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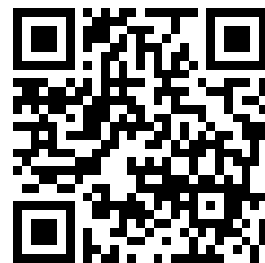


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# CHARACTERISTICS OF THE 4-H EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM



#### ABSTRACT

Most youth participating in the Extension Service's 4-H Expanded Food and Nutrition Education Program (EFNEP) were urban and from families with annual incomes of less than \$4,000. Nearly 40 percent of the youth were from families where the homemaker was also participating in the EFNEP. About 40 percent of the youth were black and an equal percentage were white. Sixty percent were between the ages of 9 and 14 years, and the majority were girls.

More than two-thirds of the youth participated on a continuing basis in the 4-H EFNEP and more than 40 percent participated in short-term activities, such as workshops and field trips and mass audience activities. Primary teaching methods included nutrition games, demonstrations, visual aids, and role playing.

Key Words: Food groups, low-income families, nutrition, youth.



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## SUMMARY

In 1972, a survey was conducted to describe the characteristics of the Extension Service's 4-H Expanded Food and Nutrition Education Program (EFNEP), which was designed to reach youth in low-income areas. Information was obtained from about 10 percent, or approximately 100, of the EFNEP youth units.

The purpose of this study is to provide more insight into the nature of the 4-H EFNEP. Specific objectives are to:

Describe the characteristics of the 4-H EFNEP youth, program staff, and volunteers.

Describe recruitment techniques and teaching methods.

Describe evaluation programs.

Obtain the program units' perceptions of their accomplishments, problems, and recommendations for improvements.

Most of the youth participants were from urban families with annual incomes of less than \$4,000. Of the total, 63 percent were girls and 37 percent were boys. Nearly 40 percent were members of families where the homemaker also participated in the EFNEP. Forty percent of the youth were white and 42 percent were black. Sixty percent were between the ages of 9 and 14.

An average full-time equivalent of 0.7 professionals and 1.9 paraprofessionals assisted each unit in the youth program. Although the program was under the direction of a professional staff, volunteers were an important component. Over a 6-month period, a typical unit utilized 29 volunteers, which equaled 0.9 per unit on a full-time basis.

More than two-thirds of the youth participated in continuing activities, and more than one-third participated in short-term activities such as day camps, workshops, and field trips. Primary teaching methods included games, demonstrations, visual aids, and role playing.

Major program achievements, as perceived by the units, were the awareness youth had of nutrition, the generally improved diets of the youth, and the influence youth had upon improving their family's diets. These program units reported that the lack of dependable volunteers and inadequate facilities were major problems. Improved teaching materials and more staff were priorities among the program improvements listed.

As a result of the survey findings, a comprehensive program for training and motivating volunteers, and a development of improved procedures for evaluating nutrition practices and teaching methods were recommended.



# CHARACTERISTICS OF THE 4-H EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM

by

J. Gerald Feaster, Agricultural Economist  
National Economic Analysis Division  
Economic Research Service

## INTRODUCTION

In 1968, the Extension Service initiated an educational nutrition program, the Expanded Food and Nutrition Education Program (EFNEP), to improve the nutritional level of diets of low-income families. The Extension Service contracted with the Economic Research Service to assist in program evaluation. This report publishes the results of the evaluation called for by the agreement.

The 1970 appropriation for the program included the provision that funds be made available to employ professionals to promote 4-H-type nutrition programs for youth in depressed city areas.

The following were objectives of the program:

To provide education in the principles of nutrition and diets, and in the acquisition and use of foods for youth.

To contribute to the personal development of disadvantaged urban youth through nutrition programs.

To contribute to the improvement of diets and family nutrition by means of educational programs for youth.

This report analyzes the results of a survey on the 4-H EFNEP which was conducted in 1972. These findings represent the most comprehensive information available on the 4-H EFNEP on a national basis, and are needed by Extension personnel to determine characteristics of youth and the program, to ascertain teaching and evaluation methods being used and perceptions of the program from the field staff. Reports of the EFNEP used by the Extension Service provides information only on numbers and racial and ethnic characteristics of youth and volunteers in the 4-H EFNEP.

Information contained in this report will be used by the national EFNEP staff in determining program direction and by the Federal Extension Committee on Policy in identifying issues and establishing policy guidelines. The findings will also be used by State 4-H leaders in planning and managing programs and by county Extension Service staff in implementing the program at the local level.

Continuity and stability of the 4-H EFNEP, as represented by program objectives, guidelines, methods of operation, and number of youth and volunteers,



indicate that these findings have current applicability. More limited studies on the 4-H EFNEP conducted at the State or local level support the findings of this study with respect to their representativeness of the current program.

## METHODOLOGY

In July 1972, information for this study was obtained from 99, or approximately 10 percent, of the 4-H EFNEP units. Each geographic unit was comprised of one or more counties. For sampling purposes, the EFNEP youth units grouped into strata on the basis of the number of youth enrolled, and differential rates were used to select units from each stratum. Among units with a relatively small number of children, sampling rates were lower than for units with a large number of youth. The strata and sampling rates are shown below:

Strata	Number of youth per unit	Number of units		Sampling rate
		Population	Sample	
1	Less than 100	580	24	0.04
2	100 - 199	186	22	.12
3	200 - 299	99	14	.14
4	300 - 399	43	10	.23
5	400 - 999	70	20	.29
6	1,000 and more	16	9	.56
Total		994	99	.10

Mail questionnaires were sent to sample units and completed by the professional staff member in charge. Data were not obtained from participants or volunteers in the program. Some of the questions were structured, but most required short essay or listing responses. Responses to essay or listing questions were reviewed, and similar answers were grouped into general categories and presented in tabular form. However, answers given by only a few units were not included in the tables. Because some units gave more than one response or did not respond to a given question the percentages in some of the tables do not add to 100 percent.

In more than two-thirds of the units, the 4-H EFNEP was supervised by the home economist also in charge of the EFNEP homemaker program. These home economists estimated they devoted about 30 percent of their time to the 4-H EFNEP.

## WORK SITE SELECTION

Since the EFNEP units were comprised of one or more counties, it was not always possible to reach all the youth in need of nutrition education. Therefore, specific sites or areas were selected for concentration of effort and resources.

In the survey, the units were asked to indicate how work sites were selected. Selection of the EFNEP work sites was based on family need, availability



of facilities, and central location. More than 30 percent said depressed areas of the counties with low-income families were primarily selected. The second most common basis for work site selection was through information requests and referrals from public and community groups. Areas where public meeting places and facilities were located, and where the EFNEP families lived were also listed as important criteria for site selection (table 1).

Table 1--Criteria used in the selection of work sites

Criteria	Units reporting
	<u>Percent</u>
Low-income families and depressed areas.....	31
Requests, referrals, and information from public and community groups.....	26
Availability of meeting places and facilities.....	17
Areas where EFNEP families live.....	15
Central location and convenience to large number of youth...	14
Housing developments and model city areas.....	13
Youth without access to other programs.....	10

#### PROGRAM PLANNING ASSISTANCE

Only about 20 percent of the units indicated they had a separate advisory group for planning youth activities. A much larger percentage probably received advice and assistance in planning from the adult EFNEP and other county extension programs.

The composition of the youth advisory groups varied and appeared to represent a cross section of groups and interests. Nearly one-fourth of the advisory groups included parents, homemakers, nutrition aides, and other adults. Only 19 percent of the units with advisory panels indicated that professional staff members were included. However, in most cases the advisory group was supervised by the home economist, and professional input was larger than reported. Also, some of the planning in the remaining units without an advisory group was probably done by the professional staff.

The county advisory groups included representatives of community organizations and agencies, local leaders, volunteers, and the youth themselves.

The units were asked to indicate types of assistance received from advisory groups. Assistance listed most often (by 17 percent of the units) was identification of target areas and participants. Three additional types of assistance listed by approximately 10 percent of the units were the following: (1) recruitment of leaders and volunteers; (2) development of lessons and activities; and (3) general planning. About 6 percent said they received assistance from the advisory group in securing equipment and supplies.



Sources of assistance, other than advisory groups and other extension personnel, included schools, churches, and community organizations. These groups mainly assisted by providing meeting rooms and facilities (table 2). Other sources providing help in obtaining food for demonstrations included USDA food assistance programs and local businesses.

Table 2--Type of assistance received from other sources

Type	Units reporting
	<u>Percent</u>
Provision of meeting facilities.....	30
Provision of food for demonstrations and teaching...	21
Recruitment of youth and location of target areas...	15
General cooperation and assistance.....	9
Provision of teaching material and supplies.....	8

Survey data indicated that several of the units received considerable assistance from other extension staff in planning and conducting conferences and workshops (table 3). Some said extension personnel provided teaching and program materials for use in the youth program. Other units indicated that they received assistance from other extension personnel in training their para-professionals and volunteers.

Table 3--Assistance received from other extension personnel

Type	Units reporting
	<u>Percent</u>
Planning, conferences, workshops.....	32
Providing teaching and program materials.....	28
Training.....	23
Specialized assistance from county, regional and State specialists.....	23
General assistance and coordination.....	17
State staff assistance.....	16
Identifying and locating youth and local leaders....	8
Assisting with camps.....	5



## TEACHING METHODS

The units were asked to list methods used to teach food and nutrition concepts. The method most often used was food and nutrition games, but many also preferred demonstrations. Visual aids, including slides, films, charts, and posters, were used by some units in their presentation. Encouraging direct participation by youth (involving food preparation, cooking, plus participation in taste panels), was another teaching technique used by many units. Other methods included use of drama, lectures, puppets, and color books (table 4).

Table 4--Teaching methods and techniques

Method	Units reporting
	<u>Percent</u>
Food and nutrition games.....	64
Demonstrations.....	50
Visual aids: slides, films, charts.....	41
Direct participation by youth, such as cooking and tasting.....	32
Role planning, drama, skits, songs.....	37
Lessons and lectures.....	20
Puppets.....	18
Color books, puzzles, scrapbooks.....	13

## YOUTH SELECTION AND RECRUITMENT

The most common and important source of selecting youth was from the EFNEP families, and the second source was from schools. Specific geographic areas and community groups were also considered important sources from which to select needy youth. Welfare agencies, housing developments, and recreation organizations were listed as sources, although it was not determined why more units had not tried these sources (table 5).



Table 5--Sources from which youth were selected

Source	Units reporting	Importance level <sup>1/</sup>		
		Not important	Important	Very important
		<u>Percent</u>		
EFNEP families.....	98	8	18	74
Schools.....	90	12	45	43
Specific geographic areas..	86	4	38	58
Community groups.....	78	1	59	40
Welfare agencies.....	67	35	36	29
Housing developments.....	62	10	40	50
Recreation organizations....	58	27	37	36

<sup>1/</sup> Importance rating was determined by units.

The units were asked to list in order of importance the techniques used to recruit and enroll individual youth. Nearly all units recruited youth from families of homemakers enrolled in the program and regarded this as the most important method. Youth participants recruiting other youth was considered the second most important technique. Many units recruited youth through arrangements with schools, churches, recreation organizations, and community groups, and over half considered this very important. Recruitment of youth by program family homemakers and from other families was also considered a very important technique. Other methods of recruiting are listed in table 6.

Table 6--Methods by which youth were recruited

Method	Units reporting	Importance level		
		Not important	Important	Very important
		<u>Percent</u>		
Youth recruited from program :				
families.....	98	9	17	74
Program youth recruited :				
other youth.....	96	2	25	73
Recruited through schools, :				
churches, recreation, and :				
community groups.....	91	4	40	56
EFNEP homemakers recruited :				
youth from other families..	80	19	43	38
Recruited by knocking on :				
doors.....	64	19	59	22
Recruited through mass media..	63	36	48	16
Recruited through direct :				
mail.....	35	38	52	10



## YOUTH CHARACTERISTICS

Of the total participants, 63 percent were girls and 37 percent were boys. The age distribution for both was similar, ranging primarily from 9 to 14 years of age.

Extension Service guidelines state that 4-H EFNEP youth should be of 4-H age, which varies from State to State. However, the data revealed that 6 percent of all participants were under school age. Although preschool children can learn some nutrition concepts, it appears that children of school age might be more apt to utilize and retain the training.

The study showed that the program was effective in reaching minority groups. Racial and ethnic participation was as follows: 42 percent black; 40 percent white; 13 percent Spanish American; and 5 percent other race or ethnic groups (table 7).

About 65 percent of the youth were urban dwellers, 29 percent were rural nonfarm residents, and only 6 percent were from farm families.<sup>1/</sup> The small number of farm youth probably reflected the fact that group meetings were difficult to hold in rural areas where families were more dispersed.

Nearly 40 percent of the youth were from families which also participated in the homemaker EFNEP. The fact that both the homemaker and youth of these families received instruction on nutrition hopefully insured improved eating habits. The survey indicated that 60 percent of the youth were from families with annual incomes of less than \$4,000. However, many large families would be considered at poverty level even though their incomes exceeded \$4,000. Consequently, this 60 percent figure should be considered as a minimum proportion of families below poverty level.

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<sup>1/</sup> Residence definitions as used in EFNEP units are as follows: Urban household--Families living in places with over 2,500 persons; rural nonfarm household--Families living outside urban areas and not operating farms; farm household--Families living outside urban areas and operating a farm.



Table 7--Youth characteristics

Characteristic	Youth
	<u>Percent</u>
<u>Racial and Ethnic Group</u>	
Black.....	42
White.....	40
Spanish American.....	13
Other.....	5
<u>Residence</u>	
Urban.....	65
Rural nonfarm.....	29
Farm.....	6
<u>Age</u>	
14 and over.....	13
9 - 14 years.....	60
Less than 9 years.....	27
<u>Sex</u>	
Girls.....	63
Boys.....	37

## PROGRAM STAFF CHARACTERISTICS

Generally, there were about eight employees (2.6 full-time equivalents) in each unit, averaging 0.7 full-time equivalent professionals and 1.9 full-time equivalent paraprofessionals. During the 6-month period, the professionals worked approximately 79 days, compared with 227 days worked by paraprofessionals.

The professionals tended to be older, predominately white and female, and worked in other extension programs. About 80 percent of the paid staff was paraprofessionals, who were predominantly female and younger than the professional staff.

Among paraprofessionals, the number of whites and blacks was more evenly matched, which more closely reflected the composition of the participating youth population. Although paraprofessionals were hired to work in the adult program, 13 percent worked full-time in the 4-H EFNEP. Of the part-time youth professionals, 57 percent worked in the youth and the homemaker programs, as well as other extension activities (table 8). This fact may have reflected counties where the home economist was in charge of all home economic extension activities.



Table 8--Program staff characteristics

Characteristic	Professionals	Para-professionals	Volunteers
	<u>Number per unit</u>		
Average number <u>1/</u> .....	1.7	6.1	29.2
Full-time equivalent <u>1/</u> .....	.7	1.9	.9
	<u>Percent</u>		
Sex			
Male.....	24	10	11
Female.....	76	90	89
Age			
Less than 19 years.....	--	12	26
19-23 years.....	14	13	18
24 years or older.....	86	75	56
Racial and ethnic groups			
Black.....	22	38	40
White.....	72	42	50
Spanish American.....	--	18	8
Indian.....	--	1	1
Other.....	6	1	1
Work schedule			
Full-time.....	28	13	<u>2/</u>
Part-time.....	72	87	<u>2/</u>
Other duties			
Part-time work in the homemaker program.....	21	76	<u>2/</u>
Part-time work in other extension activities.....	21	4	<u>2/</u>
Part-time work in both of above.....	58	10	<u>2/</u>
None.....	--	10	<u>2/</u>
	<u>Days</u>		
Total 4-H EFNEP work <u>1/</u> .....	79	227	116
Average 4-H EFNEP work (average per week).....	3.7	9.5	4.8

1/ During 6-month period.2/ Not determined.



## VOLUNTEERS

The 4-H EFNEP was designed to utilize a large number of volunteers to encourage community involvement, which was considered essential for program success. Volunteers were predominantly female, but were relatively younger than the professionals and paraprofessionals. The racial balance between blacks and whites was closely matched (table 8).

More than 60 percent of the volunteers were from families with less than \$4,000 in annual income. Almost 40 percent were homemakers and nearly 75 percent were in the EFNEP. Nearly 25 percent of the volunteers were youth who had previously participated in the program, or had experience in other extension work; some were college students. About 6 percent of the volunteers also worked in the homemaker phase of the EFNEP and nearly 5 percent were previous adult leaders in the 4-H program.

According to the survey, the average number of volunteers was 29.2 per unit. However, over a 6 month period, the volunteers worked only 116 days, or the equivalent of one person working full-time per unit. This indicated that each volunteer averaged less than 5 percent of full-time work, or between 1 and 2 hours each week. Sixteen percent of the units reported that school teachers assisted in the youth program, 14 percent indicated that community leaders and persons from community agencies volunteered their services, and more than 5 percent said that children from the EFNEP families assisted in the youth program.

Professionals were asked to list qualifications they had considered when recruiting volunteers. An interest in youth was considered primary by most respondents and an ability to relate to people was considered nearly as important. These criteria are closely related to interest in youth and include the ability to relate, communicate with, and understand low-income people. Other qualifications considered were skills and talent; good character (that is, sincerity and honesty); creativity and enthusiasm; responsibility; time to devote; and leadership (table 9).

Table 9--Qualifications for volunteer recruits

Criteria	Percentage of professionals responding
	<u>Percent</u>
Interest in youth.....	60
Ability to relate to people.....	44
Willingness to learn and work.....	24
Skills, talents, education.....	24
Good character.....	22
Creativity, initiative, enthusiasm.....	16
Responsibility, dependability.....	14
Time to devote to youth.....	11
Leadership qualities.....	5



In reviewing the criteria used to select volunteers, it was clear that previous training and skills were less important than personal attributes and interest in youth. Probably the rationale was that interested and willing volunteers could be taught basic nutrition concepts through formal or informal training sessions. In fact, about half of the units indicated formal training was given to their volunteers prior to working with youth. Those receiving training averaged about 21 hours of initial instruction. Subject matter varied from basic nutrition concepts to human relations and child development (table 10).

Table 10--Volunteer training

Subject	Units reporting
	<u>Percent</u>
Basic nutrition.....:	29
Understanding and working with youth...:	23
Teaching methods.....:	20
Goals and purpose of program.....:	16
Cooking and food preparation.....:	14
Group organization.....:	8

In order to obtain more information on how the volunteers contributed to the youth program, the units were asked to list the normal duties of the volunteers in their unit. Over half responded that the volunteers either conducted or assisted in the presentation or teaching of nutrition lessons and concepts, 44 percent made arrangements for meetings, and 23 percent reported that volunteers prepared and presented demonstration materials. These duties indicate that volunteers took a direct and active role in conveying nutrition information to the youth, thus emphasizing the need for volunteer training in food and nutrition.

Other duties were less oriented to food and nutrition and more related to the logistics of setting up time schedules and obtaining places and facilities for meetings (table 11).



Table 11--Volunteer duties

Duty	Units reporting
	<u>Percent</u>
Teach or assist in the presentation of :	
nutrition.....:	51
Organize and arrange meetings.....:	44
Prepare and present demonstration :	
materials.....:	23
Supervise recreation.....:	16
Provide transportation.....:	12
Keep records.....:	12
Recruit and enroll youth.....:	11
Keep order and discipline.....:	8

The Extension Service guidelines state that volunteers should be supervised by professional staff only. However, 56 percent of the units reported that volunteers were supervised by paraprofessionals, 24 percent said that volunteers were supervised by professionals, and 20 percent said volunteers received supervision from both groups.

The units were asked to list any major problems incurred through the use of volunteers. Nearly one-third indicated that a major problem with volunteers was irregular attendance and undependability. A smaller number of units reported that volunteers tended to lose interest and drop out of service (table 12). Also, when asked in a separate question, 60 percent of the units responded that lack of continuity by volunteers was a problem.

Many volunteers could not find transportation, babysitters during meeting hours, or sufficient time to devote to the program. Some units reported that a lack of education and skills was a problem despite efforts to nationally recruit volunteers at all education and income levels.

Efforts should be made to give volunteers more incentive, assistance, and encouragement in order to retain them. Professional training and supervision would increase skills and capabilities needed to upgrade volunteer potential.



Table 12--Problems with volunteers

Problem	Units reporting
	<u>Percent</u>
Undependable, irregular attendance.....:	32
Lack of transportation or baby sitters.:	14
Lack of education and skills.....:	12
Lack of sustained interest leading to dropping out.....:	11
Lack of sufficient time.....:	11
Difficulty in locating and recruiting qualified volunteers.....:	10

### PROGRAM ACTIVITIES

The 4-H EFNEP provided at least three activity programs in which nutrition was taught. These programs were classified as continuing, short-term, and mass audience. Over the 6-month period, 358 youth in a typical unit participated in long-term activities, 210 participated in short-term activities, and 377 participated in mass audience activities. Many youth were involved in more than one of these program activities.

A continuing activity or long-term program, such as an organized club, was defined as an activity in which staff members periodically met with youth and related to them individually on a continuing basis. A short-term activity was defined as an event limited to 1 or 2 days, which included such programs as day camps and fairs. A mass audience activity was one in which a lesson was presented to a group, usually on a one-time basis, and in which the participants were not individually identified.

Over the 6-month period, the average number of youth reached by the units in this sample was 500 per unit or about 500,000 nationwide. Over 70 percent of the youth participants nationwide were enrolled in continuing activities, and 47 percent of these attended eight or more learning sessions during the 6-month period. Twenty-five percent attended five to seven sessions during the period, 20 percent attended two to four sessions and 8 percent attended one session.

More than 200,000 youths participated in short-term activities over the 6-month period, representing over 40 percent of the youth in the program. These participants attended day camps, overnight camps, and other short-term activities. During this period, about 15 percent were enrolled in day camps and about 2 percent were enrolled in overnight camps.

Approximately 35 percent of the units with short-term activities reporting using summer day camps, which appeared to be very popular. There were about six sessions per unit or a total of about 5 to 6 weeks of day camp. The average camp session lasted slightly over 4 days. These units reported they reached an average of 227 youth or approximately 40 youth per session.



Five percent of the units with short-term activities reported overnight camps. These units held one to two sessions during the 6-month period for about 4 days per session. An average of 57 youth attended the sessions; the number of youth per camp was 35 per session.

Nearly 60 percent of the youth that participated in short-term activities, other than day or overnight camps, which included the following: 18 percent of the units presented cooking and nutrition classes; 12 percent participated in cooperative nutrition projects with other agencies; and 9 percent used exhibits, demonstrations, and fairs. In addition, 9 percent conducted tours and field trips; 5 percent used picnics and outdoor cooking; 5 percent held special workshops; and 2 percent offered garden projects.

Fifty-eight percent of the units conducted mass audience activities, such as school groups and classes. The most popular form of mass audience program was the presentation of nutrition lessons to school groups. Other youth reached through these activities were members of day care centers, churches, recreation centers, and scout groups (table 13). The national guidelines did not recognize the preschool child as part of the program audience.

Table 13--Mass audience activities

Source	Units reporting
	<u>Percent</u>
School groups and classes.....	33
Day care centers, headstart, kindergarten.....	11
Television <sup>1/</sup> .....	11
Radio.....	11
Church groups.....	10
Recreation groups.....	6
Scouts.....	6
Newsletters.....	4

<sup>1/</sup> Television activities do not reflect the 'Mulligan Stew' series, which was introduced in most States after the study.

#### PROGRAM EVALUATION

Units were asked to list program objectives as perceived out in the field. Most units listed two or more objectives. Survey findings established that food and nutrition education and improved diets and eating habits of youth were the major program objectives. Other units listed better food preparation, improved family diets, and nutrition education as important objectives. Many units were concerned with the personal improvement of youth, and listed personal development, and the promotion of good citizenship and leadership as program objectives (table 14).



Table 14--Unit objectives

Response	Units reporting
	<u>Percent</u>
Improve youths' nutrition knowledge and education.....	75
Improve diets and eating habits.....	41
Personal development and citizenship...	31
Provide opportunities for deprived youth.....	17
Teach food preparation.....	16
Improved family diets and nutrition education.....	14
Develop leadership.....	10

To determine the effectiveness of the youth phase of the program, the units were asked a series of questions relating to their program evaluation procedures. Approximately three-fourths of the units indicated that they had an evaluation procedure built into their program.

Nearly all units reporting evaluation procedures said they evaluated the youths' knowledge of nutrition and 72 percent said they evaluated the food consumption practices of the youth. In addition to evaluating diet and knowledge, 91 percent evaluated the personal development of youth through nutrition education and 57 percent evaluated family food consumption practices.

Although a large proportion of the units indicated they had evaluation procedures which covered knowledge of nutrition and food consumption, the following findings indicate that many of the procedures were very general. Forty-one percent of the units used food recalls, 31 percent based their evaluations on general observations reported by the nutrition aides and staff, and 13 percent reported that their evaluation procedures were based on general discussions with the youth. Additionally, 29 percent used games, puzzles, and related activities as a method of evaluation; 26 percent used tests and quizzes in their evaluations; and 17 percent used questionnaires, compared with 11 percent who used oral questions.

The following findings were reported by the units as a result of their evaluation: Most respondents reported that the evaluation provided information for program change; 24 percent reported that their evaluation provided a basis for increased emphasis and planning; 17 percent used the information to make changes in emphasis, direction, or procedure; and 21 percent said that the evaluation revealed weak teaching areas, such as food groups lacking in the diet. Sixteen percent of the units said they adjusted their teaching materials to meet the needs of the youth, and 13 percent said they involved more youth in activities and planning. The evaluations indicated that 4 percent of the units increased the use of visuals and games and 4 percent increased their emphasis on the milk and fruit and vegetable groups in nutrition lessons.



## PROGRAM ACCOMPLISHMENTS

Major program accomplishments, as perceived by the units, included benefits received by both the youths and their families. The principal achievement of the program was the influence youths had made on family diets. The program also improved the eating habits of the participants, at an early age through nutrition education. Other results achieved through the program are listed in table 15. The fact that the youth had a natural interest in food indicated that it was advantageous to teach food and nutrition concepts. The program philosophy and approach to youth and nutrition were also considered effective by many units.

Table 15--Program accomplishments

Item	Units reporting
	Percent
Youths influenced family diets.....	30
Increased the youths awareness of nutrition.....	27
Improved diets of youth.....	21
Provided greater opportunities for deprived youth.....	19
Involved youth in programs and encouraged participation.....	18

## PROGRAM PROBLEMS

Several problems incurred by the program included inadequate facilities; lack of family support; and limited staff, funds, and time (table 16). The major problem, however, was with volunteers. This problem included recruitment difficulties, low-level skills, and lack of dependability. Although only 20 percent of the units listed volunteer problems, these problems were considered serious because the program was heavily dependent on volunteer assistance. Thought should be given to ways of retaining volunteers through increased incentives, greater assistance, more encouragement, and improved training.

Although many units had developed good teaching materials, there were areas which lacked a supply of good materials. Other major problems included lack of transportation and adequate meeting places. Since availability of meeting places and facilities was an important criterion for selecting work sites, this could have been a factor in limiting program expansion in low-income areas.

Although some problems can be remedied by assistance from State and Federal sources, many can not. Many of the units had difficulty getting support and interest from the parents. Many families were poor and unable to provide nutritious food for the youth in the family.



Table 16--Program problems

Item	Units reporting
	<u>Percent</u>
Volunteers.....	20
Inadequate facilities.....	15
Lack of transportation.....	15
Inadequate teaching materials.....	14
Lack of family support.....	13
Lack of followup and evaluation.....	13
Limited staff, funds, and time.....	10
Lack of program emphasis, organization, and development.....	7
Lack of interest by youth.....	6

Other problems listed by units were lack of followup and evaluation, and loss of contact with youths after they left the program. Program emphasis, organization, and development were considered general problems, along with obtaining and keeping the interest of the youth and getting them to be regular in attendance.

Some units felt that the youth also needed other kinds of training which could not be provided by program staff under the existing guidelines. Nutrition and related subjects were the only ones that could be taught by professionals and paraprofessionals funded by the EFNEP. However, all subjects could be taught by volunteers.

#### UNIT RECOMMENDATIONS

The units were asked to make recommendations on how to improve the program. More and improved teaching materials and methods, more professional and paraprofessional staff, and more aides assigned to the 4-H EFNEP were highly recommended. However, it is not the policy of the Extension Service to hire paraprofessional aides to work in the 4-H EFNEP. Six percent of the units said they needed more professional staff and an equal percentage said they needed more staff in general.

Some units recommended that the youth be involved in activities other than those related to food and nutrition. Many units felt that a closer working relationship between the 4-H EFNEP and other club activities might be useful in developing the whole youth. Also, better coordination between the EFNEP youth and homemaker programs might lead to improved use of the aides' time, particularly when the same family had youth and the homemaker enrolled in the program.



A system for sharing ideas, methods, and evaluation procedures was suggested by a few units. If such a system were implemented, for example a newsletter, then various teaching, training, and evaluation methods could be shared. This system would also make it possible to share ideas on recruiting volunteers and involving families and communities in activities (table 17).

Table 17--Unit recommendations

Item	Units reporting
	<u>Percent</u>
Improved teaching materials.....:	21
Assign more aides to youth phase.....:	18
Involve youth in other activities.....:	16
More coordination of the 4-H EFNEP, the EFNEP, and the 4-H clubs.....:	15
Involve parents and community.....:	9
Assign more professional staff.....:	6
Assign more general staff.....:	6
Devise system for sharing ideas.....:	5

## CONCLUSIONS

The 4-H EFNEP depends on a large number of volunteers for its success. The units surveyed indicated that getting volunteers was a major problem. Based on the survey findings, a comprehensive program for training and motivating volunteers would be desirable.

The survey showed that a wide variety of teaching methods and procedures for evaluating program effectiveness were being used by the units. Development of improved procedures for evaluating teaching methods and nutrition practices would enable program planners to identify the most effective methods of teaching nutrition to youth.







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