spending as little as 10 cents per person per meal for food achieved good diets. Conversely, some families spending enough to have procured good diets had poor ones. In other words, wise food management can provide a satisfactory diet even at low income; and large expenditures for food may not make up for not knowing the principles of good nutrition or being indifferent to the importance of applying them.

The very fact of attending school may keep some children from having proper nutrition. Many live too far from school to return home for the noon meal. They must either bring lunch from home or buy it at school. Unless a well-supervised lunch service is operated by the school they are all too likely to have a hot dog, a soft drink, and a candy bar. The problem is acute in small rural schools where no lunch facilities are available. Even when other meals at home make up for the inadequacy of the noon meal, so far as a child's diet for the day is concerned, an inadequate lunch may keep him from getting the most from his school work.

School Lunches as a Means of Attack

The remedy for ignorance and indifference is education. Untold effort is being made nowadays toward teaching the general public the practical principles of nutrition and the importance of applying them. Certainly the campaign has not been without effect. But it is inevitably a long-range program. The very fact of their poverty and ignorance makes many of the groups most needing such education the hardest to reach effectively. Furthermore, no amount of teaching would be likely to make the poorest one-fourth of the Nation's families well-fed at their present level of income. Meanwhile malnourished children are daily growing into unhealthy adults.

Provision of well-planned free or low-priced lunches at school for malnourished children offers the most direct and immediate means of attack upon this problem. It makes use of an existing institutional framework, the school system, that reaches all children of school age. Expansion of the system of nursery schools for younger children in poorer families would make it possible to reach this age group also through a feeding program. It does not, of course, correct the most important underlying cause, poverty, except in the palliative sense that it supplements the inadequate income the child receives as a member of a poor family. But it is a way of doing something about the problem immediately, while waiting for longer range programs to take effect.

Furthermore, if integrated in the curriculum, the school lunch can serve not only to improve children's diets, but also to provide a focus for teaching desirable food habits and a knowledge of the rudiments of nutrition to the children and, through them, to their parents. Where this is done it not only attacks malnutrition immediately and specifically, but contributes toward the long-time program of removing ignorance as a

cause. As John C. Gebhart, (*8*) an authority in the field, has stated:

> School feeding * * * in dealing with defective nutrition is a program of strategic importance. The school lunch can be made the center from which radiate various activities dealing with the child's nutrition. There is something very concrete and appealing about a real meal which carries its message over to the child much more effectively than any amount of preaching on the subject. As long as the school lunch or special feeding are administered in a truly educational spirit and are coordinated with all other well-considered efforts their contribution to the work with defective nutrition will be most important.

School Lunches Versus Family Relief

The objection is sometimes raised against school lunches that they relieve the family of part of its chief responsibility—caring for its children—and thus contribute to the breakdown of the family system. Actually, school lunches cannot be a cause of the breakdown of the families of the malnourished children who are fed. The need for lunches shows that these families have already been unable to support their children adequately. School lunches are merely one way of rescuing these children from a misfortune that has befallen them through no fault of their own, and, at the same time, of saving society the costs of letting them grow up under the handicap that malnutrition imposes. The question at issue is, rather, whether some other approach to the problem could rescue the families at the same time as the children.

An alternative approach would be, of course, to provide underprivileged families directly with enough supplementary income to assure adequate diets for all their members. The Food Stamp Plan (*9*) and other distribution programs of the Surplus Marketing Administration are steps in this direction. But the findings of the Bureau of Home Economics, previously discussed, with regard to adequacy of family diets at low levels of food expenditure suggest that incomes of relief families would have to be raised considerably and relief extended to a much larger portion of the population to assure adequate nutrition for poor children. Certainly it would appear to be more economical, so far as feeding the children of school age is concerned, to supplement family meals with school lunches prepared under expert dietary supervision.

Aside from questions of economy, it does not seem probable as a practical matter that current public attitude would support any great increases in expenditures for family relief for it is widely protested that present relief programs rob the recipients of independence and initiative, and will create a large, permanent, pauper group.

Regardless of the effect of relief on adult recipients, it seems evident that letting children grow up malnourished is far more likely to make future paupers of them than is giving them food at public expense. If our underprivileged school children are to be adequately nourished rather than merely kept from starving, school lunches appear to be a much more practicable approach than increasing family relief.

Need for a Federal Program

The question still remains whether the problem is best handled locally, or whether some measure of Federal participation is desirable. The Federal Government believes that Federal action is warranted where local communities lack the resources for dealing with the problem adequately by themselves, and that it is justified if many local communities, even though they have resources for dealing with the problem, fail to do so out of lack of knowledge or through social shortsightedness. In a country where population is as mobile as in the United States no section can raise unhealthy children without injuring the Nation as a whole.

With regard to local resources, statistics show that the regions where children are most plentiful are, by and large, those with the least adequate means for feeding them. Of the 16 States having the highest proportion of children under 16 in their population, 14 stand among the lowest third of the States in respect to per capita income (*20*).

A similar relationship holds as between communities. This explains the ability of some cities with high incomes and few

children per capita to initiate lunch projects without Federal aid and the inability of poorer cities and distressed rural areas where the need is greatest to start programs on their own initiative.

Whether due to lack of resources, to ignorance, or to indifference, the prevalence of child malnutrition today testifies to the fact that States and local communities, on the whole, have not been meeting the problem successfully. Until aid was provided by the Federal Government, free or low-cost school-lunch projects were the exception rather than the rule.

The Form of Federal Action

The justification for Federal action to accelerate the attack on this problem seems well established. There are obvious advantages, however, in limiting Federal participation chiefly to providing aid for local projects, this aid to be contingent upon their maintaining satisfactory standards of operation. To insure rapid expansion of school-lunch work, the Government may need to carry on an educational program to arouse local communities to action, and advise them on ways of organizing their projects efficiently. Beyond this, national traditions suggest that the work be left in the hands of local groups, who are best able to adapt projects to local needs and conditions.

This has been the type of Federal program actually undertaken. Through the Work Projects Administration and National Youth Administration the Government provides funds so that locally sponsored school-lunch projects can employ otherwise-idle labor, and through the Surplus Marketing Administration it provides food in the form of surplus farm products. Through these three administrations and various other agencies it carries on educational and advisory work for promoting local projects and helping them maintain high standards of performance. The rapidity with which local groups throughout the country are taking advantage of these offers of aid indicates the effectiveness of this Federal program in attacking child malnutrition.

Development of the School Lunch Movement

School feeding, an outgrowth of the industrial revolution and the social doctrines of the French Revolution, assumed important proportions in the last 150 years in the school systems of Europe and America.

A survey of the development of school-feeding up to the outbreak of the present European war reveals certain broad generalities concerning the development and effectiveness of such a program that are pertinent in the analysis of the currently expanding program in the United States. To gain perspective, the experience of this and leading countries abroad is briefly reviewed.

School Feeding Abroad

Experience in England

The provision of school lunches became a national issue in England soon after the startling statement made in 1902, during the Boer War, by a major general in the British army that only 2 out of every 5 men who wished to become soldiers were physically fit. In answer to an aroused public, two special committees of technical experts [2] were appointed by Parliament in successive years to study the general social and economic causes for the alleged deterioration of certain classes, and to discover means of diminishing it. These committees came to similar conclusions: That there was no hereditary taint causing progressive degeneration but that environmental factors counterbalanced strength at birth; that the most prominent of these destructive environmental factors was malnutrition, especially among school children; and that the most plausible scheme to improve this condition was a program of school feeding. They recommended that the lunches be supported wherever possible by private funds, with public funds supplied only when the costs could not otherwise be met. However, one minority member of the Interdepartmental Committee maintained (*4, p. 29*): "We have got to the point where we must face the question whether the logical culmination of free education is not free meals in some form or other, it being cruelty to force a child to go and learn what it has not the strength to learn."

Two further commissions [3] were set up to find out what was being done by existing organizations in child feeding, and how adequately they were meeting the need. They found that Victor Hugo started school feeding in England in 1865 by providing warm meals in his home at Guernsey for children attending a nearby school. This stimulated private charitable organizations to feed the children of the poor. By 1905 there were 365 such organizations, 158 in London alone, serving meals to about 100,000 children during the winter; yet the committees estimated that in the larger cities 10 to 15 percent of all school children were undernourished.

All the special commissions were agreed on the desirability of providing school lunches on a national scale, but they did not agree on the question of whether they should be provided by educational or welfare officials. After the report of the second committee, an attempt was made to assist the work of the volunteer charitable associations by a national order that children found underfed at school should, on application of their teachers, be fed free for a month by the existing societies, with the cost charged to the parents as a loan. If the father failed to pay he was prosecuted for vagrancy or cruelty, and if he was unable to pay he was disenfranchised as a pauper.

[2] The Royal Commission on Physical Training and the Interdepartmental Committee on Physical Deterioration.

[3] Interdepartmental Committee on Medical Inspection and Feeding of Children Attending Public Elementary Schools, and Select Committee on the Educational (Provision of Meals) Bill, 1906.

This plan was a failure. It did not receive the cooperation of either school officials or parents; the parents refused to allow their children to be fed under such terms. It revealed distinctly that the provision of meals was a school problem, and, to be efficient, must be administered by school authorities.

The work of the four committees culminated in the passage by Parliament in 1906 of the Provision of Meals Act. This law transferred school feeding from charities to the local educational authorities by authorizing them to install as part of their regular school equipment restaurants for serving warm meals to children, free to those unable to pay and at cost to others. The object and spirit of the act are summarized in the following quotation (*11*):

> Its object is to ensure that children attending public elementary schools shall, so far as possible, be no longer prevented by insufficiency of suitable food from profiting by the education offered in our schools, and it aims at securing that for this purpose suitable meals shall be available just as much for those whose parents are in a position to pay as for those to whom food must be given free of cost.

The legislation was not mandatory in nature. The meals were controlled by local committees on which the school board had to be represented. The entire cost of equipment and service was to be borne by the school. The cost of food was to be met, as far as possible, by parents and voluntary contributions, and, if these sources failed, by a local tax. Although the cost of food was charged to parents as a civil debt, nonpayment could not be made a cause for disenfranchisement. Teachers were not required to take part in the organization or service of the meals.

The school-lunch program in England has been broadened and improved by amendatory and additional legislation. In 1907 medical inspection was made compulsory in all schools. In many, the medical officer chooses the children to be fed and approves the composition of the meal. In 1914 schools were authorized to serve meals throughout the vacation periods, after careful studies had shown that benefits of previous school feeding were often lost when the service was discontinued. In 1934, under the National Milk Marketing Scheme, special appropriations were given to the Milk Marketing Board to provide milk to school children free, or at a special price of one-half penny for one-third of a pint.[4] The Unemployment Insurance Act of 1938 conferred on the local authorities for higher education the power to provide meals for youths attending certain vocational classes under the same conditions as for elementary school children.

Practically all the school authorities in England and Wales have provided meals or milk to the children. The most common type of service is the noon meal; in some schools, breakfast and teas are also served. Most of the meals are prepared under the direct supervision of the local committees and are served in canteens near the schools called feeding centers. The average cost of food during the last few years has been between 3 and 4 pence a dinner (*10*).

Under the British System most of the meals are served free: About 95 percent of the ordinary meals, 65 percent of the milk meals, and 72 percent of the others. In the 1938–39 school year nearly 700,000 children received free meals. Expressed in terms of the total school enrollment, almost 12 percent of all the children in England and Wales received free milk; about 1 percent, free solid meals; and nearly 3 percent both free meals and milk. In that year 56 percent of all the school children received milk at school either free or at the special half-penny price (*10*).

Experience in France

France was one of the early countries to provide for school lunches on a national scale. The movement started in 1849, when a battalion of the National Guard in Paris, finding a surplus in their treasury, donated it to the community as a fund to aid poor children to obtain a schooling. This gift

[4] In terms of American standards, 1 cent for 0.4 pint. This plan is similar in mechanics to the school-milk programs in operation in this country. (See pp. 25–6.)

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became the nucleus for the "caisses d'ecoles," the funds that support extra-academic activities in schools, including school canteens.

This idea spread to other districts. By 1867 it received the official recognition of the Ministry of Public Education in a school law authorizing the establishment of such funds in all communes. In 1882 the law for compulsory primary education made the provision of the caisses d'ecoles by schools mandatory.

An almost universal function of the funds is the maintenance of the school restaurants known as cantines scholaires. These restaurants are under the independent management of the committee attached to each fund. In larger cities one restaurant usually serves two or more schools. The children are served together, those from poorer families receiving their lunch without charge. To avoid the possibility of distinction between paying and nonpaying children all are given the same tickets for admission to the lunchroom at a special box office. Needy children are certified to receive their tickets free only after careful investigation of their home circumstances.

A wholesome meal is served under the supervision of paid teachers in a pleasant atmosphere. The midday meal usually consists of a soup, a vegetable, 40 to 60 grams of meat according to age, bread, and, occasionally, a sweet dessert. In some canteens soup is served in the morning and tea in the afternoon. The teachers use this lunch as an opportunity to teach the children clean habits and good manners.

In rural schools where no special canteens are maintained, special arrangements are made between the local people and the teachers. In some instances, the children bring the raw material from home so the teacher can make a communal soup. In others, the teachers or janitors serve warm soup at a nominal cost. In most of the schools the children may heat on the school stove the food they have brought from home.

Although there is no national law making these canteens a compulsory function of the funds, they have become as much a part of the educational work as building schools and hiring teachers. In many communities they are compulsory. By an order in 1882, Paris became the first city in the world to make mandatory the provision of lunches to all its school children. Since 1900, about $200,000 of public funds have been appropriated annually for this purpose. The canteens in most communities are supported by public funds and, in recent years, there has been a strong movement to have all of them so maintained.

Experience in other European countries

The experience in England and France is typical of the rest of the Continent. Lunch service has been supported by national legislation in Holland,[5] Switzerland,[6] Scotland, Denmark, Italy, Finland, Austria, and Belgium, and has been nation-wide in scope in Russia and Spain.

Although the type and composition of the servings vary, on the whole they have been comparable to those in England and France. The average cost per meal has been about 3 cents (*3, p. 2*). In all these countries studies have been made of the need for lunches, and of the type that should be served to meet these needs. In all, there has been some coordination between the education, health, and medical authorities. In all, special arrangements have been made for feeding indigent children.

In Germany, Norway, and Sweden, the provision of lunches has been carried on through extensive municipal legislation. The first program on record was started in Germany, at Munich in 1790, by Count Rumford when, as part of his international campaign against vagrancy, he established municipal soup kitchens that accommodated indigent school children as well as the unemployed.

[5] The first country to have national legislation specifically for school feeding, through a law passed in 1900 authorizing municipalities to provide food and clothing for all school children in both public and private schools "who were unable, because of the lack of food and clothes to go regularly to school or to those who probably would not continue to attend school regularly unless food and clothes were provided."

[6] The first country to make national mandatory provision for school meals by a law of 1903 obliging the canteens to supply food and clothing to needy children. In 1906 authority was given for the provision of Federal funds for this purpose.

Experience in Latin America [7]

In the survey of the development of school feeding mention should be made of the work being done by our Latin American neighbors. Although school feeding was not undertaken on a national scale in any of the countries until late in the 1920's, scattered projects were started by private societies early in the century. The first project on record was started by a private society in Santiago, Chile, in 1908. Today free breakfast, lunch, and milk projects, supported either wholly or in part by Federal funds, are maintained in Argentina, Uruguay, Chile, Colombia, Brazil, Peru, Venezuela, Ecuador, Paraguay, Cuba, Costa Rica, Mexico, and Nicaragua. The rapid development of lunch programs during the last few years indicates that public authorities have begun to take action on a broad scale to meet the serious problem of child malnutrition in these countries.

School Feeding in the United States

Early developments

The United States was slow in following the lead of European countries in regard to school feeding. Although previously there had been sporadic projects by private societies,[8] public interest was not aroused until after the turn of the century, an awakening that, to a great extent, may be attributed to the publication of two books: Poverty, by Robert Hunter in 1904 (*12*), and Underfed School Children, the Problem and the Remedy, by John Spargo in 1906 (*15*). These authors estimated that there were several millions of undernourished children in the United States, pointed out how Europe had attacked the problem of malnutrition by school feeding, and advocated a similar program for the United States.

Many cities started to operate penny-lunch programs in elementary schools, often taking over the task formerly carried by voluntary societies. Small portions of food, a bowl of soup, bread and butter, or cocoa, for example, were sold for 1 to 3 cents during the midmorning or midafternoon recess. On the whole, these lunches were self-supporting, served so as to make it possible for children to buy nourishing foods with the money that they were previously spending for trash. The provision of free lunches was considered a matter for welfare, not school, officials—a problem for local providential societies and welfare boards to meet chiefly through help and educational work with the families at home.

A survey of school feeding in 86 cities of more than 50,000 population, made by the Bureau of Municipal Research in 1918, revealed that although there was some provision of lunches in high schools in 76 percent of the cities, service was maintained in the elementary schools in only 25 percent of them. Lunch service in high schools was imperative because of the shortness of the lunch recess, and the distance of these schools from the children's homes. Elementary school children were presumed not to need lunches at school as they could ordinarily go home for the noon meal.

In general, the high-school service was considered a convenient accessory to the school system, not a means of improving nutrition. Of the 72 cities reporting this service, only 5 indicated that the lunch had been established to combat malnutrition (*7, p. 12*).

Concern over the provision of lunches in rural schools followed the city movement. For many years the State and Federal extension workers in home economics have advocated and cooperated in setting up plans for school lunches. A common arrangement is for the children to contribute food for a hot dish prepared by the teacher in place of, or supplementary to, cold lunches brought from home. Ingenuity has been displayed in various localities in obtaining equipment and maintaining lunches, usually under some cooperative arrangement between parents,

[7] Adapted from unpublished material collected by Mrs. J. Raushenbush of The Surplus Marketing Administration.

[8] The first instance on record was that of the Children's Aid Society of New York which in 1853 opened the first of its vocational schools for the poor, and served meals to all children who attended. The Star Center Association was the first to organize municipal school feeding in elementary schools when, in 1894, it began the provision of meals in Philadelphia.

teachers, and local organizations such as Parent-Teachers Associations, agricultural clubs, and church societies.

Expansion since 1930

The school-lunch movement expanded along these same lines during the decade of the 1920's. It was estimated by the Director of Research of the Nation's Schools (*2*) that in 1931 there were 64,500 cafeterias in addition to 11,500 schools serving single hot dishes, and that cafeterias were opening at a rate of about 7,500 annually.

But the plight of millions of children during the depression reawakened public concern for child welfare. Many teachers contributed from their own money to feed pupils who came to school hungry. Charitable organizations like the American Red Cross and the American Friends Service Committee took up the feeding of indigent children in scattered localities. Both States and local municipalities passed enabling legislation and, in some cases, made appropriations for school feeding. Probably the largest of the earlier appropriations was an authorization by the State of New York in 1934 for the expenditure of $100,000 from relief funds for serving free lunches and milk to poor children.

State legislation [9]

During the last two decades considerable legislation with regard to school lunches has been enacted by the States. By 1937, 15 States had passed laws specifically authorizing local school boards to operate lunchrooms.[10] Although the laws commonly authorized the serving of meals at cost, usually the cost of the food only, 4 States made special provisions for needy children. In Indiana (for cities of over 300,000 inhabitants —Indianapolis was the only one), and in Vermont the boards were authorized to furnish lunches without cost to poor children, and in Missouri (for cities over 500,000— St. Louis was the only one), and Wisconsin at less than cost prices.

In other States school lunchrooms have been established by local boards of education under the general authority given them to act in the interests of the school. Such authority has been tested and upheld in the State courts. In Texas, in two cases (*17*, *18*) the board of trustees was upheld in enforcing a rule prohibiting pupils from leaving the school grounds for lunch, in the first instance, against a protesting parent, and in the second, against a store that sold food to students. In a number of States the legality of school cafeterias has been recognized indirectly in connection with other legislation. This has been done in Florida, by mention of cafeterias in connection with the school sanitation laws; in Oklahoma, by inclusion of school cafeterias in the list of exemptions from consumers' and users' tax; and in Rhode Island, by exemption of school lunches from the prohibition of sale of articles to pupils on school premises.

An increase in State legislation of a mandatory nature for the provision of lunches to undernourished children has occurred within the last few years. A Washington law of 1935 authorized local school boards to order that half-pints of milk be furnished free to needy children under 14. In its 1940 special session, the Louisiana legislature enacted a law that free lunches be furnished to needy children under the supervision of the State board of education, and appropriated a million dollars for the work. The California legislature in 1937 authorized the levying of special district taxes to meet the expenses of providing free lunches and further authorized State and local relief boards to contribute funds to the school districts for school feeding.

Federal aid

For many years before 1930, agencies of the Federal Government had been interested

[9] Condensed from an unpublished report, Cafeterias or Lunches for Public School Children (Except the Physically Handicapped and Tuberculous), prepared by Mrs. I. K. Reed of the Children's Bureau, U. S. Dept. of Labor.

[10] California, Colorado, Connecticut, Indiana, Massachusetts, Michigan, Missouri, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Vermont, Washington, and Wisconsin.

In addition, Nevada, South Dakota, West Virginia, Mississippi, and certain counties of South Carolina authorized the serving of meals in high-school dormitories, and Idaho, Maine, and Oregon authorized local authorities to furnish board and lodging for pupils when such expense would be less than the cost of transporting the children from their homes by bus.

in school-lunch work. The Bureau of Home Economics and the Extension Service of the Department of Agriculture, along with the State land-grant colleges, worked primarily in rural areas. Specialists in nutrition and home economics helped to develop techniques for providing lunches in rural schools, and State and county field workers carried on educational campaigns for the introduction of hot lunches in the schools in local communities. Health and nutrition specialists attached to State and municipal health departments cooperated similarly with programs in urban schools. The Division of Home Economics in the United States Office of Education and the home economics supervisors in the various States assisted in coordinating school-lunch activities with the work of home-economics departments in the public schools.

During the depression of the 1930's, however, it became evident that the danger of malnutrition among school children was of further national concern. Local funds were inadequate where the need was greatest, and active Federal aid was soon deemed necessary. Such aid has been administered chiefly by three Federal agencies: The Surplus Marketing Administration, the Work Projects Administration, and the National Youth Administration, and their predecessor organizations.

Early Federal assistance was of an emergency nature, a method to enable local authorities to serve needy children a hot dish supplementary to the food brought from home. In 1932 and 1933 the Reconstruction Finance Corporation made loans to several towns in southwestern Missouri for the payment of labor to prepare and serve school lunches. The work was expanded in the winter and spring of 1933 and 1934 under the Civil Works Administration, and in 1934 and 1935 under the Federal Emergency Relief Administration, which operated projects in 39 States.

With the creation of the Works Progress Administration (now the Work Projects Administration) in 1935, school-lunch work was assigned as a permanent part of the duties of the Division of Professional and Service Projects (now the Community Service Division). In the 1940–41 school year, programs for the service of hot meals were in operation in 47 States, the District of Columbia, and Puerto Rico. In March 1941 about 2 million children were served in the W. P. A. program.

The National Youth Administration has likewise helped to support school-lunch work. In its earlier years it cooperated with many W. P. A. projects by supplying young assistants to W. P. A. cooks. More recently it has supplied youth labor for non-W. P. A. projects, especially in rural areas where W. P. A. cooks were not available. It has also helped with gardening projects and has manufactured equipment for serving lunches in many schools.

Expansion of the lunch programs of the W. P. A. and the N. Y. A. has been greatly facilitated since 1935 by the availability of foods supplied by the Surplus Marketing Administration of the Department of Agriculture. All three programs are administered by distinct Government agencies, but close cooperation among their field workers is welding them into a single, coordinated Federal program. At the same time, the rapid expansion of the school-lunch work of the S. M. A., especially since 1939, has encouraged a large number of schools to undertake projects otherwise supported solely from local resources.

With the passage of the Social Security Act in 1935 additional Federal aid was given to the development of the School Lunch Program. Under title 5, Federal grants-in-aid were made available to the States, dependent on the fulfillment of certain operational standards, for the maintenance of a nutritional staff under a cooperative arrangement between the State departments of maternal and child health and the Children's Bureau of the Department of Labor. Although the duties of these nutritionists cover the general field of maternal and child welfare, many have given special attention to school-lunch work. The chief nutritionists act as advisers and consultants for the local

and State people who are interested in school feeding, and as liaison representatives of the State department of health with the State department of education and other agencies that are participating in school-lunch work. In May 1941, such nutrition departments were in operation in 28 States, the District of Columbia, Hawaii, and Puerto Rico.

The assistance given by the Government has made possible a rapid expansion of the movement to provide lunches at school for malnourished children in the United States. The movement still falls far short of the need estimated on preceding pages (p. 6), but it has made notable progress and is continuing to expand.

Generalization Regarding the Movement

In summary of the development of the school-lunch movement certain generalizations can be made. In the first place, there have been similarities in the rise of school feeding for indigent children in all western countries. In all, it has started as a charitable endeavor carried on by private or semi-official agencies. In the course of time it has become a public concern of municipal, and later of State and National Governments.

As school feeding has developed, it has tended to lose the character of relief and charity and become part of the school system itself. In many countries it is recognized as a corollary of compulsory education. As the role of school lunches has thus broadened, their dietary characteristics have improved, and the work has become better integrated in the whole program of child welfare and education.

So far as can be discovered, there are no important cases on record in which school feeding has been tried as an experiment and has later been abandoned as impracticable or as a failure. On the contrary, the rapid progress of the school-lunch movement in all countries demonstrates that it has proved its value both to health and educational authorities and to the public.

How Schools Obtain Surplus Commodities and the Foods Received

The first step in describing the part played in the present school-lunch movement in this country by the Surplus Marketing Administration program is to examine the mechanism by which surplus foods are made available for lunches for needy children. What must schools do to obtain this food, how is it supplied to them, and how much and what kinds do they receive?

Role of Local Agencies

Lunch projects in the schools that participate in this program are operated under the sponsorship of local agencies. Responsibility may be taken by educational or welfare authorities, by mothers' clubs or parent-teacher associations, by local branches of civic or fraternal organizations, or even by private individuals. W. P. A. or N. Y. A. labor may be obtained for operating the programs, or the sponsors may do the work themselves. But if they serve or plan to serve lunches to needy or undernourished children, they are entitled to apply to the local office of their State welfare administration to receive surplus foods.

If the local welfare authorities find a need in the school, and if the sponsors agree to abide by the regulations governing the use of surplus commodities, the school may obtain whatever foods the local surplus commodity warehouse of the welfare administration has available, in quantities proportional to the number of children certified to receive free lunches.

Sponsors must agree that their normal food purchases for school lunches will not be curtailed because of the availability of these surplus foods. No charge can be made for the foods when they are served to certified children. If paying children as well as nonpaying children are fed, a distinction must not be made between them in serving the lunches. A project operated for profit cannot receive these commodities. Any margin of receipts over costs must be reinvested in the project.

Certification of children

Children are usually certified on the basis either of home financial status or of physical condition. In the former case, the teacher, principal, or other school authority who is familiar with the child's home conditions may certify to his need for the lunches, or public-welfare authorities may investigate it. In the latter case, the school nurse or other health official may declare the child undernourished on the basis of physical examination. In rural schools that serve a homogeneously poor population the entire school enrollment is sometimes certified, but in most schools children are certified individually.

Various systems are used to avoid setting up distinctions between paying and nonpaying children. A common system has the teacher issue identical tickets to all children before they go to lunch. Certified children are given tickets free, and the others pay a nominal sum. Another method is to have parents who are able to do so make periodic contributions of money or food directly to the sponsor of the project. Under either of these systems no money changes hands in the lunchroom.

Role of the Federal Government

Local sponsors receive surplus commodities from warehouses that are maintained by their State or local welfare agencies. The Federal Government enters the picture in providing the food to fill the warehouses. Surplus commodities are supplied to the

State welfare administration by the Surplus Marketing Administration, through its Direct Purchase and Distribution Program, of which the School Lunch Program is a part.

The Direct Purchase and Distribution Program

The primary function of the S. M. A. is to protect farmers' incomes by preventing oversupplies of farm products from causing disastrously low prices to growers. When producers of a commodity find themselves faced with an acute marketing problem they request Federal aid. If investigation shows the desirability of a program the Secretary of Agriculture instructs the S. M. A. accordingly. Various actions may be taken. One is to buy up supplies of the commodity in order to support its market price; agents of the S. M. A. buy supplies directly from growers or shippers, or, in some cases, from wholesale assemblers or processors.

Some useful outlet must then be found for these supplies without letting them flow back into regular trade channels. If they were resold in commercial markets the price-supporting effects of the purchases would be canceled. So they are turned over to welfare agencies in the States for distribution to needy consumers—relief families primarily—and public institutions of various kinds, including schools operating lunch programs.

Allocation of the purchased commodities is based upon the needs of the States as expressed in requests by their welfare administrations, with due consideration for shipping costs, facilities for handling the commodities, and the commercial supplies locally available. Considerable variation occurs, therefore, from State to State, in the kinds and quantities of foods supplied.

The commodities are shipped to carload receiving points in the States, where the State welfare administrations take title to them, subject to S. M. A. regulations governing their use. The welfare agencies unload the commodities into central warehouses, whence they are shipped as needed to local county warehouses for ultimate distribution. In some cases, schools call at the local warehouse for their commodities; in others, monthly or fortnightly allotments are trucked directly to the schools.

The movement of surplus commodities from producers to consumers is thus simple and rapid. It sidesteps many of the buying and selling, wholesaling and retailing operations that comprise the costs of commercial distribution. In handling surplus commodities, furthermore, State welfare agencies rely chiefly upon W. P. A. or other relief labor, workers who would otherwise have to be supported out of relief funds. The whole process is thus designed to operate at a minimum cost to society.

Regulations governing the use of commodities

The requirements imposed by the S. M. A. upon State welfare agencies receiving commodities are designed to make sure that they are not wasted or misused. The State must maintain proper facilities for handling the foods; warehouses must be in good repair, clean, and well-managed; refrigerated storage must be provided for butter and other perishables. Under no condition may the commodities be sold. They must be used to supplement, not to substitute for, normal relief allowances by the welfare agency, and in general must be prevented from competing in any way with the marketing of the same commodities through regular commercial channels. Therefore agreements are required from school-lunch sponsors that they will not substitute surplus allotments for purchases that they would otherwise make.

Quantities of Foods Allotted

The maximum quantities of commodities that families, schools, and other recipients may be given monthly have been determined by the S. M. A. with the cooperation of the Bureau of Home Economics. The allowances permitted for school lunches are summarized in table 5. Upper limits are set not only for individual food items but also

for groups of similar foods. Thus the maximum allowance of most cereal foods is 1 pound per child per month. For all the cereals combined, however, it cannot be more than 6 pounds per child.

This does not mean that all these foods are continuously available to schools. On the contrary, what foods are provided at any time and how much of them depend on the current purchase programs of the S. M. A., and these programs are planned primarily to meet farmers' needs.

TABLE 5.—*Maximum quantities of surplus commodities that may be issued per child per month in the Surplus Marketing Administration School Lunch Program*

Commodities	Maximum quantity per child per month for—		
	Item	Subgroup	Class
	Pounds	*Pounds*	*Pounds*
Fruits, fresh or canned:			
Citrus and tomatoes, pulp or juice:			
Oranges	5	10	10
Grapefruit	5		
Grapefruit juice	5		
Tomatoes	1		
Apples, fresh	4	4	
Other:			
Apples, canned	1	2½	
Applesauce, canned	1		
Cherries	1		
Grapes, fresh	3		
Peaches	3		
Pears	3		
Plums	1		
Cantaloupes	3		
Watermelons	3		
Fruits, dried:			
Apples	½	1	1
Apricots	½		
Peaches	½		
Prunes	½		
Raisins	½		
Vegetables, succulent, fresh, or canned:			
Leafy, green, and yellow:			
Asparagus	1	5	5
Beans, green (snap)	3		
Cabbage	3		
Carrots	3		
Kale, collards, or mustard greens	1		
Spinach	1		
Squash, yellow (pumpkin)	1		
Peas	3		
Other:			
Beets	1		
Cauliflower	3		
Celery	1		
Corn	1		
Onions, winter	3		
Parsnips	1		
Squash, white	1		
Turnips	1		

TABLE 5.—*Maximum quantities of surplus commodities that may be issued per child per month in the Surplus Marketing Administration School Lunch Program*—Continued

Commodities	Maximum quantity per child per month for—		
	Item	Subgroup	Class
	Pounds	*Pounds*	*Pounds*
Potatoes:			
White	5	7½	7½
Sweetpotatoes	2		
Dried legumes:			
Beans	½	1	1
Peas	½		
Milk:			
Fluid	[1] 8 or	[1] 8 or	[1] 8 or
Dry skim	1	1	1
Evaporated	1½	1½	1½
Cheese	1	1	1
Eggs	1	1	1
Meat, canned:			
Beef	1	2	2
Mutton	1		
Veal	1		
Meat, fresh, and fish:			
Beef	2	2	2
Mutton	1		
Veal	2		
Fish, canned	1		
Fish, fresh frozen	3		
Fish, salted	1		
Cereals:			
Whole grain:			
Flours and meals:			
Barley	1		
Corn			
Rye			
Whole wheat			
Whole-wheat cereal	1		
Whole-wheat cereal with dry skim milk	1		
Oat cereal with dry skim milk	1	6	6
Rolled oats	1		
Rice, brown	--------		
Rolled wheat	--------		
Refined:			
Flour (wheat)	2		
Potato flour	½		
Potato starch	½		
Rice	1		
Macaroni	½		
Fats:			
Butter	1	1	1
Lard	1		
Shortening (cottonseed oil)	1		
Sugars:			
Refined	1	1	1
Sirup			

[1] Quarts per child per month.

Surplus Marketing Administration.

The actual amount and variety of food supplied has increased markedly, however, with the growth of the program. More children have been fed, and more food has

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been provided per child. As shown in table 6, the number of pounds of food per child has doubled, and its estimated retail value per child has trebled as the program has developed.

This reflects partly the shifts which have occurred in the types of commodities chiefly distributed. The estimated retail value of commodities of various types supplied each year is shown in figure 2 and table 7. Meat, mainly canned beef bought because of the drought in the Middle West, accounted for more than half the value of food distributed in 1935–36 and for nearly a third in 1936–37. Since then it has been a negligible item, while dairy products and fresh fruits have risen to chief importance. (The increase in fruit is partly due to the greater number of schools now in the program that do no cooking, and, therefore, accept only commodities that can be eaten raw, chiefly fruits.)

TABLE 6.—*Average quantity and value per child per month of foods supplied by the Surplus Marketing Administration for use in the School Lunch Program, 1937–40*

Year beginning July	Average pounds per child per month	Estimated retail value per child per month
	Pounds	*Dollars*
1937	5.28	0.29
1938	4.80	.41
1939	6.54	.50
1940 [1]	11.49	.86

[1] July 1940 through March 1941.

Surplus Marketing Administration.

The estimated retail value of each of the 10 leading individual commodities distributed each year is shown in table 8, which brings out even more clearly the changes in the commodities distributed from year to year as conditions in agriculture change. Half the commodities appear in a single

TABLE 7.—*Estimated retail value of foods supplied by the Surplus Marketing Administration for use in the School Lunch Program, by commodity groups, fiscal years 1935–39*

Commodity groups	1935		1936		1937		1938		1939	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
	Dollars	*Percent*	*Dollars*	*Percent*	*Dollars*	*Percent*	*Dollars*	*Percent*	*Dollars*	*Percent*
Dairy products and eggs	81,982	12.5	44,956	9.8	113,747	12.1	946,359	38.6	2,058,566	28.5
Cereals and flour	35,008	5.3	13,443	2.9	35,666	3.8	367,827	15.0	1,043,050	14.5
Fruit:										
Fresh	120,998	18.4	146,588	31.8	554,880	59.0	443,244	18.1	2,374,545	32.9
Dried	23,935	3.6	64,099	13.9	52,114	5.5	271,361	11.1	649,720	9.0
Canned	706	.1	25,164	5.5	5,740	.6	140,424	5.7	628,377	8.7
Total	145,639	22.1	235,851	51.2	612,734	65.1	855,029	34.9	3,652,642	50.6
Vegetables:										
Fresh	823	.1	5,257	1.1	73,584	7.8	77,538	3.2	18,460	.3
Dried	10,040	1.5	15,939	3.5	27,098	2.9	119,987	4.9	212,904	2.9
Canned	228	(1)	----------	----------	22,214	2.3	53,021	2.2	75	(1)
Total	11,091	1.7	21,196	4.6	122,896	13.0	250,546	10.3	231,439	3.2
Meat	384,167	58.4	143,348	31.1	1,441	.1	7	(1)	24,795	.3
Fish	----------	----------	1,154	.2	1,502	.2	12,719	.5	5,764	.1
Miscellaneous foods [2]	93	(1)	737	.2	11,982	1.3	5,170	.2	87,880	1.2
Processed foods [3]	----------	----------	----------	----------	41,044	4.4	12,538	.5	113,262	1.6
Grand total	657,980	100.0	460,685	100.0	941,012	100.0	2,450,195	100.0	7,217,398	100.0

[1] Less than 0.05 pereent.

[2] Include lard, cottonseed oil shortening, sirup, and sugar.

[3] Include surplus fruits and vegetables delivered by the S. M. A. to State welfare agencies for processing and reshipment to school-lunch programs.

Based on Surplus Marketing Administration data.

Estimated Retail Value of Foods Supplied by the Surplus Marketing Administration for Use in School Lunch Program, by Commodity Groups, Fiscal Years 1935–39

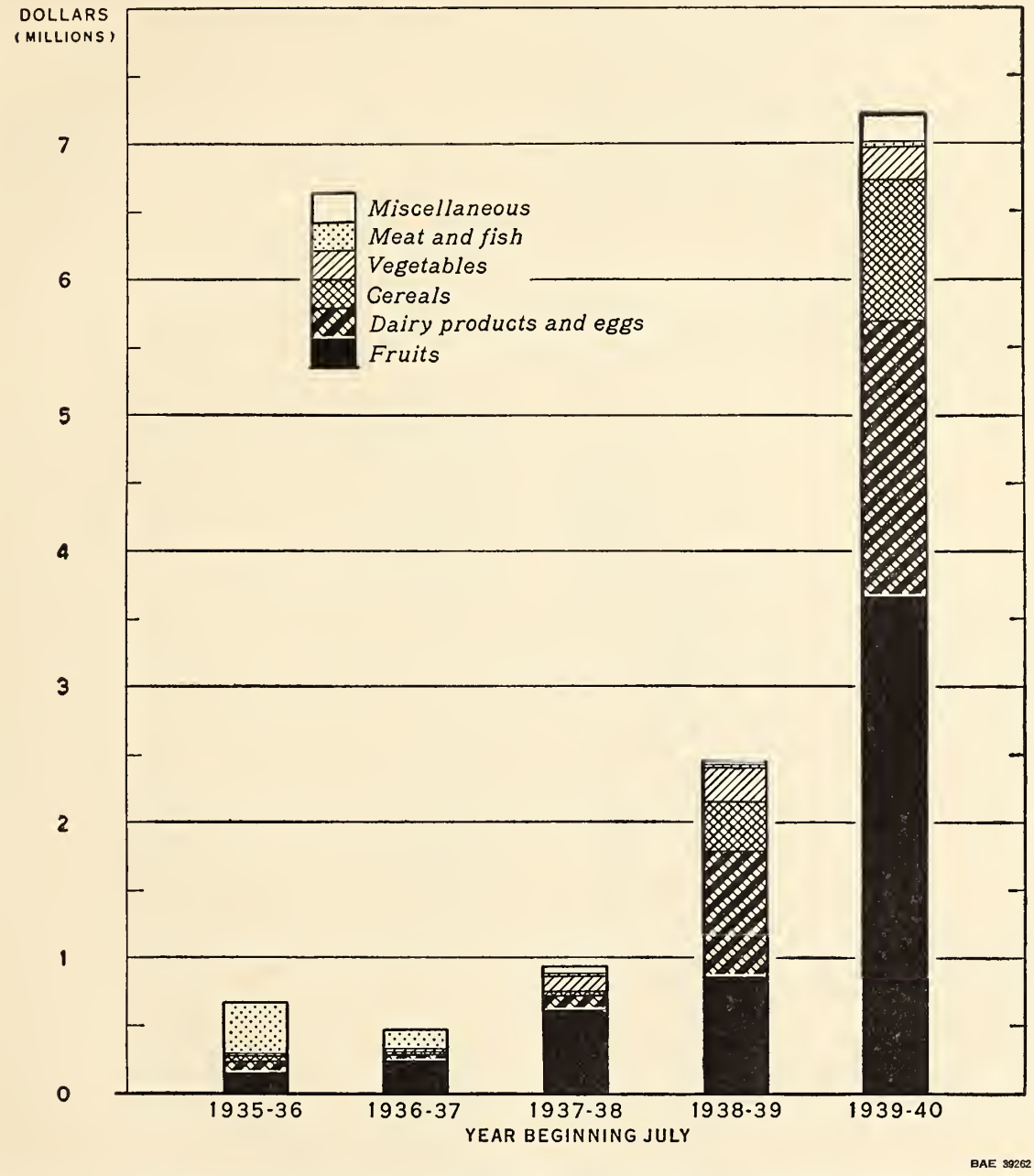

Figure 2.—The great increase in value of food supplied reflects an increase both in the number of children served and in the food provided per child. Meat was the chief item in retail value at first, and fruits and dairy products are now the largest items. (See table 7.)

year only, and none appears in every one of the 5 years. Butter, dry skim milk, dried prunes, and wheat flour, were among the leading 10 commodities in 4 of the 5 years, and apples, oranges, and grapefruit in 3 of them.

It is also significant that, whereas in the first 2 years the 10 leading commodities

accounted for more than 90 percent of all foods distributed to schools, in more recent years they have averaged only about 80 percent. This indicates that a greater variety of commodities has been generally available in the later years. As a matter of fact, only 31 different commodities were supplied school-lunch programs in 1935–36, one of them alone accounting for more than half their total value. By 1939–40 the number had grown to 48.

TABLE 8.—*Estimated retail value of the 10 leading foods supplied by the Surplus Marketing Administration for use in the School Lunch Program, fiscal years 1935–39*

Commodity	Value	Percentage of value of all food distributed to the School Lunch Program
	Dollars	*Percent*
1935		
Canned beef	367,412	55.8
Fresh apples	115,873	17.6
Dry skim milk	60,509	9.2
Wheat flour	27,080	4.1
Dried prunes	23,936	3.6
Evaporated milk	11,521	1.8
Canned broths and soups	10,901	1.7
Butter	9,471	1.4
Whole-wheat cereal	7,846	1.2
Dried navy beans	5,948	.9
Total	640,497	97.3
1936		
Fresh grapefruit	142,311	30.9
Canned beef	141,923	30.8
Dried prunes	56,971	12.4
Canned grapefruit	20,646	4.5
Dry skim milk	19,895	4.3
Fresh eggs	12,848	2.8
Evaporated milk	10,282	2.2
Dried peas	9,759	2.1
Dried peaches	7,068	1.5
Wheat flour	6,137	1.3
Total	427,876	92.8
1937		
Fresh apples	326,386	34.7
Fresh oranges	203,652	21.6
Dry skim milk	64,664	6.9
Potatoes	48,385	5.1
Rice	33,577	3.6
Dried prunes	24,555	2.6
Canned peas	20,497	2.2
Butter	16,810	1.8
Fresh grapefruit	16,500	1.8
Fresh celery	16,437	1.7
Total	771,463	82.0
1938		
Butter	732,429	29.9
Fresh grapefruit	241,832	9.9
Wheat flour	138,145	5.6
Canned grapefruit juice	131,127	5.3
Fresh oranges	130,672	5.3
Dry skim milk	128,090	5.2
Dried prunes	125,436	5.2
Whole-wheat cereal	94,821	3.9
Dried raisins	92,984	3.8
Dried navy beans	82,199	3.4
Total	1,897,735	77.5
1939		
Butter	1,725,363	23.9
Fresh apples	1,426,075	19.8
Fresh oranges	729,702	10.1
Canned peaches [1]	462,109	6.4
Dried raisins	348,418	4.8
Wheat flour	332,509	4.6
Fresh eggs	303,846	4.2
Corn meal	216,101	3.0
Graham flour	166,435	2.3
Rolled-oats cereal	166,427	2.3
Total	5,876,985	81.4
1935–39		
Butter	2,485,935	21.2
Fresh apples	1,932,355	16.5
Fresh oranges	1,065,643	9.1
Canned beef	510,736	4.4
Wheat flour	504,099	4.3
Canned peaches [1]	462,109	3.9
Dried raisins	441,402	3.7
Fresh grapefruit	406,448	3.4
Dried prunes	395,910	3.4
Fresh eggs	338,161	2.9
Total	8,542,798	72.8

[1] Does not include $16,712 of peaches delivered by the Surplus Marketing Administration to State welfare agencies for canning and redistribution to school-lunch programs.

Based on Surplus Marketing Administration data.

Surplus commodities are intended, primarily, to supplement sponsors' own food procurements for lunch projects. There is no guarantee to supply continuously a sufficient variety of foods to provide a varied and nutritionally balanced menu. Some schools do get along almost entirely on surplus foods, especially in the poorer communities or where only fruit or other uncooked food is served. But sponsors in these schools are encouraged to supplement their surplus allotments with additional food.

The local welfare agency notifies each school at regular intervals what commodities are available for distribution and the maximum quantities it may receive. The school is free to refuse any commodity, or to accept as much as it wishes within the limits of its maximum allowance. Division of the available commodities between family-relief cases, school-lunch projects, and other types of recipients is generally at the discretion of State or local welfare officials. But, on occasion, the S. M. A. has earmarked certain commodities for exclusive use in the School Lunch Program when the supplies were limited. Butter, canned peaches, and shell pecans were so budgeted in the 1939–40 school year.

Seasonal Variation in Food Allotments

As would be expected, the quantity of food supplied to the School Lunch Program shows marked seasonal variation. During the summer most schools are closed and serve no lunches. Many do not start their regular lunch programs with the opening of school in the fall; they serve either no lunches or only cold foods until winter. Except for interruptions during holiday periods, cold weather brings the peak in school-lunch activity. In the spring many schools shut down their programs completely or return to serving cold lunches, perhaps only surplus fruit.

On the other hand, surpluses of many farm products, including dairy products, many fresh vegetables, and the small fruits, are most likely to occur in late spring, summer, and early fall. This means that schools discontinuing their lunch programs during these seasons are normally unable to take full advantage of the availability of many foods. It also means that the program provides a greatly reduced outlet for direct distribution at the very time when some important commodities are in greatest surplus.

This seasonal variation in school-lunch distribution is indicated in table 9 and figure 3. They show the variation from month to month in the number of children served in the program, the estimated retail value of surplus commodities supplied them, and the value of commodities per child. In the value per child the factor of schools opening and closing their programs is eliminated, so that there is reflected only the variation in the types of lunches served and in the types of commodities available. But this value as well as the number of children participating tends to be higher in winter and lower in summer.

What this means in relation to the whole Program of Direct Purchase and Distribution is indicated in the last column of the table and the lower part of the chart, which show the value of commodities distributed to school lunches as a percentage of the value of foods distributed to all types of recipients. During the winter of 1939–40, school-lunch distribution reached 13 percent of all direct distribution and in 1940–41, 30 percent. But in the intervening summer, it fell to less than 1 percent.

Both to maximize the nutritional benefit of the program to children and to make it a more stable outlet for farm surpluses it is desirable that this seasonal variation be made less extreme. With the encouragement of the S. M. A., an increasing number of schools, especially in the larger cities, are undertaking to maintain lunch service during midyear holidays and to provide playground lunches in the summer. The S. M. A. now also makes commodities available to summer camps for needy children. But neither of these measures is applicable to the problem in the rural schools, which include a large proportion of the children participating in the program.

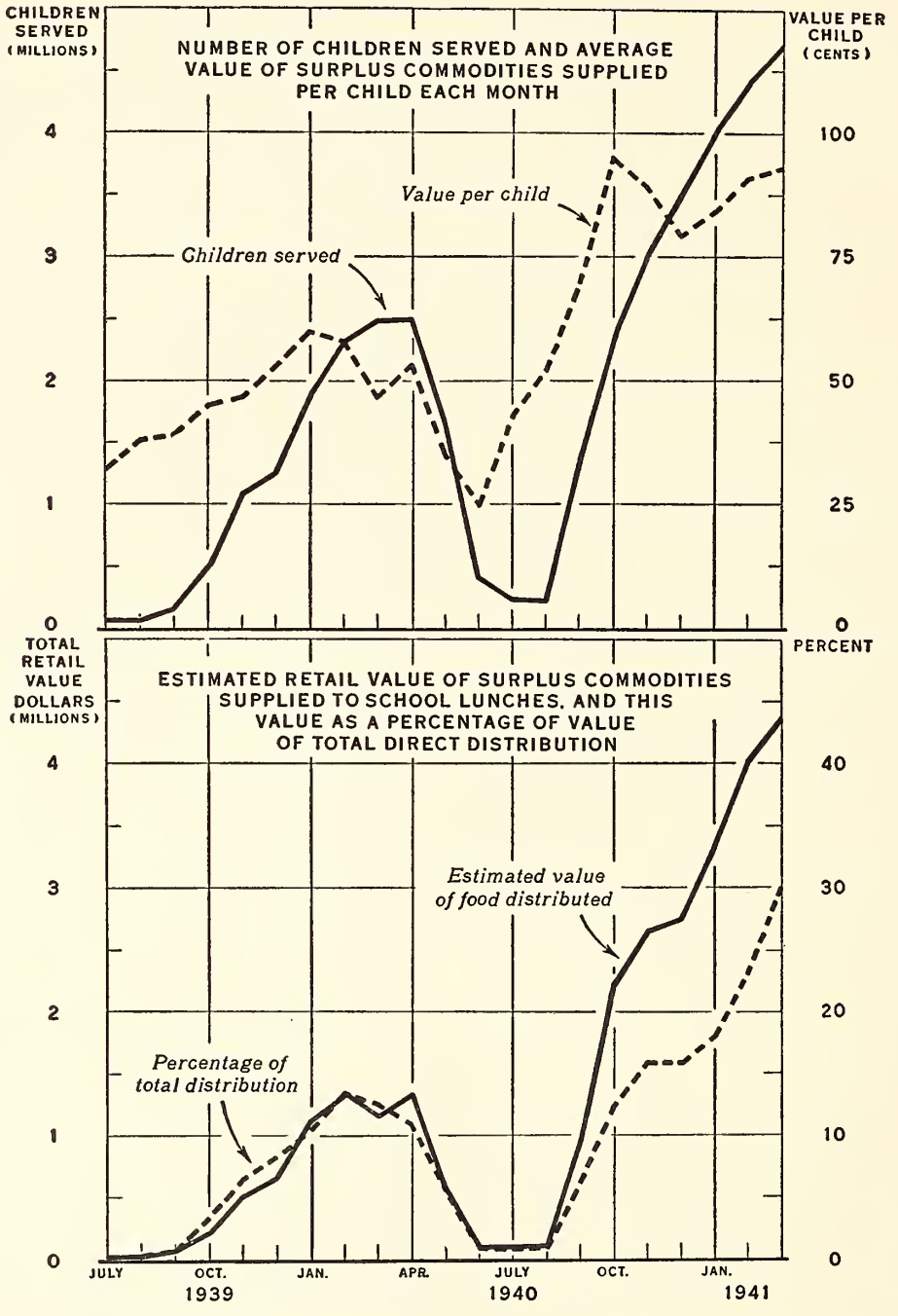

Figure 3.—The number of children participating and the value of commodities supplied per child (upper diagram) increased during the winter and fell off during the summer so there was a marked seasonal variation in the total value of commodities supplied for school lunches and in this value as a percentage of the value of all foods directly distributed (lower diagram). (See table 9.)

TABLE 9.—*Seasonal variation in the Surplus Marketing Administration School Lunch Program, July 1939–March 1941*

Year and month	Children served	Estimated retail value of food distributed to school lunches		
		Total value	Value per child	Percentage of total direct distribution
1939	*Number*	*Dollars*	*Cents*	*Percent*
July	74,085	24,053	32	0.25
August	71,384	26,956	38	.26
September	173,816	67,789	39	.70
October	494,976	220,929	45	3.35
November	1,099,818	519,407	47	6.48
December	1,264,007	675,684	53	8.33
January	1,876,697	1,132,278	60	10.54
February	2,314,945	1,351,026	58	13.43
March	2,483,578	1,177,233	47	12.64
April	2,496,287	1,335,055	53	11.02
May	1,653,461	583,405	35	5.66
June	414,390	103,583	25	.91
1940				
July	241,752	102,771	43	.82
August	238,649	123,166	52	.88
September	1,358,242	957,346	70	6.26
October	2,338,208	2,225,358	95	12.48
November	3,002,587	2,666,434	89	15.80
December	3,490,558	2,749,495	79	15.92
January	4,000,489	3,345,966	84	18.17
February	4,411,590	4,019,520	91	22.93
March	4,715,311	4,368,371	93	30.04

Based on Surplus Marketing Administration data.

Another means of reducing seasonal variation is to can summer surpluses of fruits and vegetables for winter use in school lunches. Canning projects, usually operated by W. P. A., are becoming increasingly common adjuncts of school-lunch programs. In addition to canning local produce, including that raised in school gardens, many schools use allotments of surplus commodities in this way. In a few States, welfare administrations sponsor large-scale W. P. A. canning projects that preserve summer fruits and vegetables for winter distribution to school lunches, as well as to all other types of recipients of surplus commodities.

The School Milk Program

This discussion would be incomplete without mention of the School Milk Program recently initiated in a few of the large cities. Under this program the city welfare administrations are enabled to buy milk at a special low price for distribution to needy children, either free or at a charge of a penny for a half pint.

The penny-milk experiment was first tried successfully in Chicago during the last 14 days of school in June 1940. The program was extended in the following school year and was serving over one-half million children in eight city areas in May 1941 (table 10). Further expansion of the program is planned.

TABLE 10.—*Number of schools and children in the School Milk Program, by cities, May 1941*

City [1]	Schools	Children
	Number	*Number*
New York, N. Y.[2]	———	353,351
Chicago, Ill.[3]	119	51,809
St. Louis, Mo.[4]	9	8,613
Birmingham, Ala.[4]	25	8,637
Omaha, Nebr.[4]	22	8,026
Boston, Mass.[4]	172	78,266
Lowell-Lawrence, Mass.[4]	13	8,708

[1] Program also in operation in Ogden, Utah, but no information available.

[2] Statistics as of April 1941. Includes 117,826 children in 846 schools receiving free milk with school lunches. Program started in October 1940.

[3] Statistics as of February 1941. Experimental program tried in June 1940. Present program started in January 1941.

[4] Programs started in May 1941. The Birmingham program also includes Jefferson County; the Boston program includes 13 other cities and towns in the metropolitan area.

Surplus Marketing Administration.

The actual operation of the school-milk programs is made possible through the joint cooperation of milk producers, milk dealers, the city welfare and school authorities, and the Federal Government. Producers supply the milk for distribution to schools at a price below that which they regularly receive for milk for fluid distribution (the class-I price), but above that which they get for milk sold for processing into cheese, butter, etc. (the surplus price). The money collected from the children is paid by the city welfare authorities to the local milk dealers. These dealers submit competitive bids to the Government for the business of processing and delivering the milk to each of the schools, and the lowest bid is accepted. But even with reduced producers' and dealers' charges, the costs of

purchase, processing, and delivery are somewhat higher than the penny price for which the milk is sold. To make up the differences the Government pays indemnities to the handlers, drawn from funds that are earmarked for surplus-removal programs. The educational authorities, of course, have charge of distributing the milk at the schools.

The mechanics of operation of the program in the schools is relatively simple. In general only schools in low-income areas are certified for participation. Every child attending the school is then eligible to buy a half-pint of milk for a penny. In some cities (New York, Birmingham, and Omaha), the milk is distributed free to children in special schools and is paid for out of welfare funds. In New York City all children who participate in the School Lunch Program receive free milk.

As the whole School Milk Program is still in the experimental stage, various types of operation are being tried. In Birmingham, each child must be certified by local authorities as needy. Children who have been certified may buy the milk for a penny, while the others have to pay the regular price of 3 cents.

From the viewpoint of farm policy the objective of the school-milk programs is to increase returns to dairy farmers. This increase is accomplished by diverting their low-priced surplus milk to a more remunerative use as school milk. Producers receive for school milk something less than the class-I price of milk sold for regular consumption in fluid form, but more than they would receive if the milk were classed as surplus and used for manufactured dairy products. To the extent that the school milk is substituted for regular milk purchases producers receive less because of the differential below the class-I price. Since the price of the school milk is above the surplus price, they gain, however, by the increase in milk consumption caused by the program.

The Children Served and Their Communities

Who are the children served and where do they live? Unfortunately a brief statistical summary must tell the story. This summary is based partly on statistics kept regularly by the Surplus Marketing Administration, but chiefly on information provided by the S. M. A. special school-lunch representatives in the States, during surveys made in March 1940 and February 1941. Because many of these figures are estimates, the story is incomplete and cannot be accurate in all details, but the data do provide a rough sketch of the scope and significance of the program, and the progress made from the 1939–40 to the 1940–41 school year.

Distribution of Children by States and Communities

Table 11 shows the number of children participating in the several States and administrative regions, and compares these numbers with the corresponding total school enrollments. The accompanying map (fig. 4) indicates by its shading the percentages of total school enrollment participating in the various States. Heaviest participation, with some individual exceptions, was in the Southern, Mountain, and Western Plains States, which were the most depressed economic areas in the country.

Table 12 (p. 30) presents special statistics on the operation of the School Lunch Program in March 1940 and February 1941. Parts A and B show the distribution of projects by size of community and type of school. About 75 percent of the schools and 60 percent of the children served were in rural communities. These children were predominantly from elementary schools; less than one-sixth were from high schools, and very few were

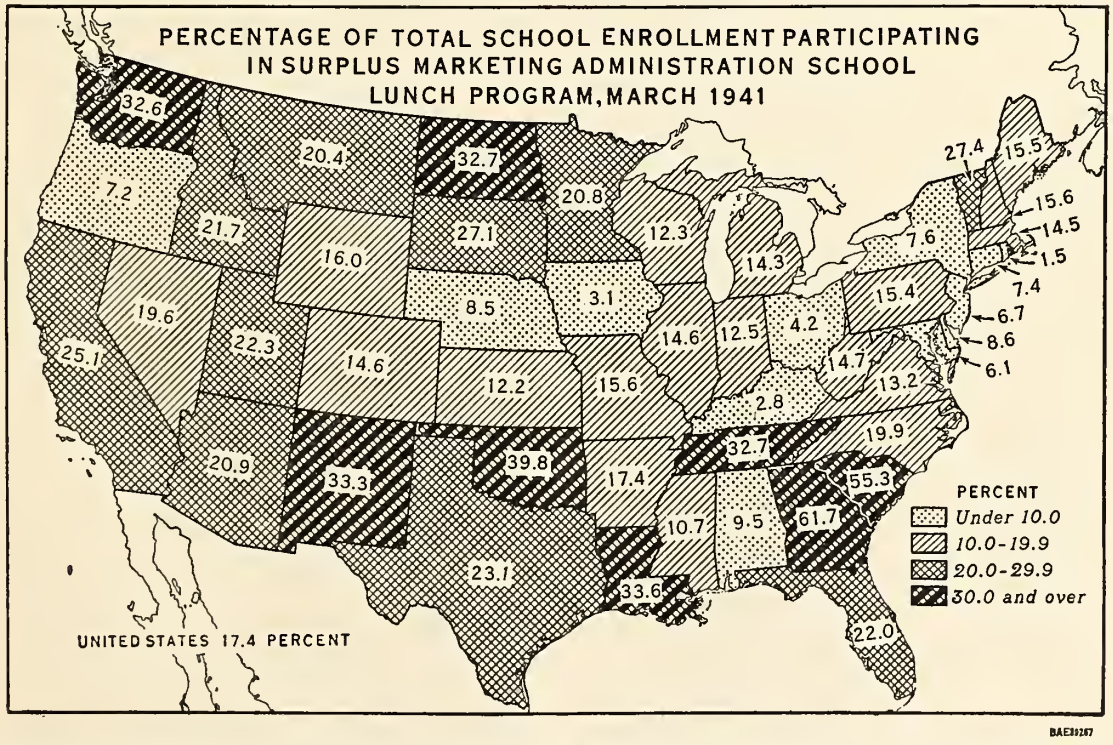

Figure 4.—Participation was generally highest in the depressed agricultural areas of the South and the Mountain and Western Plains regions.

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from nursery schools. Scattered statistics from a number of States do not indicate any significant change in the distribution of children by type of school since March 1940.

TABLE 11.—*Number of children receiving surplus commodities and the percentage of total school enrollment participating in the Surplus Marketing Administration School Lunch Program, by States and Surplus Marketing Administration administrative regions, March 1941*

Region and State	Children participating	School enrollment[1]	Percentage of enrollment participating
	Number	*Number*	*Percent*
Continental United States	4,663,113	26,821,128	17.4
United States and Territories[2]	4,715,311	27,139,563	17.4
Region 1	585,665	2,547,538	23.0
Arizona	25,222	120,809	20.9
California	284,931	1,132,930	25.1
Colorado	33,980	233,318	14.6
Idaho	26,661	122,910	21.7
Montana	22,107	108,253	20.4
Nevada	4,071	20,746	19.6
New Mexico	42,825	128,695	33.3
Oregon	14,834	205,727	7.2
Utah	30,708	137,479	22.3
Washington	91,350	280,622	32.6
Wyoming	8,976	56,049	16.0
Region 2	881,497	7,231,682	12.2
Illinois	143,242	978,376	14.6
Indiana	86,531	689,554	12.5
Iowa	15,659	501,097	3.1
Kansas	38,091	312,918	12.2
Michigan	124,816	874,230	14.3
Minnesota	120,566	579,638	20.8
Missouri	109,094	700,020	15.6
Nebraska	33,461	391,645	8.5
North Dakota	47,527	145,177	32.7
Ohio	58,792	1,384,035	4.2
South Dakota	37,953	139,817	27.1
Wisconsin	65,765	535,175	12.3
Region 3	891,881	7,978,709	11.2
Connecticut	21,336	289,759	7.4
Delaware	4,037	47,125	8.6
District of Columbia	11,369	105,668	10.8
Maine	43,169	278,418	15.5
Maryland	19,140	312,039	6.1
Massachusetts	112,294	775,491	14.5
New Hampshire	15,661	100,520	15.6
New Jersey	56,381	847,235	6.7
New York	177,209	2,346,355	7.6
Pennsylvania	345,845	2,245 881	15.4
Rhode Island	1,785	117,541	1.5
Vermont	17,499	63,845	27.4
West Virginia	66,156	448,832	14.7
Region 4	2,356,268	9,381,634	[3] 25.1
Alabama	65,225	684,559	9.5
Arkansas	80,978	464,508	17.4
Florida	87,418	397,586	22.0

TABLE 11.—*Number of children receiving surplus commodities and the percentage of total school enrollment participating in the Surplus Marketing Administration School Lunch Program, by States and Surplus Marketing Administration administrative regions, March 1941*—Continued

Region and State	Children participating	School enrollment[1]	Percentage of enrollment participating
Region 4—Continued.	*Number*	*Number*	*Percent*
Georgia	454,787	736,499	61.7
Kentucky	21,953	776,779	2.8
Louisiana	180,054	536,242	33.6
Mississippi	73,312	686,735	10.7
North Carolina	181,255	909,466	19.9
Oklahoma	237,925	597,677	39.8
South Carolina	269,846	488,200	55.3
Tennessee	219,697	671,097	32.7
Texas	355,598	1,536,910	23.1
Virginia	76,022	576,941	13.2
Puerto Rico	50,407	315,035	16.0
Virgin Islands	1,791	3,400	52.7

[1] Public and parochial elementary and high schools.
[2] United States, Puerto Rico, and Virgin Islands.
[3] 25.4 percent excluding Puerto Rico and Virgin Islands.
Surplus Marketing Administration.

The emphasis by the S. M. A. on expansion in areas and among children that are the most needy is clear. Effort has been concentrated in those localities where incomes were lowest and where previously there were few or no facilities for serving lunches. The elementary schools, especially in rural communities and economically distressed areas, have benefited particularly.

Economic Status of Children Served

As schools and communities vary widely in their practices regarding certification of children and as it was not feasible for the special representatives to get detailed data from each individual school, estimates as to the economic status of the children are not too reliable. What scattered statistics were available in the field, and published statistics on public assistance, indicate that about two-fifths of the children in the program came from relief families and another 30 percent from families dependent on W. P. A. for their income. This leaves about one-third of the children presumably from low-income, borderline families (part C of table 12).

The large number in this last category reflects again the general rural character of the program. In spite of the low incomes of many farm families, a comparatively small proportion of them receive relief grants or W. P. A. employment. (Less than 10 percent of farm families were receiving relief in 1935–36, as compared with an average of more than 15 percent in all types of communities.) (*19, p. 74.*) On the other hand, it reflects the fact that the School Lunch Program is reaching a large group of children whose families are eliminated in programs that set up formal relief status as a requisite for receiving benefits although many of this group are likely to be in worse nutritional condition than are some of the children from families who are on relief.

Types of Lunches and Ways of Operating

Progress in the quality of the meal served, from 1939 to 1940, is indicated in the latest statistics (part D, table 12). The percentage of the children served a complete meal increased from 38.7 to 53.8; the percentage of those served one hot dish decreased from 28.1 to 16.8; and the percentage who were served only surplus commodities decreased from 25.2 to 22.7. The S. M. A. has permitted projects of this third type only as a method of encouraging local sponsorship for a more complete meal.

A small but increasing proportion of the schools are taking up gardening, canning, and other supplementary food-supplying projects, which improve the nutritional value of the lunches by increasing the quantity and variety of foods served (part E of table 12). Canning projects, in particular, make it possible to take advantage of commodities supplied during the summer when schools are not in session.[11]

Improvement in the facilities for lunch service in 1941 as compared with those of 1940 is indicated in part F of table 12. The percentage of schools serving in lunchrooms increased from about 37 to 44, while that of schools serving in classrooms decreased from approximately 53 to 48. Service in classrooms occurs mainly in the smaller schools. Although slightly more than one-third of the children were served in classrooms, more than half received their meals in school lunchrooms. There has also been a slight increase in service from central kitchens, especially in large city systems.

Local financing of school-lunch projects usually comes primarily from community funds or from subscriptions raised by the sponsors. The 1940 survey indicated that parents of more than one-tenth of the certified children made at least some "token" cash contributions toward the local operating costs, and the parents of about 20 percent of the children made contributions of food or other supplies (part G, table 12). In a number of schools the parents, the children, or both, helped to provide the labor for operating the project. These contributions occur most often in small schools, where the arrangements are informal and every family gives according to its ability toward keeping the project going. In no case are cash contributions used as payments for surplus commodities; they are used solely to defray the sponsors' costs for food and other operating expenses.

Development of New Projects

The effect of the S. M. A. program in helping to expand the school-lunch movement is suggested in part H of table 12. In March 1940 an overwhelming majority of schools had new lunch projects. Less than one-fifth of the schools then participating in the program were serving lunches before they joined the S. M. A. program. At the peak of the school year in 1941, with a greatly expanded program, it is estimated that less than 15 percent of the participating schools had had lunch projects before they were included in the S. M. A. program.

In many schools that had had previous programs the receipt of surplus commodities apparently made possible the expansion of

[11] For a more complete discussion of supplementary food-supplying projects see pp. 36–8.

the work—to serve food to more children or to carry on through the spring instead of stopping at the end of cold weather. In a few cases, chiefly in the larger cities, schools have undertaken to serve breakfast or mid-morning luncheon, in addition to the noon lunch, to children who are particularly undernourished.

TABLE 12.—*Special statistics on the operation of the Surplus Marketing Administration School Lunch Program, March 1940 and February 1941*

Item	March 1940		February 1941	
	Percentage of total participating—		Percentage of total participating—	
	Schools	Children	Schools	Children
A. Distribution of projects by size of community:[1]	*Percent*	*Percent*	*Percent*	*Percent*
Urban (population over 2,500)	25.1	39.9	23.7	38.6
Rural (population under 2,500)	74.9	60.1	76.3	61.4
B. Distribution of projects by type of school:[2]				
Preschool or nursery	3.3	1.6		
Elementary school	81.2	76.4		
Junior high and high school	15.5	22.0		
C. Economic status of participating children:[3]				
Families receiving some form of local, State, or Federal relief		36.5		39.3
Families having W. P. A. employment		30.9		28.2
D. Distribution of projects by type of meal served:[4]				
Complete hot lunch	35.4	38.7	45.0	53.8
Lunch, chiefly one hot dish (e. g. soup or baked beans) including food procured by sponsor	30.4	28.1	23.4	16.8
Cold lunch including food procured by sponsor	10.3	8.0	6.0	6.7
Surplus commodities only (e. g. fruit or fruit juice supplementary to lunches brought from home)	23.9	25.2	25.6	22.7
E. Food-supplying projects operated in connection with lunch programs:[5]				
Garden projects	13.9	15.3	16.9	19.2
Canning projects	13.4	14.9	17.7	19.6
Other projects	3.3	3.0	2.4	2.8
F. Distribution of projects by type of facilities for serving lunches:[6]				
Service from central kitchen	4.0	6.5	4.4	6.9
Service in school lunchroom	36.7	42.6	44.4	52.9
Service in classroom	53.2	42.8	48.0	36.7
Other	6.1	8.1	3.9	3.5
G. Support of projects by families of certified participating children:[7]				
Parents of certified children contribute money	17.6	11.8		
Parents of certified children make contributions in kind	32.8	19.8		
Parents of certified children contribute labor	9.2	5.8		
Certified children contribute labor	21.5	5.4		
H. Schools receiving surplus commodities that had lunch projects before S. M. A. assistance:[8]	18.7	19.2		
Expansion of lunch projects in above schools:[9]				
More lunches served	54.5	[10] 30.4		
Lunches served more months of the year	35.9	[11] 25.0		
More meals served per day	4.7	[11] 3.0		

[1] Returns from 48 States and the District of Columbia, March 1940; from 47 States and the District of Columbia, February 1941.
[2] Returns from 45 States and the District of Columbia.
[3] Returns from 40 States and the District of Columbia, March 1940; from 37 States and the District of Columbia, February 1941.
[4] Returns from 45 States and the District of Columbia, March 1940; from 43 States and the District of Columbia, February 1941.
[5] Returns from 44 States and the District of Columbia, March 1940; from 33 States and the District of Columbia, February 1941.
[6] Returns from 45 States and the District of Columbia, March 1940 and February 1941.
[7] Returns from 40 States and the District of Columbia.
[8] Returns from 38 States and the District of Columbia.
[9] Expansion break-down of 33 States and the District of Columbia.
[10] Percentage of total participating children that have been added in the 33 States and the District of Columbia.
[11] Percentage of total participating children in the 33 States and the District of Columbia benefited.

Local Organization of School Lunch Projects

The wide local variation in the types of meals that schools in the School Lunch Program serve and in the management of the individual projects is a corollary of the decentralized character of the program. "Lunch" may mean anything from an apple or an orange, supplementing the food each child brings from home, to a complete, nutritionally adequate meal prepared in a central kitchen and delivered by trucks to dining rooms in schools throughout a large city. There is corresponding variation in the organization of the local projects from the purely informal arrangement dependent entirely upon volunteer labor to the highly organized project with a paid staff, large investment in equipment, and complicated administrative set-up. An attempt is now made to picture in its diversity the operation of the programs in the localities where the children are actually fed.

Local Leadership and Cooperation

Each school-lunch project is sponsored by some local agency, group, or individual who assumes formal responsibility for the project, but the actual operation of it usually involves a community of endeavor by several local groups. Table 13 lists several types of such cooperating groups in the order of frequency of their participation in school-lunch projects as reported by the S. M. A. special representatives in March 1940.

The table points clearly to the predominant part taken by parents' organizations and local governmental units in local sponsorship. But it also shows the wide variety of local groups which frequently take an active interest in the operation of projects. The following pages attempt to suggest how these groups fit into the typical organization of projects in different types of communities.

Table 13.—*Cooperation by various local groups in the organization and operation of the Surplus Marketing Administration School Lunch Program, March 1940*

Type of group	Percentage of projects in which group cooperated [1]
	Percent
Parent-teacher associations, mothers' clubs, special parents' committees	67.0
Civic and fraternal organizations	8.5
Local governmental agencies (other than welfare, education, and health departments)[2]	7.0
Interested private individuals	4.5
Teachers	3.5
Church groups	2.5
Farm groups, home demonstration clubs, 4–H Clubs, Future Farmers of America, etc	2.0
Welfare, child-welfare, and health organizations	2.0
Other groups	3.0

[1] Percentage of 11,346 projects in 31 States and the District of Columbia for which detailed quantitative estimates were given by S. M. A. school-lunch representatives. Only rough estimates were possible, so that the figures are necessarily inaccurate and incomplete and can be relied upon only to give a hasty impression of the community of endeavor underlying local organization of projects.

[2] Local welfare, education, and health departments almost necessarily cooperate to some degree in every local project.

The Country School

Let us examine first the organization of lunch projects in the small rural schools that make up so large a proportion of the School Lunch Program. Prime movers in a project of this type are almost necessarily the teacher or the mothers involved, although in some instances the 4–H Club or the local group of the Future Farmers of America take a large share in the work. The leaders in organizing the lunch program may have received their first stimulation from the county agent of the Extension Service, from the S. M. A. special school-lunch representative, from the local Farm Security agent, from a visiting nurse, or from some other county or State health or educational officer, or it may have come from observing the project operating in a neighboring community.

In any event, those interested in starting a project approach the local school board with the suggestion that some sort of cooking facilities should be provided in the school. If this is possible—and in many cases it is not, at least at first—arrangements are worked out for some of the mothers to take turns preparing the meal, or the teacher may prepare it with the help of a few of the older children. If the school is easily reached from a nearby city or village a W. P. A. cook or qualified N. Y. A. out-of-school workers may be available. W. P. A. is experimenting successfully with the development of central kitchens to prepare food for delivery by truck to rural schools throughout a wide area.

The meal may consist of one hot dish to supplement the usual cold sandwiches brought from home, or it may have more items. This depends to a considerable extent upon the success in making satisfactory arrangements regarding labor and cooking facilities. When cooking facilities are not available, special arrangements may be made to heat on the school stove the soup or stews that the children bring from home, or the children may be asked to bring materials from home to make a hot soup or other hot dish for the entire school. Such arrangements have been advocated by the home economics workers in the Extension Service for many years.

Meanwhile application has been made at the local welfare office for surplus commodities. In some areas, trucks from the welfare agency deliver allotments of surplus food directly to the schools once or twice a month. Elsewhere the sponsors of the project must arrange for someone to call for the commodities at the county warehouse or at some convenient intermediate point. What surplus commodities can be used, and what additional food the sponsors will have to provide, depends of course on the type of lunch to be served. It may include a stew that contains surplus vegetables with the addition of meat that is furnished by the sponsors; bread or biscuits baked from surplus flour and spread with surplus butter; and surplus canned or stewed fruit with cookies made from surplus oatmeal. Or, if no cooking is done, it may be that only oranges, apples, or other uncooked surplus food may be served to supplement cold lunches brought from home.

The financing of a hot-lunch program in a small rural school is likely to be as informal as the other arrangements. Much of the food supply commonly consists of contributions in kind from the children's families. The mothers sometimes have canning bees to preserve the contributions for winter use. Often a special school garden is grown to supply fresh foods in season as well as foods for canning. In addition, parents who are able may be asked to pay a small amount each week for their children's lunches. Usually, however, funds for equipping the school for the project, to the extent that this is not done with school-board money, and to buy supplies during the year are raised through bake sales, church suppers, entertainments, and other social events.

An increasing number of rural hot-lunch projects are being operated throughout the school year. A large proportion of them, however, run only during the winter months when cold weather makes a hot lunch seem particularly important.

The Village Graded School

Somewhat more formal arrangements are usually necessary in a graded village or consolidated school that serves a large rural or suburban area. The number of children to be cared for is larger, and the parents form a less closely knit social community. Here active responsibility for the project is likely to be taken by the principal or other school official or by the parent-teachers association, mothers' club, or perhaps a special parents' committee formed for the purpose.

Many of the newer graded schools are built with more or less adequately equipped rooms set aside for serving lunches. If this is not the case, because of the larger scale of operations the cooking and serving facilities are even more of a problem than in the small rural school. In some cases the kitchen of a

church or community meeting hall may be available in the neighborhood. More likely, however, some sort of makeshift facilities for cooking are set up in the school, in the basement or an empty room (fig. 5). Meals may be served there in shifts, or the children may carry their food from the serving tables to their classrooms.

W. P. A. labor for cooking and serving is more likely to be available to projects of this type. In many cases the work is performed by N. Y. A. students under the supervision of a single W. P. A. cook or of a teacher of home economics. Occasionally such a lunch project is run by the home economics department of the school as a practical application of its work. From the viewpoint of both instruction and lunch preparation an arrangement like this has obvious disadvantages, as well as advantages, unless special help can be regularly employed for many of the routine tasks. Even in these graded schools the lunches are often prepared and served by a rotating committee of mothers.

The financing of facilities for lunch preparation in these schools is more likely to come out of regular funds for school maintenance. Where school funds are inadequate, private individuals or organizations often give the money for particular pieces of equipment.

As for operating costs, it is not usually feasible to depend primarily on contributions of food brought by the children from home. An increasing number of these schools depend for some part of their food supply on gardening and canning projects, but food and other supplies represent predominantly cash expense.

If many pupils who are not considered to be needy come from a considerable distance and so can benefit from a hot lunch at school, it is usual to serve them, charging them or their parents accordingly. In many cases, enough money is raised in this way to carry the costs of feeding less fortunate children free. Frequently, however, funds must be raised from other sources. In particularly poor areas, the Red Cross sometimes donates foods, and, in a few places, W. P. A. funds have been made available for food purchases as an expenditure necessary to make possible the operation of lunch projects. In some communities of this kind, also, schools have found it necessary to rely almost entirely upon their surplus-food allotments for supplying their lunch programs.

Larger City Schools

Lunch projects in cities that are large enough to have a system of several schools present still different problems. The program is likely to start in an individual school in a very poor neighborhood where the resources of the families involved are lowest. A local mothers' club may take the initiative in agitating for a program, but it is more likely to be a city-wide health or welfare organization. The attention of the organization may have been called to the need in the school by teachers or by the principal or the school nurse, whose contact with the children as a group has made them vividly aware of the extent of malnutrition. In any case financial support for the project necessarily has to come from outside this poor community group that is to be served by the program.

As the idea spreads from one school to those in other needy neighborhoods a system is built up which obviously calls for coordination. Cities with projects in a number of schools frequently find it economical to establish a central kitchen where all the food is prepared, and from which it is delivered, still hot, to the individual schools. Thus eventually a highly complex organization may develop, requiring large capital investment and centralized administrative direction and permitting considerable division of labor and specialized supervision in its various operations.

Probably the largest organization of this kind is operated by W. P. A. in New York City, where meals for more than 100,000 children are prepared daily in a single highly mechanized plant. Nutrition specialists plan its menus and supervise the cooking. Foods are bought on specification contracts, and a laboratory is maintained to check incoming shipments against the specifications.

Not only is W. P. A. labor the rule rather than the exception in city schools, but often the W. P. A. takes over almost complete responsibility for administering and managing the project. Educational authorities usually provide some special personnel responsible for coordinating the project with the educational program in the schools. The educational, health, or welfare departments are responsible for certification of the children to be served. The city health department checks whether the project is observing sanitary regulations.

The costs of operating a city-wide project obviously run into large figures. In smaller cities, Kiwanis, Rotary, the federated women's clubs, the American Legion or its Women's Auxiliary, or fraternal organizations may take the part of sponsor for projects in individual schools. Parochial schools are usually financed by their own denominational groups. Individual businessmen—bakers, milk distributors, etc.—may provide certain foods free. An appropriation for school lunches may be made from the community chest. But in general, especially in larger cities, the lunch program sooner or later becomes an item in the budget of the department of welfare or of education, or both.

Because of the selection of poor neighborhoods, there is usually no problem of serving children who pay for lunches along with nonpaying children, and no money comes from this source, either. In some cases supplementary dishes are offered for sale to children who can and wish to buy something in addition to their own lunches. In general, certified children eat their lunches at school, and the others go home.

A few cities with well-organized free or low-cost lunch programs antedating that of the Surplus Marketing Administration, have not taken full advantage of the availability of surplus foods. On the other hand, a few cities confine their service to cold lunches or supplementary fruits given to needy children during recess. Most cities, however, supplement the surplus foods with local purchases; the extent of their reliance upon surplus commodities depends both upon their means and upon the importance they attach to school-lunch work.

Problems of Initiating and Integrating Lunch Projects

Regardless of the size of community, the development of a school-lunch project for needy and undernourished children requires ingenuity and resourcefulness on the part of its promoters. Usually it embodies a great deal of enthusiastic effort by one or a very few individuals who have been prime movers in organizing the community endeavor behind it. Success in the long run, however, requires support from the community as a whole, once the need has been pointed out and the possibilities of dealing with it demonstrated.

If the school lunch is to fulfill its maximum potentialities, moreover, it must be integrated in the whole educational program of the school, and in a broad community program for improving child welfare. Lunches can be more than additional filler for children's stomachs on school days. They should be designed specifically to reinforce the children's diets in essential nutrients that are likely to be inadequately supplied in meals at home. Furthermore, they provide a unique opportunity for giving not only the children but also their parents concrete lessons in health and nutrition.

The atmosphere of the lunchroom has a real influence on the whole social development of the children. It is common practice to inspect the children for clean hands before admitting them to the lunchroom and to use the meal as an opportunity for teaching table manners. Often considerable effort is made to cheer up dreary rooms with colorful wall decorations and curtains that may be made in the pupils' art classes. Lessons in hygiene are built around the lunch program with health posters, often prepared by the children themselves, displayed in the eating center (fig. 6).

That the more progressive communities are aware of these phases is shown by the attention they pay to them. Many com-

FIGURE 5.—Lunch in a rural consolidated school in Mississippi. Space and equipment for a lunch program present difficult problems in schools that were built without provision for lunchroom and kitchen.

FIGURE 6.—A nourishing meal for Negro children in Washington, D. C. Posters from the hygiene class enliven the lunchroom and help to integrate the lunch program with the school health program.

munities secure the services of home economists or trained nutritionists in supervising their lunch projects. Where this is not possible, those responsible for the project often seek expert advice on menu planning and methods of preparing food.

Interested parents are encouraged to consult with school nutritionists on the dietary needs of their children, and classes in nutrition are sometimes organized among parents. In some cities, certification of a child for free lunches is followed by a visit to its home by a visiting nurse or other social worker in an effort to help the family to achieve better nutritional management.

It is in relation to these problems of initiating and developing school-lunch projects that agencies outside the local community render valuable assistance, as well as in providing substantial aid in supporting the projects. They cannot furnish the first-hand interest and the close adaptation of a project to local conditions that an alert community can provide when organizing its own lunch program, but they help to arouse local groups to the need for such a project in their community and point out ways and means that have proved successful elsewhere. Once a program has been started, they contribute greatly toward teaching those who are locally in charge the desirable standards of operation and the broader contributions that a lunch program can make to child welfare and education as a whole. This background work by State and national organizations and agencies is next described.

Aid to Local Groups by State and National Organizations

The Work Projects Administration Program

Along with the Surplus Marketing Administration, the Work Projects Administration is the chief Federal agency that offers substantial aid to school-lunch projects. Its activities reach fewer schools and children than do those of the S. M. A. but they are of very great importance in the operation of the projects that it serves. W. P. A. provides the labor for preparing and serving the food, and usually takes an active part in supervising and administering the project. In addition, it frequently undertakes gardening, canning, and other food-supplying projects in conjunction with the work, and in a few instances has even supplied funds in particularly needy communities to help defray costs of food for school lunches.

The present W. P. A. program grew out of the emergency school-lunch activities of the earlier Civil Works and Federal Emergency Relief Administrations. Under W. P. A. these activities have been coordinated and consolidated, and efficient national and State organizations have been developed for carrying on the work. At the peak of the 1940–41 school year, W. P. A. school-lunch units were operating in almost 23 thousand schools, serving about 2 million children (table 14). State-wide projects have been established in all but two States.

Organization of W. P. A. school lunch work

W. P. A. has done a remarkable job of organizing this work on a large scale without losing close contact with local agencies. The work in each State is headed by a school-lunch supervisor, who is responsible to the director of the community-service division of the State W. P. A. Under her is a staff of sectional, area, and local supervisors selected for their special training and ability in lunchroom management and child feeding. This staff cooperates closely with local sponsors of the units under their supervision, making sure that adequate standards of cleanliness and efficiency are maintained, and taking varying degrees of responsibility for the operation of the units. In many cases they take complete charge of planning menus and recipes, and even of food purchases, although no W. P. A. employee may handle any cash in the operation of a lunch unit.

The whole School Lunch Program of W. P. A. has been organized in a way designed to make it render continuous, efficient service, meeting high performance standards, and to integrate closely with the local needs of the communities it serves. The school units are staffed entirely by local workers who are given special training for their jobs, and who must meet State and local regulations for food handlers before they can be assigned to school-lunch work. A comprehensive manual has been prepared giving suggestions on setting up school-lunch units, giving the standard requirements as to sanitation, space, and equipment that local units must meet to be eligible for W. P. A. assistance and providing food standards and menu patterns. In addition, State and local offices usually prepare special technical material to meet the current needs of their units. Valuable work has been done in developing recipes and menus suitable for low-cost school lunches at an experimental kitchen maintained in St. Paul, Minn.

Supplementary food-supplying projects

The operation of supplementary food-supplying projects by the W. P. A. has been particularly important in raising the standards of operation of many projects. The most common method of supplementing the

TABLE 14.—*Number of schools, average number of lunches served daily, and number of persons employed on school lunch projects operated by the Work Projects Administration, January to March 1941*

State	Schools served	Lunches served	Persons employed[1]
	Number	*Number*	*Number*
Continental United States	22,559	1,921,089	62 631
United States and territories[2]	23,160	1,967,839	64,298
Alabama	386	40,652	1,173
Arizona	63	5,981	138
Arkansas	314	38,738	1,532
California	876	105,990	1,826
Colorado	295	28,324	938
Connecticut	50	4,488	105
Delaware			
District of Columbia	89	9,223	354
Florida	510	43,947	1,403
Georgia	951	119,170	3,000
Idaho	145	15,706	318
Illinois	1,120	66,804	4,274
Indiana	286	33,583	973
Iowa	148	12,813	484
Kansas	344	31,098	1,275
Kentucky	323	23,018	871
Louisiana	201	25,827	875
Maine	79	4,486	188
Maryland	24	2,448	87
Massachusetts	204	11,618	731
Michigan	613	48,015	1,295
Minnesota	502	40,510	857
Mississippi	636	62,450	2,893
Missouri	817	56,522	3,104
Montana	146	11,619	215
Nebraska	123	10,337	407
Nevada	57	2,241	88
New Hampshire	24	975	28
New Jersey	183	13,478	474
New Mexico	176	17,218	577
New York	758	96,222	2,619
North Carolina	962	104,511	2,597
North Dakota	153	7,460	164
Ohio	588	57,228	2,232
Oklahoma	1,642	131,261	4,819
Oregon	225	19,319	326
Pennsylvania	254	15,579	603
Rhode Island	23	1,230	65
South Carolina	1,438	117,764	2,507
South Dakota	217	15,151	413
Tennessee	1,652	130,248	2,687
Texas	2,065	127,650	7,576
Utah	251	28,507	689
Vermont	176	7,945	221
Virginia	574	39,593	878
Washington	441	49,204	945
West Virginia	970	53,107	1,876
Wisconsin	443	27,677	837
Wyoming	42	4,154	94
Puerto Rico	601	46,750	1,667

[1] Number of persons employed as of March 1941.
[2] United States and Puerto Rico.

Approximated from Work Projects Administration data.

food supply is by means of a garden project. In February 1941, about one-fifth of the children participating in the S. M. A. School Lunch Program were in schools which made use of gardens, and most of these were operated by W. P. A. The most common kind is a plot of a few acres located near the school, but gardens are not necessarily limited to country schools. In some towns and cities a common plot is maintained for many schools, and in others the schools receive produce from large city or county farms maintained to furnish fresh vegetables to people on relief.

Gardens supply the needy children with some of the foods that are most deficient in their home diets. Estimates of the quantity of food obtained from garden and canning projects in various States ranged from 2 to 75 percent of the value of all food provided locally, with an average of about 20 percent.

Another method of obtaining supplementary food for the programs is through food-preserving projects. These projects are of two kinds. The more common is a small project in the school during the summer, when lunches are not being served. Foods for canning or other preservation may be bought, or donated by the sponsors, local farmers, or merchants, or they may come from the school garden. In many States large projects are operated by relief labor for the preservation of food, including that donated by the S. M. A., for distribution to all relief categories as well as to school-lunch projects. The trend in W. P. A., in both food preservation and gardening work, is toward consolidation into central units which can take advantage of the economies that a larger scale of operation makes possible.

In 1940 a few States experimented in maintaining bakeries. Under this arrangement schools ship all or part of their allotments of flour, other cereal products, and fruit to a central town or county bakery where they are used in making bread and cakes and cookies. Schools lacking adequate baking facilities are thus able to use surplus commodities they would otherwise have to decline.

Supplementary food-supplying projects are of great value in the expansion of the school-lunch movement. They help in the initia-

tion and maintenance of lunches in schools that otherwise could not support lunch programs. They insure a more nourishing, well-balanced meal by supplying the children with commodities that otherwise would not be bought, and by making possible fuller use of the surplus commodities available to the school. The surplus commodities are distributed seasonally, according to the period of surplus, but preservation makes possible their utilization throughout the year. Wider use of supplementary food-supplying projects is anticipated in the coming school year.

Nursery schools

Another activity of the State W. P. A. community-service division is the operation of nursery schools for underprivileged children of preschool age. Most of the nursery schools that receive surplus commodities are operated by W. P. A. (fig. 7). Such schools are of strategic importance in combating child malnutrition, since they reach children at an age when they are especially susceptible to permanent injury from inadequate feeding. Parents of nursery-school children are given information on family feeding and demonstrations in food preparation and cooking.

The National Youth Administration Program

Increasing aid is being given to school-lunch projects through the National Youth Administration. Although youths who are employed by N. Y. A. can work only under adult supervision in these projects, they have made possible many school lunch programs that otherwise could not have been undertaken. This service has been especially important in small communities where there are no W. P. A. workers who can be certified as cooks; through N. Y. A. funds, youths are hired to operate such projects under supervision of a home economics teacher, a committee of mothers, or a paid manager. In April 1941 over 16,000 youths in 42 States, the District of Columbia, and Puerto Rico were employed in the N. Y. A. school-lunch projects.

N. Y. A. also helps in the operation of gardening projects to supply food for school lunches. A special service it has rendered in some areas has been the manufacture of tables, chairs, and other equipment for school lunchrooms (fig. 8).

Special School Lunch Representatives of the Surplus Marketing Administration

The role of the Surplus Marketing Administration in the development of the School Lunch Program has been described. The field men who have been responsible for the expansion of the program in the States are the S. M. A. special school lunch representatives. The effectiveness of their work is attested by the marked growth of the program since the summer of 1939, when their positions were created. (See table 1, page 2.)

The largest part of the time of these representatives is spent in visiting local communities in their States. Where no school lunches are in operation they visit individuals and groups who might be interested in such projects, explain the cooperation that the S. M. A. can offer, acquaint them with the work that is being done elsewhere, and give them sources of information, advice, and aid. Where a project is being organized they take part in discussion groups and meetings and help with particular local problems. Where programs are in operation they offer their services to the local sponsors in obtaining advice and aid on difficulties that may arise, and pass along any suggestions on operation that they have received when visiting other projects. One of the more important functions is to help local sponsors over any difficulties that they may encounter in arranging for their supplies of surplus foods or in interpreting the rules established by the S. M. A. governing the use of commodities.

Other National and State Cooperating Groups

Many other organizations and agencies cooperate in various ways in school-lunch work

FIGURE 7.—Dinnertime in a Works Progress Administration nursery school. A well-balanced noonday meal is an important education activity in the Works Progress Administration nursery school day.

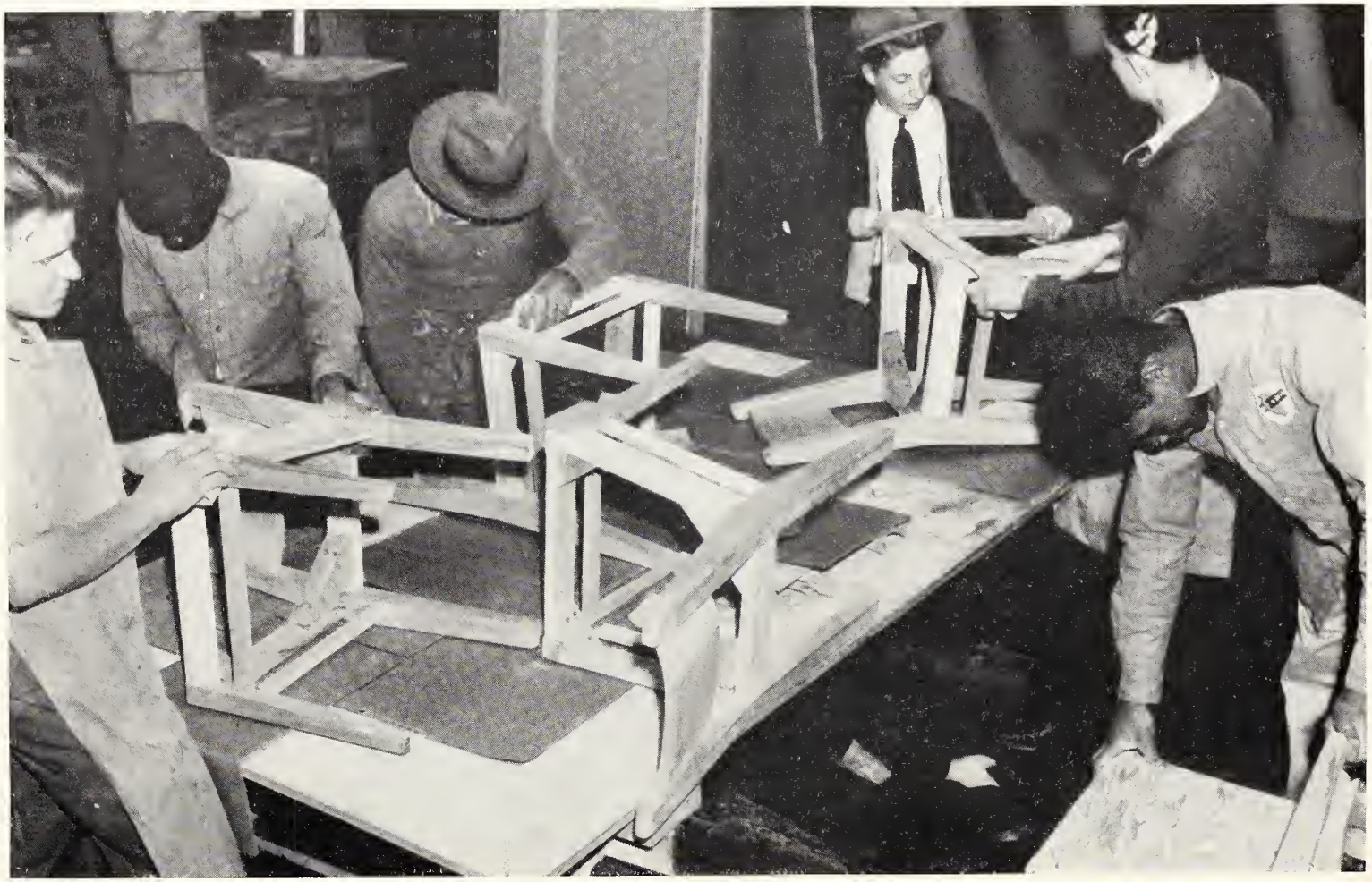

FIGURE 8.—Chairs built by National Youth Administration workers for a school lunch project in Illinois. Manufacture of lunchroom equipment combines occupational training with aid to school-lunch work.

on the State and national level Among other Federal agencies may be listed the Extension Serviee, the Farm Security Administration, the Rural Eleetrifieation Administration, and the Bureau of Home Economies of the Department of Agrieulture; the Children's Bureau, of the Department of Labor; and the Federal Office of Education, of the Federal Seeurity Agency. State departments of education, health, and welfare neeessarily take part in the program. Different groups in the State eolleges give valued assistance. Among nongovernmental organizations mention should be made of the State eongresses of parents and teachers, and of the State bodies of women's and eivic clubs, health and welfare associations, and sueh rural organizations as the 4–H Clubs. All of these groups cooperate in promoting school-luneh work. Many of them also help aetively in the operation of lunch projects, once they are established.

Promotional assistance

Promotional aids may cover many activities. They inelude pointing out ehild nutritional needs and the eontribution that school lunches ean make toward meeting these needs. They may be given by personal contaets through group meetings and home demonstrations and by pamphlets and periodieals. Special advice and assistanee may be given to loeal groups interested in promoting projects in their communities. For example, the State offiees of the American Red Cross may urge loeal chapters to help provide food for struggling projeets, or the State departments of welfare or edueation may give finaneial aid to loeal sponsors.

Other aid eonsists in suggesting ways of overcoming the problems that confront loeal sponsors when setting up their projeets. Many ageneies operating on a State-wide basis offer basic speeifieations for kitchens and lunchrooms. They provide lists of suggestions that help sponsors to foresee the types of facilities and equipment they will need and offer adviee on ways of assuring adequate sanitation, on arranging faeilities effieiently in minimum space, and on construetion and utilization of storage equipment. Where projeets must be set up with the least possible eost and mistakes may be ruinous, this assistanee may spell the difference between suecess and failure.

Bulletins dealing with sueh problems have been prepared by the Federal Bureau of Home Economics, the Extension Services, and many State colleges and State departments of health. The W. P. A. has a manual for sehool-luneh projeets, a considerable part of whieh is devoted to speeifieations and suggestions on these matters. Home demonstration agents and State health nurses in many States consult personally with local groups on problems of this kind. In addition, the representatives of these ageneies advise the loeal people as to the kinds of help they can get from State and Federal agencies.

Assistance in operation of projects

Similarly, State organizations offer aid in maintaining projects after they are started. The more important problems of operation are the maintenance of good eooking praetiees, the best utilization of the surplus foods that happen to be available, and the development of low-cost menus and reeipes that meet nutritional requirements.

Again, bulletins that help in operation are plentiful. Suggested menus and reeipes and nutritional advice have been issued by the Bureau of Home Eeonomics, and in many States the home eeonomics extension departments and departments of health, education, and welfare will supply pamphlets. A manual for school-luneh projeets reeently prepared by the Bureau of Home Eeonomies for the Surplus Marketing Administration gives menus and reeipes that are adapted to different sizes of projeets and are espeeially planned to make the most desirable use of surplus commodities; general adviee on kitehen praetiees and nutrition is ineluded (*5*).

Many of the State extension services offer advice and assistanee through bulletins, and

the county agents frequently give direct advice in connection with gardening and canning projects.

State-wide School Lunch Advisory Committees

In most of the States there are State-wide advisory committees in which representatives of the agencies interested in lunch work pool their efforts in publicizing, promoting, and planning for the school-lunch program. The special representatives of the S. M. A. have played an important part in the establishment of these committees. Membership in them usually includes the State director of commodity distribution, officials of the State welfare, education, and health departments, a representative of the department of home economics of the State college, the president of the State congress of parents and teachers, the W. P A. and N. Y. A. supervisors of school-lunch work in the State, and representatives of civic, health, and welfare organizations interested in the program. Representatives of the Extension Service and the Farm Security Administration also frequently participate.

These committees are able to guide the school-lunch work in the States with the most desirable division of labor and the least duplication of effort between different agencies, and to coordinate it with other child-welfare and education activities. In addition they provide a means of acquainting each cooperating organization with what others are doing in the field of child welfare. In some States these committees work through local school-lunch committees that act as a clearing house for all local activities.

The work of State and national groups in general, and of such State-wide advisory committees in particular, in guiding and aiding the development of the school-lunch program in the State, gives local groups the kind of encouragement and assistance that stimulates and helps them toward operating more efficient and more adequate projects. It facilitates the achievement of high goals of performance in lunch work throughout the State by promoting the program widely and helping each unit to raise its standards.

Economics of the School Lunch Program

An attempt to evaluate the effects of the School Lunch Program, and to discuss its potentialities involves some hazards, but it is well worth making.

The Program as an Aid to Farmers

Since the program is carried on as part of the attempt by the Federal Government to help farmers by removing price-depressing surpluses from the markets for farm products, we turn first to its economic aspects from this point of view. The economic principles underlying the School Lunch Program are the same in most essentials as those involved in other methods of surplus disposal. There are, however, certain factors peculiar to this program that differentiate its economic effects from those of other programs.

The benefit to farmers from any surplus-disposal program depends, in the first place, upon how much money the Government puts into it. But this is not the only determining factor. The increase in farmers' incomes is not composed of the actual dollars spent by the Government. Rather, it comes about because the Government purchases bid up market prices, or because a broader market is established at prevailing prices. The effect of the program is exerted throughout the market; and, depending on the nature of the market, the increase in farmers' incomes may be appreciably greater or appreciably less than the amount of subsidy.

Stated in another way, the benefit to farmers consists not in the subsidy as such, but in the net increase, at the farmers' market level, in total expenditures for the various food products, Government expenditures included. This will depend, under any program, upon reactions to price rises on the part of farmers themselves, and of consumers. But it will differ for different programs, depending upon the effectiveness with which the Government subsidy is applied. This in turn depends on whether the subsidy is spent in farmers' markets or at some other stage in the marketing organization, and on how the surplus commodities thus bought are disposed of. These four factors are discussed in the following pages.

Changes in Quantities of Foods Marketed by Farmers

One effect of a rise in price of any food is likely to be an increase in the quantity of it which farmers try to sell. There are always, so to speak, a few more apples at the top of the tree that the farmer would strain himself to pick if the price were high enough.

In the case of some nonperishable commodities of which there are large storage stocks on hand—wheat, for example—even a small rise in price might bring considerable additions to the quantities offered for sale. There have also been spectacular cases of so-called physical surpluses of perishable crops. Farm prices have sometimes fallen so low that they failed to cover many farmers' actual out-of-pocket costs for harvesting and marketing a crop already grown, so that a considerable part of it was left to rot in the fields. In this case, likewise, a small increase in price might have justified farmers in marketing a much larger part of the crop.

In situations like these the chief effect of a Government surplus-disposal program would be that some supplies would be bought that farmers otherwise would not have sold. The market price would be bid up very little, so that the increase in farmers' incomes would be closely equivalent to the value of the net sales which the purchases by the Government represent. (For reasons discussed in detail later, this is not the same thing as the actual amount spent by the Government.)

But such cases are the exception rather than the rule. With most food crops, about all that is produced each year is usually sold by farmers. Even a considerable price rise would not ordinarily cause any enormous increase in the year's marketings of strawberries, for example.

At the opposite extreme is the case in which a rise in price brings no increase in the quantity marketed. This is likewise unusual but, with a few important exceptions, it probably comes closer to describing the situation of most food products than does the preceding case. Certainly, when one takes the supply of all foods together, its expansibility in response to changes in price during any one crop year is not great.

Changes in Quantities of Foods Purchased by Consumers

It is in this second case that the reactions of consumers become important. Here the whole effect of the governmental program is to induce a rise in price. The Government, in effect, bids away part of the supply of certain foods from the rest of the purchasers. And the degree in which prices of these foods rise obviously depends upon the readiness or reluctance of consumers to give up part of what they would otherwise have bought.

In the case of some commodities consumers may curtail their purchases only when faced with a considerable price rise. The total amount of money spent at the farm-market level for commercial purchases of such commodities, exclusive of the subsidy purchases, will be greater as a result of the program. The incomes of the growers of these commodities will thus be increased by something more than the value at the farm of the net quantities bought through the Government program.

In the case of other commodities, however, consumers may curtail their purchases drastically in response to a very moderate rise in price. The money spent in regular commercial purchases of such commodities may be less than if the price rise had not occurred. Incomes of the growers of these commodities may be increased by something less than the value of the net quantities bought through the program.

Data are not available to show into which group various food products fall. Milk may well be of the first group, a commodity the purchases of which decrease but little unless the price is raised considerably; at least this seems likely to be true among medium- and high-income families. Apples, on the other hand, might fall into the second group, for many consumers readily turn to other fruits when the price of apples rises appreciably. In fact, because foods may so easily be substituted one for another, it is possible that many of them may fall into the second group.

But even where this occurs it means only that decreases in commercial expenditures for the foods that are included in the surplus-disposal program will reflect chiefly consumers' substitution of other foods, because of price changes. Hence, more money is spent for the substitute foods. Growers of other commodities, outside the program, will benefit indirectly from the expenditure by the Government.

It is generally agreed that a rise in the average level of food prices is accompanied by an increase in total expenditure for foods as a whole. Thus the net indirect effect of a surplus-disposal program must be an added increase in farmers' incomes over and above the value of the net quantity removed from the market through the subsidized purchases, although part of the benefit may sometimes be shifted from growers of commodities included in the program to other producer groups.

Conclusions as to the Increase in Farmers' Incomes

To sum up the general effects of surplus-disposal programs upon farmers' incomes: To the extent that purchases with Government funds represent merely the sale of supplies of a commodity which would not otherwise have been sold, and are accompanied by no appreciable price rise, farmers' incomes

are increased simply by the value of the additional quantity thus sold. But in the case of most farm products, during any one season purchases by the Government represent primarily a bidding up of prices throughout the market, thus increasing farmers' returns on the whole of the crop.

If consumers of a commodity attempt to maintain their consumption of it in spite of the price rise, this price rise will be sufficient to cause expenditures for the commodity through regular commercial channels to increase, quite apart from Government purchases. Then growers' incomes will be increased by more than the value of the net quantity bought through the Government program. If, on the other hand, consumers turn readily to other foods in place of ones the Government is buying, the price rise will be smaller, expenditures for the commodity through commercial channels may decrease, and incomes of growers of it may increase by an amount less than the value of the net quantity bought through the program.

But in the second case, consumers' substitution of other foods means that prices of these other foods will be bid up. Thus the benefits of the Government program are merely shifted in part from producers of the commodities subsidized to other producers. Total benefits to farmers as a group can be expected to exceed the value of the net quantity of food removed from the market through the Government purchases.

Effectiveness of the Government Subsidy

The discussion so far has carefully avoided speaking in terms of the amount of money spent by the Government for surplus disposal. Instead, it has referred to the value (reckoned at the prices the farmer receives) of the net quantity of food removed from the market through the subsidy program. This seems at first sight a fine distinction, but it is an important one.

In the first place, no program can expect to remove from the market a dollar's worth of farm products, at the farm price, for each dollar the Government spends. Even where purchases can be made directly from growers, the Government will have to spend money to cover the costs of handling and transporting the commodities after they are bought. And unless the foods are simply destroyed, there is always the likelihood that the use made of them will to some degree replace commercial sales which might otherwise have been made. The effect of the Government's purchase is obviously offset to the extent that this occurs. The net quantity removed from the market is less than the quantity actually bought.

Different methods of meeting these difficulties have been developed in connection with different programs. It is desirable, therefore, to describe these methods and evaluate, in the light of them, the effectiveness of the School Lunch Program as a particular method of surplus disposal.

Point of application of subsidy

Under the Direct Purchase and Distribution Program, of which the school-lunch distribution is a part, purchases are made directly from growers wherever possible. Some commodities are bought from wholesale assemblers or at mercantile exchanges, and those which must be processed before consumers can use them are bought from processing firms—canners or flour millers, for example. The products are then shipped to the States, where they are turned over to local welfare agencies. This method of operation saves the Federal Government the usual wholesale and retail costs, which may vary from 10 or 12 percent of the retail price for some products to as much as 35 or 40 percent for others.[12]

Replacement of normal food sales

The Direct Purchase and Distribution Program has, on the other hand, no direct safe-

[12] The out-of-pocket cost to the Federal Government does not include the cost to State and local welfare agencies of distributing the commodities nor the cost of the W. P. A. labor used in this distribution. These costs must be taken into account in a general social evaluation of the program though they are not pertinent in estimating the return to farmers per dollar of expenditure by the Surplus Marketing Administration.

guard to prevent recipients of the distributed foods from using them to replace purchases that they would otherwise make out of their own pockets. In the Food Stamp Plan this danger is minimized by requiring participants to buy orange-colored stamps, good only for purchases of food, in amounts intended to cover their normal food expenditure, before they are given any of the free blue stamps that represent the subsidy. Under direct distribution, agreements are required from relief administrators that family-relief allowances will not be reduced because of the surplus allotments. In the last analysis, however, the chief safeguard (except where relief is in the form of grocery orders) is the presumption that the families given food are so hungry, to begin with, that free Government food allotments will not seriously tempt them to shift their own expenditures from food to other items.

Special Effectiveness of the Subsidy under the School Lunch Program

Replacement of family food purchases

Foods distributed for school lunches may replace normal sales in two ways. Families of the children fed may reduce their food purchases somewhat. It would be very difficult to measure accurately the extent to which this occurs, but it does not seem probable that there would be much cutting down on meals at home for the whole family because the children receive free lunches at school. Families on short rations are more likely to continue to spend as much as they can afford on food, and be glad that the children get something extra through their school lunches.

Creation of a new demand for food through new lunch projects

The other possibility of replacement of commercial food sales is in the lunch projects themselves. Sponsors must agree that the receipt of surplus foods will not cause them to cut down on their own food purchases for the lunches. But the important point here is that most of the projects receiving surplus commodities are new. Probably most of them would not have come into operation at all had it not been for Federal aid. In these new projects, instead of "normal" purchases being replaced, the opposite occurs. A new, previously nonexistent, demand for farm products is created in regular market channels in the form of foods bought by these projects for use with the surplus commodities that they receive.

This new demand certainly much more than compensates for any replacement of commercial purchases that would be made in the absence of the program. Because of it the effect of the Federal subsidy is multiplied rather than diminished.

This is a peculiar advantage of the School Lunch Program as an outlet for surplus foods. As a consequence, it is probable that no other method of surplus disposal brings farmers so large an increase in income per dollar of Government subsidy as does the School Lunch Program.

Benefits of School Lunches to Farm Children

One other point should be mentioned in an economic evaluation of the School Lunch Program from the farm viewpoint. Farm families are consumers as well as producers. A program which raises their level of consumption, therefore, offers them benefits quite independent of the increase in income it brings them.

As was pointed out on pages 27–8, participation in the program is greatest in the depressed agricultural areas of the Southeast and the Mountain and Western Plains regions. Some 60 percent of the children in the program are in rural schools, whereas such schools account for only 50 percent (*1, p. 49*) of total school enrollment in the United States. And almost one-third of the children receiving lunches are from borderline families rather than those actually on relief or W. P. A.—another factor favoring farm children, whose families are less likely to receive relief benefits than urban families of comparable income.

This, therefore, constitutes another special advantage of the School Lunch Program from the standpoint of farmers as a group. Their families tend to receive proportionately higher benefits as consumers from this program than from others that concentrate distribution to a greater degree in urban communities and require relief or W. P. A. status as a condition of participation.

Estimate of the Increase in Farm Incomes

To return to the increase in income farmers receive through this program, precise estimates would be extremely difficult to make. It would interfere seriously with the working of the program if local sponsors throughout the country were forced to keep uniform, detailed records of all their operations for the use of governmental research agencies. Even if such records were available, the task of analyzing and interpreting them would be enormous. And even with such information, additional facts not now known regarding such factors as the elasticity of general consumer demand for various foods would be necessary before a precise estimate could be given of the resulting increases in producer incomes.

Estimates of benefits to growers of particular commodities are thus out of the question. The authors were able to obtain some information, however, regarding the over-all costs of operation of a sample of lunch projects in several areas, in 1940. Sponsors' expenditures for food were found to vary widely from school to school. In many schools little or nothing was spent. In some, sponsors' expenditures were found to run as high as 10 to 15 cents per meal. When figures for different States or parts of States were combined, average sponsors' food expenditures, omitting schools where only surplus commodities were served, ranged from less than 1 cent to more than 5 cents per meal. It would perhaps be a safe guess that, for the country as a whole, the average sponsors' food expenditure, still omitting schools serving surplus commodities only, would lie somewhere between 1½ cents and 3 cents per meal.

In March 1941 about 4¾ million children were included in the program; they received commodities with an estimated retail value of nearly 4½ million dollars. Roughly, 25 percent of the children were in projects using surplus foods only, and another 15 percent in schools that were operating lunch programs before they began to receive commodities from the S. M. A. (table 12, page 30). Subtracting these groups (although a large proportion of schools with prior programs expanded them upon receiving surplus commodities), there are left not quite 3 million children in new school lunch projects in which the food purchases represented an addition to previous sales of food through commercial channels. Assuming that these children had 20 lunches at school during the month and applying our previous estimate of 1½ cents to 3 cents per lunch for food buying, we reach an estimate of $900,000 to $1,800,000 as the value of additional food sales during the single month over and above the contribution of the S. M. A. It may be concluded that during the month possibly a total of 5 or 6 million dollars worth of food (retail value) was added to normal farm sales as a direct result of the program.[13]

Assuming that farm prices of this food averaged 40 or 45 percent of retail prices (about the current figure for foods as a group) it had a value at the farm of 2 to 2½ million dollars. Added to this, in making up the total increase in farmers' incomes, are the indirect benefits, previously discussed, that result from increases in general consumer expenditure for food.

Conclusions Regarding the Economics of the Program

The School Lunch Program provides a peculiarly effective method of helping farmers through governmental buying of surplus farm products. The purchases can be made close to the producers' end of the marketing

[13] This figure makes no allowance, on the one hand, for expansion of programs operating before surplus foods were received, nor, on the other, for any reduction in normal food expenditure which may have occurred.

system where the money appropriated goes farthest. And instead of the difficulty encountered in most methods of distributing direct purchases—that the food distributed replaces to some extent expenditures that the recipients would otherwise have made from their own pockets—the distribution to school-lunch projects has been instrumental in developing a new demand for farm products through the large number of new projects that have been established throughout the country.

For this reason, and because of the indirect effects of such a program in increasing consumer expenditures for foods through raising food prices, benefits to farmers as a result of the program have probably appreciably exceeded the Government's expenditure on it. Lack of detailed data regarding the operation of lunch projects throughout the country prevents any precise estimates of the increase in incomes that the program has brought to particular groups of growers. It may be very roughly estimated, however, that in March 1941, the peak month of the program up to that time, food worth at the farm 2 or 2½ million dollars was used in the program. Farm incomes should have increased by something more than this amount, taking into account indirect as well as direct effects of the program.

In addition to such increases in incomes from production, farm families receive benefits as consumers in that over half the children receiving free school lunches through the program are in rural schools.

Contribution of the School Lunch Program to Child Welfare

From the discussion of the program as a benefit to American agriculture, attention is now turned to its other important purpose, the relief of malnutrition among American children.

The Goal of Child Nutrition

The figures on the value of the surplus foods provided children (table 7, p. 20) represent the "increase in children's incomes" resulting from the Surplus Marketing Administration program. But such figures hardly measure its contribution to child welfare. The goal is not just to increase children's "incomes" in general, but to improve their nutrition—an end that cannot be significantly stated in mere dollars and cents.

This goal was defined earlier as an optimal dietary standard, the food intake that would make possible the full measure of physical and mental vitality of which a child is capable. To evaluate the School Lunch Program from the viewpoint of child welfare, therefore, necessitates an examination of what the program has contributed toward such a goal.

Expansion of the School Lunch Movement

Certainly the School Lunch Program of the S. M. A. has given a great impetus to school lunch work for needy children in the United States. This development is best shown in tables 1 and 12 (pp. 2 and 30). To summarize, at the peak of the 1940–41 program the S. M. A. was contributing food to lunches for almost 4¾ million children, probably 85 percent of whom were in schools that previously had no lunch projects. The receipt of surplus foods in many schools that previously had programs enabled them to serve more children, to provide other meals in addition to the lunch, and to expand service through more months of the year.

The number of children of preschool age participating in the program, about 52,000, is still relatively small. Yet these children form a vital problem for, unless immediate remedial steps are taken, malnutrition is likely to be more permanently harmful to them. Nursery schools for children of preschool age from needy families are increasingly common as welfare services in many cities, especially as a result of the Work Projects Administration nursery-school program. Surplus commodities to supplement food furnished by local sponsors have been made available to these schools in the hope that this may help the expansion of nutrition work for preschool children.

Nutritional Evaluation of Lunches Served

Fully as important as the number of children reached by the School Lunch Program is the kind of lunch they actually obtain. As indicated in table 12 (p. 30), about 30 percent of the children participating in the program in February 1941 received cold lunches, including 23 percent with lunches that came from surplus commodities only. Such lunches improve the nutrition of the children, but they certainly fall far short of providing a substantial meal every day. (Projects of this kind were served by the S. M. A. as better than none at all and in anticipation that they may in time develop into hot-lunch projects.) The remaining 70 percent received hot lunches varying from a single hot dish to complete meals including salad, beverage, and dessert as well as one or more hot dishes.

In connection with this study the Bureau of Home Economics of the United States Department of Agriculture is analyzing the nutritional content of the food in 11 W. P. A. hot-lunch units selected from various parts of the country and measuring the proportion

of the various nutrients that come from surplus commodities. The units are located in the following areas: Washington, D. C.; Menard, Saline, and Williamson Counties, Ill.; Atchison and Ford and Neosho Counties, Kans.; Holyoke, Mass.; Altoona, Pa.; and Portage and Iron Counties, Wis. The Washington, Atchison, and Holyoke units include city-wide lunch systems; the others are in individual schools. Results of some of the analysis [14] follows:

There was great variation in the quantities of various foods served and in the average

[14] Pages 48 to 52 are drawn, almost as they stand, from an unpublished preliminary progress report on the school-lunch nutritional project being conducted under the direction of Hazel K. Stiebeling, "The Nutritive Value of Free School Lunches in Selected Communities," by Sadye F. Adelson. Statistical assistance in the preparation of this report was provided by the District of Columbia Work Projects Administration (O. P. 165-2-26-18).

TABLE 15.—*Average nutritive value per child per lunch of all food received for school lunches and proportion of each nutrient contributed by commodities from the Surplus Marketing Administration, 11 units, 1939–40*

QUANTITY PER CHILD PER MEAL

Location of unit and period studied	Average number of meals served in a day	Energy value	Protein	Calcium	Phosphorous	Iron	Vitamin A value	Thiamin	Ascorbic acid	Riboflavin
	Number	*Calories*	*Grams*	*Grams*	*Grams*	*Milligrams*	*International units*	*Micrograms*	*Milligrams*	*Micrograms*
District of Columbia, Washington: September 1939–June 1940	7,304	690	23	0.41	0.49	3.9	3,000	410	40	830
Illinois: September 1939 or March 1940–April 1940:										
Menard County	78	1,100	26	.25	.53	7.0	3,800	620	58	680
Saline County	215	840	25	.27	.49	4.8	3,100	380	45	620
Williamson County	84	530	14	.11	.29	4.4	4,600	430	69	340
Kansas, Atchison, November 1939–May 1940	254	570	18	.29	.37	3.0	1,300	320	12	530
Ford County, October 1939–May, 1940	55	700	18	.18	.33	4.0	1,500	330	31	410
Neosho County, October 1939–May 1940	25	1,180	27	.16	.49	6.6	1,600	560	61	460
Massachusetts, Holyoke, September 1939–April 1940	1,396	650	23	.37	.49	4.3	2,500	460	33	810
Pennsylvania, Altoona, January–April 1940	175	930	24	.41	.54	4.8	1,500	500	29	740
Wisconsin, November 1939–April 1940:										
Portage County	68	580	13	.10	.23	3.2	1,200	290	25	230
Iron County	54	310	7	.07	.15	2.0	1,000	180	22	190

PERCENTAGE OF NUTRIENTS DERIVED FROM FOODS CONTRIBUTED BY THE SURPLUS MARKETING ADMINISTRATION

	Number	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
District of Columbia, Washington, September 1939–June 1940	7,304	36	17	13	18	38	40	26	65	24
Illinois, September 1939 or March 1940–April 1940:										
Menard County	78	63	54	33	56	62	52	58	66	34
Saline County	215	43	28	15	23	35	39	33	57	13
Williamson County	84	47	41	30	36	36	11	26	30	23
Kansas, Atchison, November 1939–May 1940	254	36	27	14	29	53	69	37	80	21
Ford County, October 1939–May 1940	55	50	40	23	39	51	49	45	66	28
Neosho County, October 1939–May 1940	25	67	80	64	81	85	85	78	91	71
Massachusetts, Holyoke, September 1939–April 1940	1,396	41	20	12	20	34	48	22	52	20
Pennsylvania, Altoona, January–April 1940	175	42	34	20	37	61	35	47	68	27
Wisconsin, November 1939–April 1940:										
Portage County	68	74	75	39	63	71	68	49	69	33
Iron County	54	55	58	32	52	66	23	49	56	37

nutritive value of the hot noon meals provided the children in the 11 school-lunch units. This is shown in tables 15 and 16.

In more than half of these 11 units the lunches provided between 530 and 700 calories per child. The range in average energy value of lunches was from 310 calories in Iron County, Wis., to 1,180 calories in Neosho County, Kans. Food donated by sponsors provided 50 percent or more of the calories in 6 of the projects; food donated by the S. M. A. in 5. With one exception (milk in the Washington, D. C., lunches) grain products were the chief

TABLE 16.—*Average quantities of specified foods or groups of food per child per month received for school lunches from all sources and from the Surplus Marketing Administration, 11 units, 1939–40*

ALL FOODS

Location of unit and period studied	Average number of meals served in a day	Average quantity received per child per month [1]													
		Eggs	Milk [2]	Butter and other table fats	Other fats	Meats, poultry, fish	Sugars	Grain products [3]	Potatoes, sweetpotatoes	Dry mature legumes	Tomatoes, citrus fruit	Leafy, green, yellow vegetables	Other vegetables	Dried fruit	Other fruit
	No.	*Doz.*	*Qt.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*
District of Columbia, Washington, September 1939–June 1940	7,304	0.4	5.3	0.5	(4)	0.8	0.3	1.9	0.9	0.5	3.9	0.6	0.3	0.4	5.1
Illinois, September 1939 or March 1940–April 1940:															
Menard County	78	.4	1.9	1.2	0.2	.6	1.5	4.4	2.0	.9	5.1	2.6	.3	.7	3.1
Saline County	215	.2	2.9	.8	.2	1.2	1.2	3.3	2.0	.5	4.6	1.9	.7	.1	.5
Williamson County	84	.1	.2	.4	(4)	.2	.3	1.9	4.6	.8	6.2	2.7	2.8	.2	.6
Kansas:															
Atchison, November 1939–May 1940	254	.1	4.0	.2	.1	.7	.4	2.4	.4	.3	.9	.1	.3	.2	3.5
Ford County, October 1939–May 1940	55	.4	1.7	.5	.3	.7	1.1	2.3	2.0	.5	2.8	.6	.5	.3	2.9
Neosho County, October 1939–May 1940	25	.4	.7	.6	.6	.4	1.2	6.8	1.8	.5	6.5	.4	.6	.4	4.8
Massachusetts, Holyoke, September 1939–April 1940	1,396	.3	5.0	.4	.2	1.0	.4	1.8	3.2	.4	2.6	1.4	.6	.4	3.4
Pennsylvania, Altoona, January–April 1940	175	(4)	5.2	.4	.6	.2	.9	3.1	1.8	.6	2.4	.7	.4	.5	6.4
Wisconsin, November 1939–April 1940:															
Portage County	68	(4)	.7	.5	.2	(4)	.5	3.0	3.2	.4	2.3	.4	.1	.3	2.1
Iron County	54	.1	.6	.2	.1	.1	.2	1.3	1.0	.2	2.1	.5	.6	.1	2.7

SURPLUS FOODS

District of Columbia, Washington, September 1939–June 1940	7,304	0.4	0.2	0.5	(4)	(4)	0	0.2	0.1	0.2	3.0	0.1	(4)	0.4	4.8
Illinois, September 1939 or March 1940–April 1940:															
Menard County	78	0	0	1.2	0	0	0	3.9	.1	.6	4.5	0	0	.7	2.8
Saline County	215	0	0	.8	.1	0	0	1.8	.2	.4	3.0	0	.4	.1	.2
Williamson County	84	0	0	.4	0	0	0	1.6	0	.2	2.4	0	.4	.2	(4)
Kansas:															
Atchison, November 1939–May 1940	254	(4)	.1	.2	(4)	0	0	.9	0	.2	.9	0	.2	.2	3.5
Ford County, October 1939–May 1940	55	0	0	.5	.1	0	0	1.8	0	.3	2.2	0	.3	.3	2.6
Neosho County, October 1939–May 1940	25	.2	0	.3	.1	0	0	6.4	0	.5	6.5	0	.4	.3	4.8
Massachusetts, Holyoke, September 1939–April 1940	1,396	.3	.1	.4	(4)	0	0	.6	.1	.3	1.8	.2	0	.3	2.7
Pennsylvania, Altoona, January–April 1940	175	0	.4	0	.5	0	0	1.3	0	.6	2.0	0	0	.5	6.4
Wisconsin, November 1939–April 1940:															
Portage County	68	0	0	.5	.1	0	0	3.0	0	.4	1.9	0	0	.3	1.9
Iron County	54	(4)	0	.1	(4)	0	0	1.1	0	.2	1.2	0	0	.1	2.5

[1] 20 lunches equal 1 month.

[2] Fluid milk or its equivalent in solids not fat, of dry skim milk, evaporated milk, or cheese.

[3] Flours, meals, and other cereals; 1½ pounds baked goods counted as 1 pound of flour.

[4] 0.05 or less.

calorie bearers; this food group provided an average of one-fourth or more of the calories for each lunch unit.

The average protein content of the lunches ranged from 7 grams per child per lunch in Iron County to 27 grams in Neosho County, with most of the schools serving a little more or a little less than 20 grams. Milk donated by the sponsor was the chief source of protein for the Washington, Atchison, Holyoke, and Altoona lunches while grain products, given in large part by the S. M. A., contributed most conspicuously to the protein in the lunches of the other seven units.

As shown in table 17, the calcium content of the school lunches varied closely with quantities of milk and milk products the projects received, foods which were provided almost entirely by local sponsors of the lunches. In the Washington, D. C., schools, where each child may have a half-pint bottle of milk a day, the average quantity of milk or equivalent in a meal was more than each child in the Williamson County school received in a month. The lunches served in Washington provided an average of 0.41 gram of calcium per child per lunch; those served in Williamson County furnished 0.11 gram of calcium per child per lunch.

Noon meals in almost half of the units provided from 4 to 5 milligrams of iron. In seven of the units studied, an average of 50 percent or more of this nutrient was derived from surplus foods.

There was wide variation among the units in average values for vitamin A. The food served in six communities provided between 1,000 and 1,600 International units of vitamin A value per child-lunch while that in five had between 2,500 and 4,600 units. The vitamin A was furnished chiefly by vegetables and fruits, although butter, which was on the surplus list during the entire period covered, contributed considerable also.

Dried peas and beans, and lightly milled grain products, on the surplus list during the period, are excellent sources of thiamin (vitamin B_1). Menard County lunches provided the most thiamin, with an average of 620 micrograms per child-lunch; this school served 4.4 pounds of grain products and 0.9 pound of dry legumes per child per month. On the other hand, Iron County lunches had the lowest thiamin content, 180 micrograms per child-lunch; this school served only 1.3 pounds of grain products and 0.2 pound of dry legumes per month.

TABLE 17.—*Average calcium value per child per lunch of all food received for school lunches and average quantity of fluid milk or equivalent per child per month, 11 units, 1939–40*

Location of unit	Average calcium per child per lunch	Average quantity of fluid milk (or equivalent) [1] per child per month
	Grams	*Quarts*
District of Columbia, Washington	0.41	5.3
Pennsylvania, Altoona	.41	5.2
Massachusetts, Holyoke	.37	5.0
Kansas, Atchison	.29	4.0
Illinois:		
Saline County	.27	2.9
Menard County	.25	1.9
Kansas:		
Ford County	.18	1.7
Neosho County	.16	.7
Illinois, Williamson County	.11	.2
Wisconsin:		
Portage County	.10	.7
Iron County	.07	.6

[1] Fluid milk or its equivalent in solids not fat, of dry skim milk, evaporated milk, or cheese.

Surplus food supplied half or more of the ascorbic acid for each school-lunch unit but one (Williamson County). The most important source was oranges, large quantities of which were available as surplus during the 1939–40 school year. The average ascorbic-acid content ranged from 12 milligrams per child per meal in Atchison to 69 milligrams in Williamson County. An average of 0.9 pound of surplus oranges was used per child per month in the former locality; in the latter, S. M. A. supplied 2.4 pounds of oranges and the sponsors supplied 3.8 pounds of tomatoes and citrus fruit.

Surplus foods added less to the riboflavin content of the free school lunches than to other nutrients with the exception of calcium. Again like calcium, the riboflavin value of the lunches was closely related to the quantity of milk served. The average riboflavin

values of the diets in Williamson County and in Washington, D. C., were 340 and 830 micrograms per child-lunch, respectively.

What do these averages mean for diets of elementary-school children who may range in age from 5 to 12 years? Or, for the retarded pupils who may be as old as 16? For an answer we must compare the average nutritive values of the school lunches with the dietary needs of children of these ages. Recommended daily allowances for specific nutrients for children of elementary school age have recently been made (May 1941) by the National Research Committee on Food and Nutrition (table 18). Many sponsors of lunch programs for needy children plan to provide from one-third to one-half of the needed food energy, and half or more of the protein, minerals, and vitamins. This is done because meals at home are likely to be less well fortified in the protective foods than those noted for their food-energy value.

TABLE 18.—*Recommended daily allowances for specific nutrients made by the National Research Council's Committee on Food and Nutrition for elementary-school-age children*

Nutrient	Unit	Allowances for children aged—		
		4–6 years	7–9 years	10–12 years
Food Energy	Calories	1,600	2,000	2,500
Protein	Grams	50	60	70
Calcium	do	1.0	1.0	1.2
Iron	Milligrams	8	10	12
Vitamin A	International Units	2,500	3,500	4,500
Thiamin	Micrograms	800	1,000	1,200
Ascorbic acid	Milligrams	50	60	75
Riboflavin	Micrograms	1,200	1,500	1,800

In the 1939–40 school year the raw food received for free school lunches in Washington, D. C., provided about one-third of the children's daily caloric needs, if equitably distributed. (In some schools an attempt is made to give the older boys larger servings or second helpings and the younger children smaller portions.) If equally distributed, the Washington lunches furnished almost half of a 5-year-old child's need for calories, but little more than one-fourth of that of a 12-year-old. In protein, the school lunches tended to be low, furnishing about half of a 5-year-old child's normal allowance. Of calcium the average lunch furnished about 40 percent, and of iron approximately one-third to one-half of the needs of the older and younger children, respectively. Of vitamin A value, the lunches supplied from two-thirds to something more than the usual allowances for these ages, and of thiamin from one-third to one-half. The ascorbic-acid and riboflavin needs of a 5-year-old were more than two-thirds met by the average school lunch, while those of a 12-year-old were about half met.

The relationship between the average quantity of nutrients supplied per child per lunch in Washington and other schools is shown in table 19. In view of the above analysis of the Washington school lunches these figures indicate that the school lunches in each locality could have been more ample in some nutrients to the advantage of the children. Calcium, vitamin A value, and riboflavin were most usually in need of improvement.

Suggestions for improvement of the lunches

The food-energy value of the school lunches could well be maintained at or increased to averages as high as 800 or 900 calories per lunch. Most of the children could eat this quantity every day; these generous servings would partly help to make up for restricted meals at home and the 2 days out of 7 that school lunches are not served.

Some of the 1938–39 menus of the Washington unit which furnished about 800 calories follow: In December, a lunch of beef stew, apple butter and whole-wheat-bread sandwiches, stewed dried peaches, and milk provided 740 calories. In January, a lunch of navy bean soup, ham-and-carrot sandwiches of whole-wheat bread, stewed dried prunes and peaches, and milk added up to 850 calories. In March, hamburg balls and potatoes, whole-wheat-bread and butter sandwiches, stewed dried prunes and peaches, and milk supplied 770 calories in each lunch. The lunches which were lowest in calories

TABLE 19.—*Relative nutritive value per child per lunch of all food received for school lunches, 11 units, 1939–40*

[Free school lunches in Washington, D. C.=100]

Location of unit	Energy value	Protein	Calcium	Phosphorous	Iron	Vitamin A value	Thiamin	Ascorbic acid	Riboflavin
District of Columbia, Washington	100	100	100	100	100	100	100	100	100
Illinois:									
Menard County	159	113	61	108	179	126	150	145	81
Saline County	123	109	66	100	123	103	93	112	74
Williamson County	77	61	27	59	113	154	104	172	40
Kansas:									
Atchison	84	78	71	76	77	45	76	30	63
Ford County	103	78	44	67	103	48	81	78	49
Neosho County	172	117	39	100	169	53	136	152	55
Massachusetts, Holyoke	94	100	90	100	110	85	110	82	97
Pennsylvania, Altoona	135	104	100	110	123	50	122	72	89
Wisconsin:									
Portage County	84	57	24	49	82	39	71	62	28
Iron County	45	30	17	31	51	33	43	55	23

were, as might be expected, those that failed to include a dessert, those that had a thin soup for the main dish, those that lacked a hot dish entirely, or those that contained only two or three instead of the customary four items. The usual menu consisted of a hot dish, a sandwich, milk, and fruit.

The Washington lunches could be increased to the suggested goal in calories and with calories in the other nutrients, by using more surplus foods. Increased nutritive value need not mean larger servings or more than four items in a day. Recipes could be concentrated so that every bite or spoonful eaten by a child would be as rich in nourishment as good cookery principles permit. Soups could be made thicker with less water and more meat, beans, and vegetables—more like stew than soup. Extra butter, or other fat, and dry skimmed milk could be tucked into "made dishes."

Instead of reconstituting dry milk so that 1 quart carries the nutrients (other than fat) of 1 quart of fluid milk, it could be made equivalent to 1½ to 2 quarts of fluid milk. Evaporated milk often could be used undiluted, or diluted with less than equal parts of water—how much less to be determined by the recipe. Bread and biscuit dough could be enriched with cheese or with peanut butter or other ground nuts. Butter could be spread on bread more generously than at present. Extra sandwiches should be available for those who might wish them, a current practice in many Washington schools. On days when the lunch provides fewer calories than usual, the older children might be given a few nuts, raisins, or dried prunes or even a square of cheese in addition to the regular menu, or all the children could be given a sweet cookie in addition to the usual dessert.

These suggestions are given for improving the nutritive quality of the lunches served by the Washington unit because more detailed information was available for this unit. The suggestions carry ideas that pertain, as well, to other school-lunch projects. The nutrients in school lunches need to be provided in quantities and in proportions that, when combined with the food served at home, will give the child a well-balanced daily diet. As diets of low-income families tend to be high in calories and low in minerals and vitamins, it is well to have the school lunches high in minerals and vitamins, even if this will mean fewer calories.

CONCLUSIONS REGARDING THE CONTRIBUTION TO CHILD WELFARE

It may be inferred from this analysis by the Bureau of Home Economics that, although lunches in the schools studied have added much to the diets of the needy children who were served, they still fall short of the goal of achieving an optimum diet. The surplus commodities used in these lunches made an important contribution nutritionally but

still greater use of them would have improved the menus in most instances.

Greater use of milk and milk products, not distributed by S. M. A. in appreciable quantity during the period studied, was an outstanding need in most of the units whose lunches were analyzed. Milk for children "constitutes the foundation upon which an adequate diet can most safely and most easily be constructed" (14). The need for it may be met through the school-milk programs currently being sponsored by S. M. A. wherever such programs are made possible—probably only in the larger cities. But it was in the rural units studied, rather than the urban, that milk was least used. Lack of it thus appears likely to remain a serious defect in the School Lunch Program unless local sponsors generally become able to provide milk or unless surplus dried or condensed milk or other milk products are made generally available for school lunches.

The desirability of emphasis in school lunches upon minerals and vitamins—as versus mere calories—in order to compensate for probable deficiencies in the home diets of poor children, suggests further the importance of butter and of oranges and other fruits among the surplus foods which were available during the period. These commodities made important contributions to the vitamin A and ascorbic acid content of the lunches analyzed.

Social Evaluation of the School Lunch Program

To round out this report, it is desirable to outline the social costs of the School Lunch Program for comparison with its accomplishments and to consider whether, from a broad social viewpoint, some other type of program might accomplish the same objectives more effectively.

Estimate of Social Costs

The true social costs of the School Lunch Program cannot be estimated in terms of the expenditures it has involved. Prices paid by local communities for equipment, food, supplies, and labor might be taken to represent the value of these items to society. Where they have been donated, values might, perhaps, be imputed to them, based on what they would have cost had they been purchased. But the large amount of time and energy voluntecred to the program by social-minded individuals would be difficult to evaluate in this way. And expenditures by such agencies as the Surplus Marketing Administration and the Work Projects Administration cannot be taken as measures of the social cost of their contribution.

The direct purchase and distribution activities of the S. M. A. would presumably have been carried on had there been no lunch program. The true social cost of supplying surplus commodities to needy school children, therefore, should be measured by the value of the food in some alternative use. It might, for example, have been given to relief families. The cost of using it for school lunchcs should then be reckoned in terms of the loss to society in failing to provide for these relief families as well as would otherwise have been possible. Similarly, the social cost of all the work and energy contributed by volunteers, and of W. P. A. and N. Y. A. labor, can properly be measured only in terms of what the volunteer workers would have done had their energies not been used in this program, and the value of alternative projects upon which the relief workers would otherwise have been employed.

The estimation of the social costs of a program of this kind is thus not a simple accounting matter. It depends on what would have happened had there been no School Lunch Program, and the social value of the alternatives thus given up. Any absolute evaluation of it is virtually impossible. The problem of child malnutrition is serious, but whether it is more urgent than other problems to which the resources devoted to the lunch program would have been applied is necessarily a matter of opinion. The large measure of public enthusiasm for the program indicates that it has democratic approval as a socially worth-while undertaking.

Coordination of Ends Through the Program

Granted that the program represents a desirable use of thc resources that have been devoted to it, the fact that it attacks three problems at once is certainly an advantage from the viewpoint of social efficiency. Through it, a frontal attack on the pressing problem of child malnutrition is made a part of general programs for relieving agricultural distress and for training and employing in socially useful projects labor that otherwise would be idle.

But has this coordination of ends involved any offsetting disadvantages? Has school feeding been appreciably handicapped through attachment to the agricultural program or the program of unemployment relief? Could more be accomplished for child welfare, with similar costs to society, through a program devotcd primarily to the promotion of school lunch work, independently of other purposes?

The chief disadvantages which might be expected to result from attachment of the School Lunch Program to agricultural surplus disposal relate to the nutritional desirability of the foods selected, and to the security of their supply. Foods selected for surplus disposal are passed upon by nutritionists as making a desirable addition to the diets of low-income families. But the primary basis in choosing them, and in determining the quantity and timing of purchases, has been the relief of farm-marketing problems.

The nutritional analyses of foods used for school lunches (pp. 48–52) show that the surplus commodities distributed have made an important contribution to the nutritive value of the lunches. The contribution might have been greater had some foods not distributed in appreciable quantity been made available—milk is the most notable example. But butter, eggs, and various fruits, all highly desirable supplements to children's diets have been supplied rather continuously.

The inability of S. M. A. to guarantee a continuous supply of particular kinds of food has not prevented rapid growth of the program. Local groups have gone ahead in making capital outlays for equipment and initiating projects without such a guarantee, on the basis of the past record of commodity distribution. And so far the record appears to have justified their hopes. Surplus foods have been available in increasing quantity and widening variety.

Similarly with respect to aid through W. P. A., while its primary purpose has been to provide relief employment, it has developed a well-organized program of school lunches throughout the country. Communities in almost every State have been enabled to carry on child-feeding work on a scale otherwise impossible.

So far as the past record is concerned, then, the advantages of the attachment of the School Lunch Program to the work of S. M. A. and W. P. A. appear to outweigh the disadvantages. The contribution to child welfare could have been greater under an independent program in which foods were chosen solely with an eye to maximum nutritional value and workers employed solely on the basis of maximum efficiency of operation. But it is highly unlikely that any such program could have been developed on a scale at all comparable to the present one. The dramatic effect of pointing simultaneously to hungry children and to farm surpluses and idle workers has focussed attention on these children that they would not otherwise have received. The important question is not as to past operation but as to the future of the program under changing conditions of surplus disposal and the problems of the defense emergency.

The School Lunch Program Under Changing Methods of Surplus Disposal

At the same time that the School Lunch Program has become an important outlet for surplus foods, the surplus removal policies of S. M. A. have undergone a great change. In area after area direct distribution of foods to relief families is being replaced by the Food Stamp Plan. Begun in Rochester, N. Y., in May 1939, the Food Stamp Plan in March 1941 was in operation in 288 areas and included almost 3¾ million participants. In addition, 56 other areas were designated for inclusion. Meanwhile, participation in the Direct Distribution Program declined from about 12½ million persons in March 1939 to 8 million in March 1941. (As the number of pounds of food distributed per person increased over this period, the total quantity of food handled remained about the same.)

This change raises the question of the status of the School Lunch Program in areas where direct distribution is replaced by the Food Stamp Plan. Regulations of the S. M. A. make it a condition of installation of the Food Stamp Plan in any area that local welfare authorities guarantee to maintain adequate facilities to continue distribution to school lunches. But because the scale of distributive operations is necessarily greatly reduced, and because the volume of distri-

bution to school lunches varies markedly with the season, it is likely to be relatively more expensive for State and local welfare agencies to maintain facilities for school-lunch distribution alone. To simplify their administrative problems these agencies might prefer that the School Lunch Program be brought under the Food Stamp Plan in some way wherever the stamp plan is in operation.

The chief advantage of bringing school lunches under the stamp plan would be from the standpoint of the schools served. It would give them somewhat greater flexibility and freedom of choice with respect to the commodities received. But so long as a sufficient quantity and variety of nutritionally desirable foods is maintained through direct distribution this advantage would appear secondary.

The S. M. A. does not plan to make such a change, for various reasons. In the first place, direct purchases are considered to have special advantages over the Food Stamp Plan for handling certain kinds of surplus problems. In some acute market situations, it is believed, prompt action by an S. M. A. buyer can forestall a disastrous break in prices to growers that could not be prevented by placing the commodity on the stamp-plan list. The direct-purchase programs have a permanent place in the general scheme of surplus disposal because of the greater flexibility they are considered to offer in dealing with particular kinds of surplus situations. While aid to Britain is providing an abundant outlet for direct purchases at present, the School Lunch Program is reserved as a permanent outlet for them when the emergency may be past.

Another reason against bringing the School Lunch Program under the Food Stamp Plan stems from the economies of its operation. The stamp plan has a clear-cut advantage over direct distribution to relief families because of the safeguard provided in the orange-stamp requirement against recipients' substitution of surplus foods given them for purchases they would otherwise make out of their own pockets. But as has been pointed out, this is not a serious problem in connection with distribution to school lunches. The net effect of this program has been the creation of additional demand through commercial channels in the form of purchases to supply the many new lunch projects that have been established. There is therefore no need to give up the economies of direct purchase for the sake of the kind of safeguard represented by the orange-stamp requirement.

The School Lunch Program Under the Defense Emergency

A far more important problem currently is the status of the School Lunch Program in the light of the defense emergency. Food purchases for aid to Britain are absorbing a large quantity of agricultural surpluses, and these purchases are expected to increase. Increasing employment in defense industries and reduction in nondefense expenditures is resulting in marked reductions in W. P. A. rolls. The question arises whether Federal aid to school lunches must be greatly curtailed or even given up entirely in the national concentration on the defense program.

It would be catastrophic for the school-lunch movement were this to occur. Doubtless many of the projects that have developed with Federal aid during the last few years could be continued by local sponsors, on a reduced scale, if Federal aid were withdrawn. But a large proportion of them have not had time to become sufficiently intrenched in their communities, or their communities simply have not the resources, to make this possible. Not only would these be wiped out. Even more important would be the disappointment and disillusionment of communities that have made important contributions of money and effort in anticipation of continuing Federal aid to make their projects possible. The resulting set-back to the school-lunch movement might well leave it in worse position than before Federal aid was provided.

Actually it does not seem probable that Federal aid will be cut off entirely, and serious curtailment of it may be avoided.

With regard to the supply of surplus commodities, it seems reasonably certain that citrus fruits, dried prunes and other dried fruits, beans, enriched white flour, corn meal, and dried and canned vegetables will continue to be distributed in the 1941–42 school year. And it is anticipated that some supplies of other foods—like dairy products, eggs, and meats—may be available over and above what is needed for shipment to Britain. At the same time, school lunch work has been given preference in W. P. A. operations, as a program important to defense, so it may be hoped that this source of Federal aid, likewise, will be continued. Although the future is highly uncertain, as must inevitably be the case in the present situation, the administrators of the programs involved realize that care for the nutritional status of the Nation's children is important as a long-run, if not an immediate, measure to insure the defense of the United States.

Desirability of an Independent School Lunch Program

Assuming that Federal aid to school lunches is to be continued during the emergency period, would it be desirable that it be made independent of the agricultural and unemployment relief programs? What changes would this make in the operation of the program, and to what extent would it involve giving up the advantages of the present program, with its threefold attack upon social problems?

So far as agriculture is concerned, the benefits to farmers under the present program would by no means be entirely lost under such a change. The increase in total farm income would not necessarily be any less, for lunch projects would need as much food under one type of program as under another. The increase would be less specifically directed to the relief of immediate areas of maladjustment. But even in this respect, the search for the cheapest foods that would provide the most desired nutritional elements would still tend to direct the benefits to the farm groups most in need of help. In the long run, the selection of foods on such a basis might even contribute to beneficial readjustments in agriculture, for it would encourage the production of the foods that are nutritionally most valuable, and would discourage the production of chronic surpluses of less desirable products.

Similarly with respect to unemployment relief, school lunches under an independent program would still give employment to a large staff. But it would be less likely to undertake to train persons currently unemployed, and would thus lose some of the specific advantages of the present program for dealing with the unemployment problem.

But unless an independent program would be more secure than the present kinds of Federal aid—which is possible but not certain—its other advantages would appear secondary. S. M. A., W. P. A., and N. Y. A. have been effective channels through which to extend assistance to school-lunch work. Under them it has developed much faster than it would have been likely to do otherwise. If they can be counted upon to continue the work they have begun, the program may well continue to be left in their hands—with the possible qualification that somewhat greater emphasis be given to nutritional desirability as a basis of selecting the foods to be distributed to school lunches. Meanwhile, public awareness of the need of the Nation's children may well continue to grow until a Nation-wide school lunch program is so well intrenched that it will survive even though the programs that have given it vital stimulation should ultimately be curtailed.

Public Attitudes Toward the School Lunch Program

If a random cross-sectional sample of the population anywhere in the United States were asked their opinion of the School Lunch Program of the United States Department of Agriculture, a large majority would be found to know little if anything about it. Farmers know of the Direct Purchase Program because its agents buy their surplus crops. But most of them have only vague notions of what becomes of the foods after the Government buys them. Farmers' wives and city families in communities where there are school-lunch projects know that these projects receive surplus foods, and usually know that they come originally from the Federal Government, but they are likely to connect them only vaguely with the Federal farm program.

This is a natural consequence of the decentralized nature of the Surplus Marketing Administration School Lunch Program, and the care the S. M. A. has taken to stay in the background and avoid the appearance of operating local projects. It does not mean that the program has failed to arouse widespread public interest in the problem of child malnutrition and in school lunches as a remedy. The rapid growth of the work by methods that require active local participation demonstrates its effect on local interest. But most people have consciously participated in it only as a school-lunch activity, and have had little direct concern with its place in the general farm program.

Consequently, the opinions the authors found, when making their field studies, centered chiefly on the school-lunch aspects of the program. The overwhelming majority of persons who were familiar with it expressed enthusiasm, and agreed that the supplying of surplus foods, if they were satisfactory from a nutritional standpoint, was a suitable form for Federal aid to school lunches. Some were critical of certain aspects of the program's operation. A few individuals expressed strong opposition to the whole idea of a Federal program to promote school lunches.

Basic Social Objections

Persons opposed to the program as a whole see behind it basic social trends that they deplore. Some of them are skeptical of the seriousness of child malnutrition, in the first place. They doubt that children are more poorly fed than in the past, and insist that in their own youth occasional hunger toughened their moral fiber more than it harmed them physically. Thus, they view school feeding as one more example of a paternalistic social attitude that is depriving our people of the self-reliance that, in the past, has been a chief virtue in American life.

Some people who admit that child malnutrition is a serious problem object to free school lunches because they extend to our children the system of relief that, they feel, is demoralizing a large part of our adult population. They see the program as likely to rear a generation accustomed since childhood to be beneficiaries of the State—a permanent pauper class.

They fear, further, that once schools begin to give lunches to needy children they will go on to give them other meals, until eventually they will take over the total responsibility for feeding needy children and even, perhaps, all children. Once the schools have taken over the feeding of children, the objectors argue, there is no reason why they should not assume responsibility for clothing and housing them as well. Thus they see the logical outcome of school lunches as the abolition of the family and the home as our basic social institution and the substitution of some form of totalitarianism in which the State, through its school system, takes

entire responsibility for the care of children, and so gains authority over their lives.

Many persons who oppose school lunches in general object especially to a Federal program as representing, in addition, the trend toward centralism and away from local autonomy. They see such a program as part of a general social tendency toward absorption of control over more phases of life by an authoritarian national government.

These criticisms of the School Lunch Program raise basic social issues that are beyond the scope of the study now reported. The opinions are given here for what they are worth. Instead of discussing them, the attitude expressed earlier is restated—that, for persons who hold such views, the widespread malnutrition among American children is the proper cause of alarm rather than the expansion of school lunches as a remedy. Whatever the future roles of family, school, and State in our national life, the United States can ill afford to let a generation grow up physically and mentally handicapped through malnutrition during childhood while we debate the form that basic social and economic reorganization should take in dealing with present maladjustments. Well-fed children, even though fed at school, are less likely to become future wards of the State than those who grow up malnourished. The Federal program has been undertaken only after family, local community, and State Government were unable to prevent or remedy prevalent child malnutrition. It operates in a way that requires a maximum of participation and assumption of responsibility by local groups. Until local people become competent to deal with the problem by themselves, it is generally conceded to be better that needy children be fed with the help of a Federal program than not fed at all.

Criticisms of Operation

Most of the people with whom the authors talked during their field work—the great majority—were in sympathy with the aims of the School Lunch Program. Some criticized certain aspects of its operation, chiefly the kinds of food available and difficulties connected with their distribution.

Many nutritionists pointed out that a better choice of foods could be made if the program were operated primarily to make a maximum contribution to school lunches. They criticized particularly the excessive quantities of cereal foods supplied, pointing out that these foods furnish chiefly carbohydrate, which is the food element least likely to be deficient in the diets of needy families. They suggested that, from the nutritive standpoint, the money might better have been spent on more of the protective foods. Complaints were also made that children became tired of certain foods supplied in large quantities over long periods and that projects were handicapped because other essential items, like butter or dried or evaporated milk, which they had hoped to receive throughout the school year, were distributed only for a few months.

In some States there has been difficulty in the local distribution of commodities. It was said, for example, that a dozen different commodities were being distributed in one county while an adjacent county received only two or three kinds. This difference is usually caused by faults in the State distributive systems over which the S. M. A. has but negative controls. Perishable commodities are not sent to counties that lack adequate storage facilities.

Several persons who were associated with the school-lunch movement before the work of the S. M. A. began said that the movement is being expanded too rapidly. They think that fly-by-night projects are being set up without the preliminary education and organization that are necessary to make them stable parts of community life. They think that communities are being encouraged to undertake lunch projects in order to take advantage of the offer of surplus foods, when they lack suitable facilities and trained personnel. They fear that such projects will be disillusioning to communities in the long run and ultimately give the school-lunch movement a set-back, in spite of the rapid forward strides it now appears to be making.

Evaluating and answering criticism of this kind is difficult. The importance of developing a well-rooted movement and avoiding mushroom growth is not to be underestimated. On the other hand, communities, like individuals, learn by doing. With broad sources of cooperation, aid, and encouragement for local projects, surprising results have been attained. From projects hastily established in areas that had inadequate facilities and had had little or no experience with school-lunch work, it has apparently been possible to develop stable, well-organized community institutions of enduring value.

Extensive work remains to be done, but the success of present efforts demonstrates that it is not necessary to allow thousands of children of the present generation to go undernourished until all the Nation's schools can be rebuilt with lunchrooms installed and fully equipped, nor to wait for our institutions to graduate trained specialists to operate these lunchrooms. The chief danger of collapse of the movement would seem to lie in the possible premature curtailment of Federal aid, through discontinuance of the programs to which it is incidental, before the present gains can be consolidated and made permanent.

Widespread Enthusiasm Regarding the Work

Spontaneous enthusiasm was the predominant reaction to the program even among those who offered constructive criticism. Parents expressed their gratitude for the surplus commodities that had given better diets to their children. Teachers pointed to improved school attendance, and to more interested attention to studies since the lunches were begun. The principal of a school for delinquent children said that her disciplinary problems had been greatly reduced because the children ceased to be quarrelsome after they had had a decent lunch, for a change. School nurses cited increases in weight among undernourished children. People everywhere who were in regular contact with the children did not hesitate to show gratification over the improvement in health and vitality.

School nutritionists said that many mothers had asked advice on home-meal planning and food preparation because their children praised the superior meals they had at school. Then it was often said that pupils ate, at school, foods that they had always refused at home; they found out that all the other children at school liked those foods.

Everywhere among persons who were closely associated with local projects a sense of pride in what they were accomplishing was found and an eagerness to have suggestions that would help them do a better job. The esprit de corps found among the relief workers on these projects belied the remarks about inefficiency that are often so loosely passed around in reference to work projects in general. The dominant attitude among persons associated with the lunches everywhere was one of enthusiastic participation in an undertaking of social value and importance.

Summary and Recommendations: The Future of the School Lunch Program

A summary analysis of the present and future of the School Lunch Program is in order, in terms of its three major objectives: Farm relief, unemployment relief, and the improvement of child nutrition. Has work toward these ends been coordinated in an effective program of school feeding? What kind of coordination would be desirable for an efficient school-lunch program in the future? In the conclusion of this analysis such questions must be answered.

The Program as an Aid to Agriculture

From the viewpoint of agriculture, the program provides a particularly efficient method of surplus disposal. It is an outlet for direct purchases of farm products by the Surplus Marketing Administration—purchases made as close as possible to the point of production, where the money spent buys the largest quantity of foods.

In contrast to most other outlets for direct purchases, there is a minimum of danger under this program that these foods will replace commercial sales that might otherwise have been made, thus canceling the effect of removing the products from the market.

On the contrary, the lunch program is creating new commercial sales of foods. Most of the lunch projects participating in it are new, operated in schools where no lunches had previously been served. Purchases of foods to supplement the surplus commodities used in these projects represent an increase in demand for farm products in regular commercial markets. To the extent that these new projects become established in their communities they form a permanent addition to the market for American farm products. Thus the program, by promoting the expansion of the school-lunch movement, is bringing long-run as well as immediate benefits to American agriculture.

The School Lunch Program offers special benefits to farmers as consumers, as well as to farmers as producers. Both the Direct Distribution Program in general and the Food Stamp Plan serve rural as well as urban areas, but both require relief status as a prerequisite for participation, and fewer farm families receive relief or W. P. A. employment in comparison with city families at comparable cash income levels. In the lunch program, however, about one-third of the participating children come from low-income nonrelief families—the majority come from farm families. Participation is highest in the Southern and Mountain and Western Plains States which are problem agricultural areas.

The Program as an Aid to Child Nutrition

From the viewpoint of child welfare, the program has helped arouse public interest in the serious problem of child malnutrition in the United States, has been a vehicle of widespread effort to deal with it, and has made large quantities of food available to needy and undernourished children. Even more significant, it has stimulated thousands of communities to local action, and has helped to bring together a wide range of organizations and agencies, local, State, and national, for coordinated effort toward solving the problem.

Some means of reaching more children of preschool age is important if the program is to make a maximum contribution to child welfare, since injury from malnutrition is likely to be even more permanently harmful among these children than among older ones.

Some preschool children are now being fed through nursery schools for needy children operated by The Work Projects Administration or local welfare organizations in various cities. The most likely means of reaching more of them would appear to be through having more nursery schools; every encouragement should be given to the expansion of work of this kind.

To make the benefit to children reached by the program as great as possible, it is desirable that schools serve ample hot lunches, nutritionally designed to compensate for deficiencies likely to occur in the diets of needy children. It is to be hoped that the present trend away from giving the children only fruit or some other form of light lunch and toward serving them a full meal will increase as time goes on. It is likewise desirable that schools serve lunches continuously throughout the school year, and that children be reached during the summer through playground lunches and summer camps wherever possible. Development in these directions is desirable from the standpoint of agriculture, also, since it makes for a more stable and permanent expansion of the market for farm products.

Greater contributions to child welfare could be made by the program if greater emphasis were placed on nutritive value as a criterion in selecting foods. This would mean, of course, that the needs of agriculture would no longer be the sole basis for choosing the foods to be distributed.

But even if purchases were to be planned entirely with a view to making the maximum contribution to school lunches the program would not lose its value to agriculture. Far from it. Distribution of certain commodities to schools would probably be discontinued or greatly curtailed, so that producers of them would lose much of their present benefits, especially if the School Lunch Program should become the chief outlet for direct purchases. But the attempt to provide the desired nutrients as cheaply as possible would still direct choices toward products for which farmers were receiving low prices.

Actually, the total increase in farm income under the program would not necessarily be any less. This basis of selection might, in fact, facilitate a desirable long-run agricultural adjustment, for it would encourage the production of foods that are needed in greater quantities in American diets, and would discourage the production of chronic surpluses of less desirable foods.

So complete a change in the basis of selecting foods would hardly be necessary or desirable. But it should be possible so to modify the present basis as to add considerably to the nutritive contribution of the program to school lunches without too great diminution of its benefits to agriculture. Such a change would expand the program by increasing the inducement to local groups to undertake projects. The eventual value of this expansion to agriculture might well compensate for any temporary or local disadvantages.

Continued expansion of supplementary food-supplying projects would help greatly to improve the nutritive value of the lunches. The School Milk Program makes it possible to distribute this valuable food at a price within the reach of most of the needy children. School gardens, canning projects, and community bakeries, enable the serving of a more complete and varied meal.

Future of the Program: The Defense-Emergency Period

Although the School Lunch Program could be improved in the directions suggested, it has already made a genuine contribution to our attack on serious social problems. Should it be a permanent program? What should be its future place in our national life?

For the immediate future the chief energies of the Nation are being devoted to a vast program of rearmament and aid to Britain. This is the single purpose to which all others are being made secondary. It is the usual experience of nations at war (and the defense program is coming more and more to resemble war activity in the social attitudes it calls forth) that welfare endeavors of many kinds are curtailed or given up as superfluous in

relation to the more immediate ends to be accomplished. Is this to be the fate of the School Lunch Program in the period we are now entering?

It should not be. This analysis makes that evident. And there are reasons to doubt that it will be. An important reason is that the calling-up of men for military training focuses attention on problems of health and physical competence, especially among the youth of the Nation. Preliminary statistics indicate that about 38 percent of the first million men examined for selective service were rejected for physical defects, with much larger proportions in low-income areas. Usually a large number of such rejections are traceable to malnutrition, especially during childhood. National concern for good nutrition in childhood will naturally be intensified as a result of the Defense Program. That this concern is already developing is indicated by the attention focused on child-welfare problems in the National Nutrition Conference for Defense called by the President last May.

Just as the large number of men rejected by England for service during the Boer War led to a publicly supported school-lunch program, the results of the medical examinations during the present selective processes may have a similar effect in the United States—with the exception that this country has a mechanism of Federal aid for school lunches, so that it will not require a series of four official investigations and studies to work out a program.

Certainly it will be possible to continue to supply this aid, both food and labor, in addition to meeting the immediately urgent demands for food for Britain and for labor for defense. So far, curtailment of W. P. A. activities and concentration of the Surplus Marketing Administration on purchases for shipment overseas do not appear to be endangering Federal support for school lunches. If these agencies should become unable to continue this support, other means should be found to carry it on.

For the resources of our democracy are adequate to insure care of our children along with any other demands that may be made upon us. The School Lunch Program may well be made a part of national defense itself, a basic defense measure to build and conserve the health and strength of the generation now growing up. If this occurs, it will be a program of value to the Nation beyond the present emergency period, for it will be conserving the long-time, as well as the immediate, human resources upon which the ultimate welfare of our society depends.

Future of the Program: After the Defense Emergency

If the School Lunch Program continues to expand during the defense period, what should be its place in the more distant future in American life? The answer depends upon the direction of future development in the structure of community life in the United States. There are those who oppose even a temporary school-lunch program as breaking down the basic pattern of our society. There are others who look upon school feeding for all children as a progressive step forward.

Issues like these must ultimately be resolved by the forces of social development. At present, the case is strong for expansion of the School Lunch Program until it includes all children not adequately fed without it, and for continuance of Federal aid as long as that is necessary to maintain the movement at a level adequate to meet the need. Evidence is against curtailing the program so long as that need continues.

Should this Federal aid continue to be an adjunct of farm and unemployment relief? Programs that serve several ends at once have obvious advantages from the viewpoint of social efficiency so long as these ends are chiefly complementary rather than conflicting. It would be desirable in this case to coordinate these ends fully instead of making aid to school lunches incidental to working toward other goals.

In the aid given by the S. M. A. this would involve coordinating the nutritive needs of children with the needs of agriculture as a basis for the selection of commodities and the

timing of their distribution. If such modification could be made within the framework of the present program, little would be gained from changing its status, for the present organization and mechanism are working satisfactorily and are rendering notable service.

It seems probable that programs to increase domestic consumption of farm products will continue to be part of national policy for some years to come. During that time the School Lunch Program may establish itself securely enough in our national life to be safe against discontinuance caused by ultimate revisions in the agricultural policies through which it now receives support.

As for W. P. A., whatever finally becomes of it as a program of unemployment relief, the people of the United States will hope that some of the valuable social services that organization now carries on will be continued—and its school-lunch and nursery-school programs are demonstrated to be valuable. In addition to supplying labor for school lunches the Community Service Division of W. P. A. has set up an extensive organization for servicing and developing its school-lunch work, an organization that has helped local communities throughout the country to maintain higher standards of operation in their local projects than they would otherwise have done. It would be unfortunate for the school-lunch movement if this organization were disbanded. Agriculture has a stake in the continuance of this part of the W. P. A. program, for the expansion of complete-lunch projects that are the most desirable from the farm standpoint would be severely curtailed without such aid. If the school-lunch and nursery-school programs cannot be continued as part of W. P. A. activities they might well be carried on under a separate agency established to continue Federal support to the child-welfare movement.

Broader Social Implications of the Program

If more suitable ways are ultimately found for preventing child malnutrition in the United States, the school-lunch movement as now conducted will cease to serve its present useful purpose, and should then be abandoned or modified. If other and better ways are not developed, school lunches should remain as a permanent institution in our national life. It is beyond the scope of this publication to foretell what long-time direction the development of American social structure will or should take, or the ultimate place of school feeding in that structure. But it is a matter of historical record that the whole movement toward publicly supported lunches in schools has been part of the growing broad social consciousness that seeks to use Government as an instrument for actively promoting the public welfare. It represents one of many current attempts to shape public action to deal with social problems that private agencies have failed to prevent or to solve.

The Federal programs for aiding school-lunch work represent further the trend toward using the resources of the national Government to meet problems that local and State Governments are unable to cope with alone, in our present-day highly integrated society. Like most such Federal-aid programs, they confine themselves chiefly to the provision of material assistance to State and local agencies that retain basic responsibility for operating their own programs. Beyond this the Federal Government merely imposes minimum standards of performance as a condition of giving aid, and carries on educational and advisory work to stimulate local agencies to action and to help them operate with maximum efficiency.

The Federal programs aiding school-lunch work embody another broad social principle that is gaining increasing recognition: That we should not allow productive resources to lie idle or their products to go to waste in the face of evident need, merely because that need fails to find expression in effective economic demand in our markets. This principle is latent in the work of W. P. A., but the emphasis in its program has been primarily upon employment of idle labor as

an alternative to relief, and only secondarily upon the products of such employment. As a rule, the W. P. A. has not adopted maximization of output as a chief basis of operation.

The principle emerges more clearly in the surplus-disposal programs of the Department of Agriculture, in which the distribution of surplus farm products to those on relief has been undertaken as a scheme of withholding such supplies from the commercial market in the effort to obtain prices that would represent a reasonable return to agriculture. It is interesting to economists that this principle should have been given its clearest expression in agricultural policy that deals with an industry in which free competition among many small-scale enterprisers (among other factors) has caused production to be maintained more fully in the face of falling prices than in other sectors of the economy.

In the School Lunch Program the Surplus Marketing Administration has applied a broader principle of distribution than in its other programs, in that surplus foods are given to children on the basis of need only, irrespective of whether their families have been or expect to be given relief status, because of unemployment or disability. About one-third of the pupils served come from low-income nonrelief families. Thus the School Lunch Program involves the basic social recognition of need, as such, in the distribution of food to children who are not effectively reached through the regular marketing channels.

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