

T H E S I S

ATTITUDE TOWARD AND OBSERVANCE OF
SOME HEALTH PRACTICES

BY

RURAL PEOPLE OF COLORADO

Submitted by

Beatrice C. Young

In partial fulfillment of the requirements
for the Degree of Master of Science

Colorado State College

of

Agriculture and Mechanic Arts

Fort Collins, Colorado

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Chapter I

Part I

INTRODUCTION 1/

Among the many problems confronting rural people, the problem of health has long held a prominent place. Although numerous investigations have been made with respect to health facilities and public health programs, few have dealt with the fundamental health practices underlying health programs, the extent to which

1/ This study is a part of a larger project of the Colorado Agricultural Experiment Station entitled "Attitude toward and observance of some health practices by rural people of Colorado," which is being made among rural families living on (1) irrigated farms, (2) dryland farms, (3) mountain ranches, and (4) small tracts surrounding Denver. Various steps of the study including outlining of the problem, development of the schedule, gathering of the data, and checking its validity and reliability have been developed cooperatively with Dr. R. W. Roskelley who is responsible for the Experiment Station project and is supervisor of this thesis. The writer is responsible for the findings presented in this thesis, which is based upon the analysis of a part of the material that was obtained by interviewing 100 farm families living in the irrigated area of Larimer County, Colo. The field work was done in 1940 with the assistance of two part time enumerators who were employees of the Experiment Station. The cooperative work between Dr. Roskelley and the writer has been of such a nature as to insure the writer the basic opportunities for growth and development that should come in the preparation of a master's thesis and still make the data that were collected for this thesis an integrated and functional part of the larger Experiment Station study.

people observe these health practices, and how they feel toward their own observance of them. These attitudes and patterns of behavior, usually assigned to the field of sociology, form the framework of this study. The study of behavior patterns and of attitudes presents one method of attacking social problems which involve human elements.

Attitudes are tendencies to act, representing the residue of past experiences, and as such become the keystone to behavior. Through them man expresses subjectively how he feels toward any situation.

Political and business groups have found the measurement of attitudes a useful technique in "feeling out" the public before new measures are launched. Britt said, "Actually a great deal of significant work is being done in the field of attitude measurement. Polls of opinion by the American Institute of Public Opinion, Fortune Magazine, and Psychological Corporation have been well executed and have had great practical value. The Psychological Corporation in particular has reduced many a problem in business and industry to a scientific study of attitudes, always with due caution against sweeping generalizations." ^{2/} Such a procedure seems equally applicable to social problems with attitudes forming the basis for future planning of health programs.

^{2/} Stuart Henderson Britt, Social Psychology of Modern Life, (New York: Farrar and Rinehart, Inc., 1940) p. 120.

From the general field of health arose the question as to the nature of behavior patterns of rural farm families in respect to the frequency with which they observe some of the health practices usually prescribed for healthful living and also as to their attitudes of sufficiency and nonsufficiency toward such practices.

In further defining the problem as conceived in this thesis and the methods of studying the problem, a number of subordinate questions arose, namely:

1. What association exists between tenure status, the frequency with which certain health practices are observed, and peoples' attitudes toward it?
2. In what way is the education of the homemaker related to the practice of certain health habits and to attitudes of sufficiency toward the observance of them?
3. To what extent is the homemaker's participation in organizations (social, service, religious and educational) related to the frequency with which certain health habits are practiced and what effect does the degree of such participation have on attitudes of sufficiency and nonsufficiency?
4. What effect does the possession of a garden have upon the frequency with which certain diet items are eaten and upon attitudes of sufficiency toward the observance of this particular practice?

Part II

METHODOLOGY OF THE STUDY

Although much research has been done in the field of health, little consideration has been given the fundamental health practices underlying the health programs, the extent to which people observe them, and their attitudes toward them. These behavior patterns and attitudes are usually assigned to the field of sociology and are referred to in this study as the sociological aspects of health.

Delimiting the Field

There are many aspects of the field of health. This fact presented the problem of how to delimit the field. Since the sociological aspects of health involve not only behavior patterns but also a study of attitudes, it was decided after much consideration to limit the scope of the survey to some of the health practices usually prescribed for healthful living, the frequency with which people observe these various health habits, and their attitudes of sufficiency and nonsufficiency toward the observance or nonobservance of them.

Compilation of Health Practices

From a general knowledge of the field, a review of literature, and the case history technique, a

tentative list of health practices which seemed to be the most important for healthful living were drawn up in schedule form. To eliminate the possibility of having omitted a fundamental health practice, this list in schedule form was submitted to selected specialists in the field of health for confirmation of the choice of practices. The list in schedule form was approved by Mrs. Shanstrum, superintendent of nurses, Larimer County Hospital; Miss Ruth E. Phillips, director, Division of Public Health Nursing, State Division of Public Health, Denver, Colo.; Miss Norma Michaelson, Larimer County public health nurse; Dr. Ruth Sumner, assistant professor of physiology, Colorado State College; and Mrs. Carmen Johnson, Larimer County home demonstration agent. The final list that was decided upon was as follows:

1. Physical and dental examinations
2. Brushing the teeth
3. Bathing
4. Relaxing
5. Diet
6. Other sanitary practices

A preliminary analysis of some of the data indicated that an analysis of all the data for the six health practices was beyond the scope of a master's thesis. Therefore, it was decided to restrict the present thesis to a treatment of:

1. Dental examinations and attitudes toward sufficiency in this respect.
2. Selected sanitary practices and related

attitudes.

3. Diet: vegetables and attitudes toward their adequacy in the diet.

Behavior Patterns, Attitudes, and Reasons

The next problem arising was that of obtaining behavior patterns and attitudes of sufficiency and nonsufficiency toward the observance of these health practices. The frequency with which people observed or did not observe the various health practices was selected as the basis of one pattern of behavior. In regard to dental examinations, however, it was necessary to distinguish between examinations made because of illness or ailment and those made voluntarily. Since the attitudes to be investigated were covert, it was felt that the only feasible method of evaluation was to accept the verbal expression of the interviewee, a common technique in sociological methodology. But was this enough in the case of an attitude of nonsufficiency? At length it was decided that the reasons behind such an attitude might be significant in regard to the total problem. The case history method was used to obtain a sample list of reasons. Six homemakers were interviewed at this time. The writer found that in many cases the reasons given by each person for an attitude of nonsufficiency were the same in regard to a particular health practice. To facilitate measurement, the most common reasons for each

health practice were compiled and listed at the bottom of the schedule page following the health practice to which they related. Space was provided in the schedule for listing additional reasons at the time of the interview.

Further consideration of the problem brought up the question of other factors influencing attitudes and behavior patterns. Did education, for example, have a bearing on the attitude of sufficiency toward the observance or nonobservance of some health practice? Did it influence the frequency with which family members observed this health practice? Did age, sex, tenure status, and the like also influence them? Such questions led to the compilation of a list of factors which, it was felt, might be related to the problem of health practices and related attitudes. Again the problem was studied intensively by the case history technique and by obtaining confirmation from the specialists mentioned previously. The list of factors which it was thought would have a bearing on the behavior patterns and attitudes of persons toward health were:

1. Education of the head and homemaker
2. Age
3. Sex
4. Type of farm
5. Size of farm
6. Tenure status
7. Nativity
8. Budgeting
9. Insurance: health and accident
10. Organizations to which the homemaker

belonged and measures of her participation in them

The limited sample used for this thesis and the amount of work that could be reasonably required for a master's thesis suggested the advisability of analyzing the attitudes and behavior patterns on the basis of but three variables, namely: tenure status, education of the homemaker, and her participation in organizations.

Other Information

Other information of a general nature was included in the schedule which had been drawn up jointly by Dr. Roskelley and the writer to serve two purposes: (1) As a basis for this thesis, and (2) to be used later in an Experiment Station publication. This other information consists of checks on ventilation, days of illness, medical costs, and the presence or absence of gardens and dairy cows.

Selection of the Interviewee

The next major step was to decide what member of the family should be interviewed. Could the information be more easily obtained from the head, the homemaker, or from all family members? The writer assumed that the homemaker would be the best interviewee for the following reasons: (1) She was probably more actively interested in the problem of health than the other family

members; (2) she was more frequently to be found at home than other family members; and (3) children were unable to express their attitudes because of immaturity. Hence in most cases the homemaker gave the desired information. The schedule formed the basis of the interview.

The Schedule

The problem of composing the schedule was most difficult. It had to contain all the information required and answer all questions accurately and convincingly. It had to be brief and concise. All items had to be grouped logically. It had to be easy to score and convenient to carry. The questions could not be ambiguous. It had to be constructed to permit a quantitative evaluation of the data wherever possible. These criteria and many others had to be satisfied. Various plans were considered and discarded before the writer and Dr. Roskelley finally approved the final form.

Three copies were then taken into the field by the writer to be tested. Defects found in this preliminary test were corrected and a new schedule made. Eight revised copies were taken into the field by the writer and three Experiment Station investigators. Each investigator filled out two schedules. Following the field work a conference was held to discuss the difficulties encountered by each enumerator, and on the basis of their

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suggestions the schedule was revised into its final form. Since the schedule was organized in conjunction with the compilation of health practices, it also received the criticism of the previously mentioned specialists in the field of health. See page 146 for a sample of the schedule.

Definitions

Certain terms which need some explanation have been used in the schedule. These definitions are consistent throughout the study.

1. Head --man in authority in the household.
2. Homemaker --woman in charge of domestic affairs.
3. Sufficiency --estimate of adequacy with which a health habit is practiced.
4. Nonsufficiency --estimate of inadequacy with which a health practice is observed.
5. Attitude --expression of how an individual feels toward any given situation.
6. Ailment --any dental disorder which requires attention.
7. Voluntary --examinations made because of habit and training rather than because of ailment.
8. Participation --activity in organizations.
 High --attends two-thirds of the meetings, pays dues, and holds office.
 Medium --Attends one-third to two-thirds of the meetings, pays dues.
 Low --Attends less than one-third of the meetings, pays dues.

Procedure of the Interview

The following procedure was used for obtaining the information for each of the selected health practices.

Concerning dental examinations made in the year

preceding the interview, the investigator asked the interviewee, usually the homemaker, if the head of the household had a dental examination during that period. If the answer was affirmative, the investigator then asked if the visits had been made voluntarily or because of some ailment. The total number of visits, both voluntary and ailment, was recorded on the schedule under the frequency of dental examinations. The homemaker was then asked if the number of visits made by the head had been sufficient. An affirmative reply was recorded in the "yes" column under "sufficiency." If the homemaker said the number of visits had been inadequate, then a check for each visit was made under "sufficiency" in the "no" column. The interviewer through direct or indirect questioning determined the reason or reasons for an attitude of nonsufficiency. If the reasons were among those listed at the bottom of the schedule page, the corresponding number was placed in the column provided for reasons. Additional reasons were written on the schedule, numbered, and recorded in a like manner. Replies which were not ascertainable (NA) were also indicated. Similarly, entries were made for each family member living in the household at the time of the interview.

The method of obtaining the information was

essentially the same for each health practice, although the approach varied. The more personal health practices were approached indirectly; for example, the question of bathing was related to the bathing facilities in the home. Significant comments made during the interview were recorded on the margin of the schedule.

Editing

At the close of each day the schedules obtained by each worker were edited by him. After the field work was completed the next step was the editing of the schedules by the writer. This was done with the center of attention being on missing and incomplete entries as well as on the system of scoring -- NA (nonascertainable items), zeros, and blanks.

Types of Information

The problem of analyzing statistically the quantitative data brought to light the fact that the schedule was composed of the following types of information sought: (1) Information of such a personal nature that the only surety of accuracy was dependent on a general confirmation of the integrity of the interviewee as obtained from a secondary source, (2) information which could be checked by observation, (3) information about which a reliable estimate of accuracy could be made by community leaders and friends of the interviewee.

Validity and Reliability

The problem of reliability and validity had been anticipated before the field work was begun. Several possibilities of testing it were discussed at that time. The very fact that the information contained in the schedule was so favorably received by specialists in the field of health, together with the fact that at their suggestions questionable items were discarded, indicated that they believed it possible to get the desired information from the people by means of the schedule and personal interviews. After the interviewing was completed it was felt that reliability could best be tested by checking each schedule with a community leader and a friend of the interviewee. The schedule and separate diet sheet which had been made were taken into the field and the various items rechecked by these community leaders and friends. Any changes that were made were noted in red pencil. With the exception of diet, about which a fairly accurate estimate could be made, the checks consisted in the observation of various items, such as screening, fly control, and condition of water containers, and the confirmation of the integrity of the interviewee.

Coefficients of correlation were computed for some of the information about which a fairly reliable estimate of accuracy could be made, specifically the diet

items. Eight diet items were selected at random and two sets of correlations were computed, one for the information obtained by the interviewer and checked by the community leader and the other for information obtained by the interviewer and checked by a friend of the interviewee. In turn the reliability of these computed correlations was estimated by the computation of the standard errors of the coefficients of correlation obtained. The unknown true coefficient of correlation measuring reliability was then considered with reasonable certainty not to differ from the sample coefficient of correlation by more than twice the latter's. Thus a fair measure of at least part of the survey questionnaire was determined. Tables 1 and 1a show the results of the correlations and the standard error for each coefficient.

TABLE 1.--COEFFICIENT OF CORRELATION AND STANDARD ERROR OF SOME DIET ITEMS OBTAINED BY INTERVIEWER AND CHECKED BY FRIENDS

DIET ITEMS	SUMMER		WINTER	
	r	s	r	s
Milk	1.	0.	1.	0.
Vegetable Protein	1.	0.	1.	0.
Eggs	1.	0.	.6438	.0283
Butter	.9990	.0001	.9962	.0005
Fresh Fruit	.8073	.0238	.6735	.0373
Meat	.7209	.0328	.9994	.00008
Citrus Fruit	.6927	.0355	.7968	.0249
Green Leafy Vegetables	.6658	.0380	.8201	.0223

Note: Coefficient correlations and S.E. are based on 215 cases.

TABLE 1a.--COEFFICIENT OF CORRELATION AND STANDARD ERROR OF SOME DIET ITEMS OBTAINED BY INTERVIEWER AND CHECKED BY COMMUNITY LEADERS

DIET ITEMS	SUMMER		WINTER	
	r	e	r	e
Eggs	1.	0.	.6594	.0353
Butter	.9997	.00008	.9959	.0005
Vegetable Protein	.9850	.0019	.9205	.0095
Citrus Fruit	.7955	.0029	.7802	.0244
Fresh Fruit	.7776	.0247	.8197	.0205
Meat	.6573	.0354	.7333	.0258
Milk	.6544	.0357	.6584	.0353
Green Leafy Vegetables	.6538	.0357	.8508	.0172

Note: Coefficient correlations and S.E. are based on 257 cases.

Information which could be checked by observation was assumed to be correct since the enumerators either recorded disagreements with an item on the margin of the schedule or discussed a doubtful item until it was satisfactory to both the interviewee and the enumerator. Information of a personal nature was checked only by a confirmation as to the integrity of the individual interviewed.

The high correlations showed that roughly the same information which was obtained during the interview could also be obtained from a community leader or friend of the interviewee. However, an aggregate standard error of the coefficient of correlation is necessary to show which procedure is best to follow. Since the writer is

interested only in indicating that the information could be obtained from a friend or community leader, it is not necessary to use this standard error which is merely a technique for deciding if the friend was a better source of information than the community leader and vice versa.

Tabulation

Where answers did not agree with those of either a friend or community leader, the data was tabulated on the basis of the statements of the friend or community leader as being possibly more reliable.

Within many of the categories the samples were so small that only possibilities of trends were suggested. A more exhaustive study would be needed to show conclusively whether or not these suggested trends are of a definite nature.

In order to determine a significant difference between two sample percentages, it is necessary to apply a statistical technique. Two sample proportions, p_1 and p_2 may be considered to differ significantly if:

$$\frac{p_1 - p_2}{\sqrt{p_1 q_1}} \sqrt{\frac{N_1 N_2}{N_1 + N_2}} > 1.96$$

where

p_1 and p_2 are the two percentages

N_1 and N_2 are the total number of cases

$$p^1 = \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2}$$

$$N_1 + N_2$$

$$q^1 = 1 - p^1$$

and where the critical value 1.96 is based upon an arbitrary level of significance of .05.

Example:

P_1 = observed proportion of tenant class who visit a dentist because of ailment

P_2 = observed proportion of owners who visit a dentist because of ailment

N_1 = 51 = total number of tenants in sample

N_2 = 47 = total number of owners in sample

$$P_1 = .353$$

$$P_2 = .181$$

$$p^1 = \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2} = \frac{18 + 8.5}{98} = \frac{26.5}{98} = .27$$

$$q^1 = 1 - p^1 = .73$$

$$\frac{P_1 - P_2}{\sqrt{\frac{p^1 q^1}{N_1 + N_2}}} = 1.91 \not> 1.96$$

Hence the difference must be considered not significant, although significance is admittedly approached.

The writer has recognized the need for the application of such precise statistical techniques in

order that complete confidence may be placed in the conclusions. However, because of the fact that the variation in many of the comparable proportions is not extreme and since the number of samples in many cases were limited, it was recognized that but few of the cases of definite significance could be proved. Hence it was decided to suggest the possible trends and their evaluation rather than limit the discussion to those few points of difference which statistical analysis would confirm as existing for a more general population. Thus to a considerable degree this study must be construed as descriptive of a limited situation rather than as of an analytical nature endeavoring to establish generalizations.

Presenting the Findings

In analyzing and presenting the findings of the survey with which Chapters III, IV and V will deal, it was necessary to eliminate many of the minor details connected with the study and to stress only the most important differences which were found. Since the writer is interested in presenting the material not so much for the technical reader as for the layman, the findings are presented in a general rather than a technical fashion. Implications and comments made during the interview have been included in the body of the discussion.

In order, hereafter, to emphasize certain comparisons and to make the meaning and import of the aggregate collected information more readily understandable, such devices as tables and graphs are freely employed. They serve to suggest possibilities of trends and differences and also as a convenient basis upon which to rest the incident discussion. See the footnote below Figure 4 for explanation of the legend relating to education of the homemaker.

Part III

SOME CHARACTERISTICS OF THE PEOPLE

In every group of human beings, certain aggregate or population characteristics are found which not only provide a basis for a general description and understanding of the nature of the group but also often directly influence group practices and habits to an extent that definite trends may be observed.

Some of the fundamental group characteristics of the people with regard to whom the survey was conducted follow:

Sex distribution

Males	
Parents-----	97
Children-----	107
Females	
Parents-----	99
Children-----	74

Nativity

Native born-----	90.0%
Foreign or mixed parentage--	3.0%
Foreign born-----	6.0%
Nonascertainable-----	1.0%

Education of the head and homemaker

Grade school (0-8)	
Head-----	23.5%
Homemaker-----	20.0%
High school (9 - 12)	
Head-----	19.0%
Homemaker-----	18.5%
College (13 - 16)	
Head-----	2.5%
Homemaker-----	9.0%
Nonascertainable----	6.5%

Tenure status

Owner additional----	2.0%
Owners-----	48.0%
Tenants-----	51.0%

Organizations to which the homemaker belonged and measure of her participation in them

Belonged to no club-----	49.0%
Belonged to one or more clubs---	51.0%

Type of organization and measure of participation per homemaker

Extension club----	11
High-----	6
Medium-----	4
Low-----	1
Service-----	15
High-----	9
Medium-----	2
Low-----	4
Social-----	45
High-----	28
Medium-----	8
Low-----	9

Church-----	23
High-----	17
Medium-----	5
Low-----	1
More than one club	23
High-----	23
Medium-----	5
Low-----	2
Mixed-----	1

Budgets

Groceries	
Yes-----	33.0%
No-----	67.0%
Medical care	
Yes-----	16.0%
No-----	84.0%

Insurance

None

Parents-----	79.0%
Children-----	90.7%

Health

Parents-----	1.0%
Children-----	1.1%

Accident

Parents-----	4.00%
Children-----	0.55%

Health and accident

Parents-----	3.00%
Children-----	0.55%

One or other of the parents insured---- 13.0%
 One or more children but not all insured 7.1%

Vaccination and immunization, Tuberculin test

Tuberculin test

Parents-----	2.0%
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Children not attending school*	----20.8%
Children in school-----	14.9%
Preschool children-----	0.0%

Diphtheria

Parents-----	2.0%
Children not attending school*---	32.1%
Children in school-----	23.0%
Preschool children-----	9.3%

* In two families, only part of the children were vaccinated and immunized.

Small Pox

Parents-----	16.0%
Children not attending school*---	52.8%
Children in school-----	43.7%
Preschool children-----	6.9%

Typhoid

Parents-----	1.0%
Children not attending school*---	9.4%
Children in school-----	6.9%
Preschool children-----	4.7%

Whooping Cough

Parents-----	0.0%
Children not attending school*---	1.9%
Children in school-----	2.3%
Preschool children-----	9.3%

* In two families part of the children were not vaccinated or immunized.

Chapter II

REVIEW OF LITERATURE

Although much of the literature reviewed was not directly related to the thesis problem, it nevertheless served as a frame of reference for the study.

Research conducted by the United States Public Health Service and other state experiment stations have considered such problems as public and rural health facilities, sickness and medical care, and vital statistics. Very little attention has been given to the problem of behavior patterns as they are related to the field of health. The following studies are most closely related to that of the writer.

Isabella C. Wilson and William H. Metzler (15) writing of sickness and medical care in the Ozarks stated that 15 percent of the families and 5.1 percent of all persons used the services of a dentist. The principal reason given for not having had the teeth cared for was lack of funds. The study also included information on the type and availability of medical care and the relationship of sickness and medical care to income groups, residence, and occupation and tenure.

A section of a survey of health facilities

and agencies and the extent they are used by rural people in Ross County, Ohio, was also devoted to dental care. C. E. Lively and P. G. Beck (9) in 1927 found that of the 200 families studied 89 had dental care. Forty-seven families were classified as owners, 26 as renters, and 16 as laborers and others. Dentists credited examinations made at school for the increase of children who visited a dentist. The data as well as the field observation revealed that the dental work done was mainly a matter of relieving an aching tooth.

In a survey of the rural health situation in South Dakota W. F. Kumlien (7) reported with respect to sanitation that the majority of homes in Brookings County maintained a fairly satisfactory water supply and that the milk supply was of at least average grade. The remainder of the bulletin was devoted to general facts about health agencies in South Dakota and particularly to the health conditions in Brookings County.

Mr. Kumlien in the same survey found that the showing of people in Brookings County with respect to vegetables in the diet was quite good. Besides potatoes, some vegetables, cooked or raw, were served 7.49 times per week for country families and 9.58 times for town families.

Mary M. Clayton (3), studying the food habits and physical condition of children in some Maine commun-

ities, found that very few children in the localities visited ate raw vegetables. Sixty-three percent had cooked vegetables on the day preceding the interview. Two succulent vegetables, excluding tomatoes, were eaten by 21.6 percent of the children, while one succulent vegetable was eaten by 31.3 percent. Over one-half (55.2 percent) had potatoes once a day but almost one-third (30.3 percent) had them twice or more. Miss Clayton also stated that there was a relatively low consumption of milk, fruits, and cooked and raw succulent vegetables in the children's diet.

Miss Anna Heisler (5) indicated a health need pertinent to Larimer County, Colo., when she stated in her survey of public health nursing, "Also community interest in developing a health program for the family as a whole or for the community as a whole seemed to be almost entirely lacking."

Letters were sent to the United States Public Health Service and the Division of Public Health for the state of Colorado inquiring about studies similar in nature to that undertaken in this thesis. The writer was informed that to the best of their knowledge no such study had been made.

Chapter III

PRACTICES AND ATTITUDES RELATING TO DENTAL HYGIENE

Within recent years more emphasis has been placed upon dental hygiene, particularly upon the care of the teeth as a preventive measure. Medical science has brought to light the fact that many physical disorders originate as the result of poor teeth. For this reason a great deal has been done in an effort to educate the public as to proper and desirable dental practices. The elements of dental hygiene have been presented not only in our educational system, but also through the media of radio, popular literature and advertising, and many varied educational programs.

It is of importance in this study to examine the extent to which rural people follow recommended dental practices. How do they regard the adequacy of the care given their teeth? Do children follow the same dental practices as their parents? Does the frequency of brushing the teeth bear any relationship to seeking dental examinations? Does tenure status, education of the mother, or her participation in organizations have any bearing on the problem?

General information as to the extent to which these rural people, parents and children, have dental examinations, together with the reasons therefore, may be gained from a consideration of Figure 1. This percentage distribution graph classifies the families according to their tenure status, thus making comparisons on this basis possible.

Scale of Percent

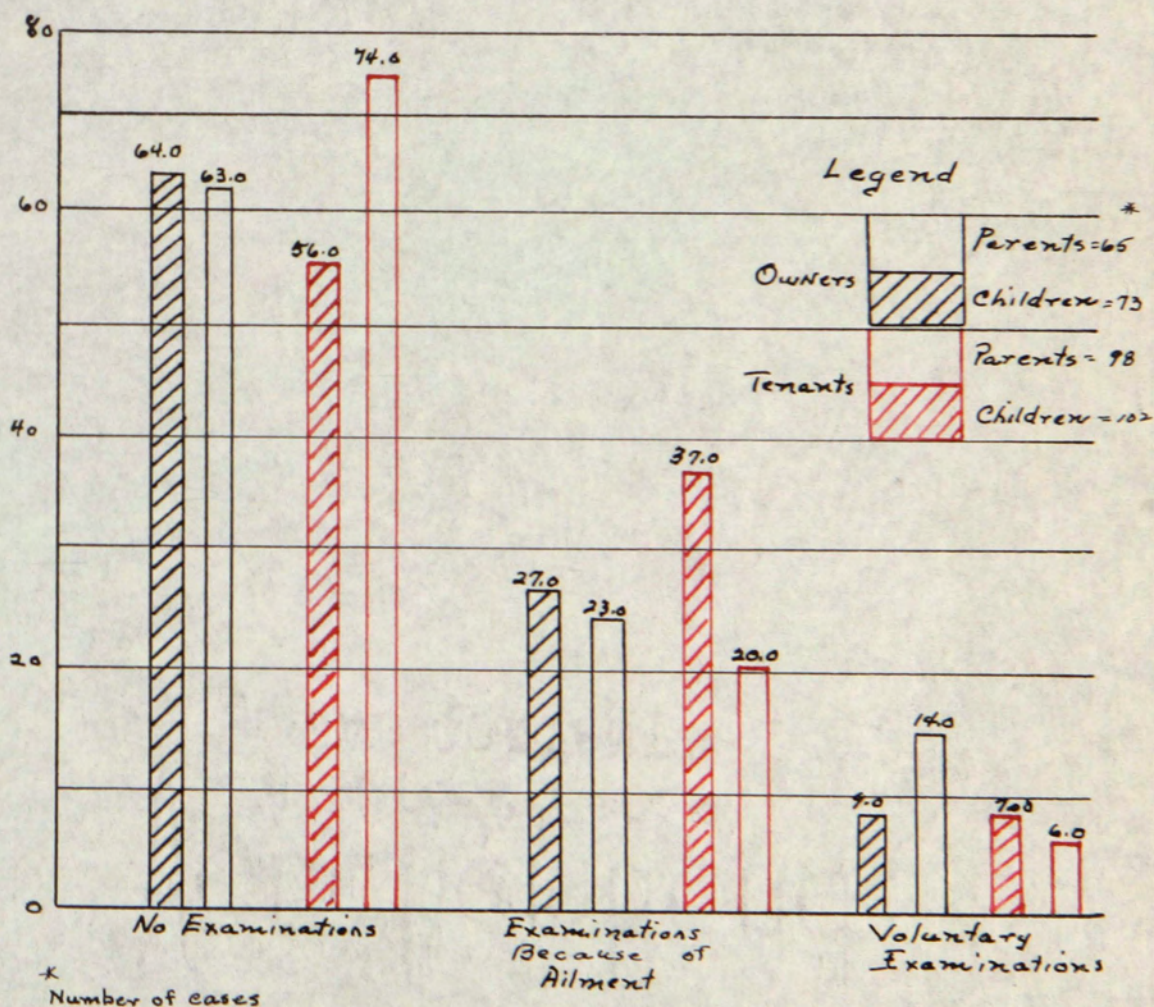


Fig. 1.--Percentages of owners and tenants (both parents and children) who did not have dental examinations, who had such examinations because of ailment, or who had them voluntarily

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The most striking point evidenced by the data is that the majority of families, both tenants and owners, had no dental examinations at all during the year. Apathy in regard to visiting a dentist is rather general, notwithstanding the flood of educational propaganda on this point. Also, with but slight variation, children tended to follow the example set by their parents with respect to visits to the dentist.

The relationship of dental examinations to tenure status seems slight. Although more families owning their farms (parents 9 percent, children 14 percent) voluntarily sought dental check-up than did tenant families (parents 7 percent, children 6 percent), the differences appear to be too small to be regarded as significant. It is rather surprising that parents in both owner and tenant families visited the dentist either voluntarily or by reason of ailment more often than did their children, with the only exception noted in the case of voluntary examinations by members of owner families.

It is noteworthy that in general more dentist visitations were made because of ailment than were made voluntarily. Without doubt toothaches were a stronger motivating influence than was education in regard to this practice.

A comparison of owners with tenants as well as parents with children in regard to the frequency of

dental examinations per individual is facilitated by

Figure 2.



* Number of cases

Fig. 2.--Average number of dental examinations for persons having such examinations classified with respect to tenure status.

In the matter of the number of dental examinations per person, regardless of the motivating reason, an entirely different type of family pattern than that depicted by Figure 1 persists. Parents make far more visits to the dentist per person than do their children. Dental ailments of the parents were probably more serious than those of the children, thus accounting for more visits, but the reason for the difference in the case of voluntary examinations is not very evident. As mentioned previously ownership and tenancy appear to have slight relationship to dental examinations with the exception of per person frequency of dental examinations of parents, but the association of tenure status with this practice as far as children are concerned seems negligible.

TABLE 2.--NUMBER AND PERCENT OF PERSONS IN EACH CLASSIFICATION (OWNER, TENANT; PARENT, CHILD) WHO, IN THE OPINION OF THE HOME MAKER, HAD A SUFFICIENT OR NONSUFFICIENT NUMBER OF DENTAL EXAMINATIONS

ATTITUDES TOWARD DENTAL EXAMINATIONS	OWNER				TENANT			
	PARENTS		CHILDREN		PARENTS		CHILDREN	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Sufficient	42	66.0	62	85.0	78	79.0	37	85.0
Nonsufficient	22	34.0	11	15.0	20	21.0	15	15.0
Total	65	100.0	73	100.0	98	100.0	102	100.0

An analysis of attitudes evinced by these rural people as to the adequacy of their visits to the dentist is exhibited in Table 2. Here two points deserve mention. As a whole, the parents seemed to be more satisfied as to the sufficiency of the professional dental care provided for their children than for themselves. As to tenure status, 34 percent of the parents who were owners admitted a feeling of dissatisfaction in regard to their adequacy of their dentist visitations, whereas but 21 percent of the tenant parents indicated a similar attitude.

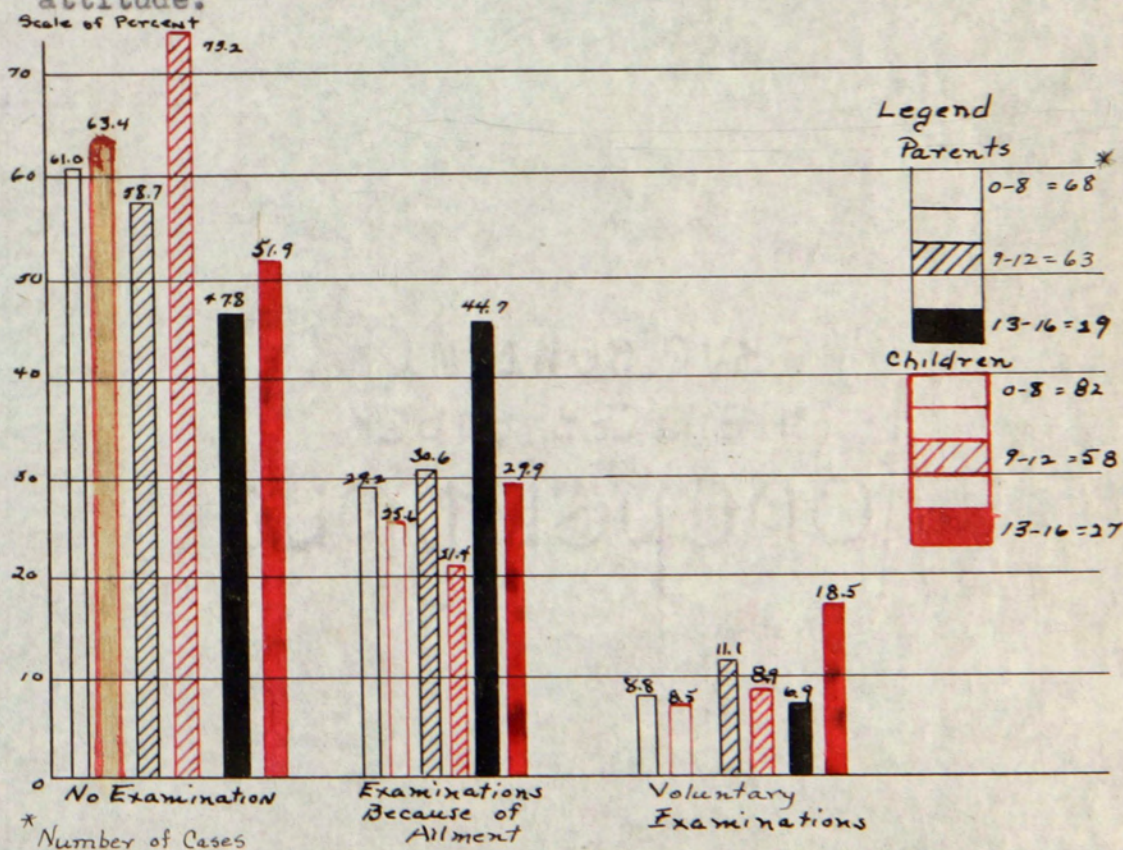


Fig. 3.--Percentages of both parents and children who did not have dental examinations, who had such examinations because of ailment, or who had them voluntarily, classified by the degree of education of the homemaker.

Information relative to possible association of the prevalency of dental examinations with the degree of formal schooling possessed by the mother of the family is presented in Figure 3. Here the practices of both parents and children are comparatively portrayed under three categories of education possessed by the homemaker. Although, as was indicated before, most persons had no examination at all within the year preceding the survey, there appears to exist a general and definite tendency relating the practice of parents seeking professional dental care with superior education as possessed by the mother, with one exception being in the case of voluntary examinations. The transfer of the benefits of education to daily living, although perhaps slow and only partial in nature, is nevertheless quite real and recognizable. In this graphic analysis, like that for tenure status, children in general seemed to receive less professional dental attention than did their parents. A possible reason for this condition might have been a hesitancy on the part of the parents to incur expense in having the temporary teeth of their children cared for properly. Another conclusion permitted by a study of the data is that a college education apparently influenced homemakers to see to it that their children had voluntary dental examinations but did not produce a like reaction in regard to themselves and their husbands.

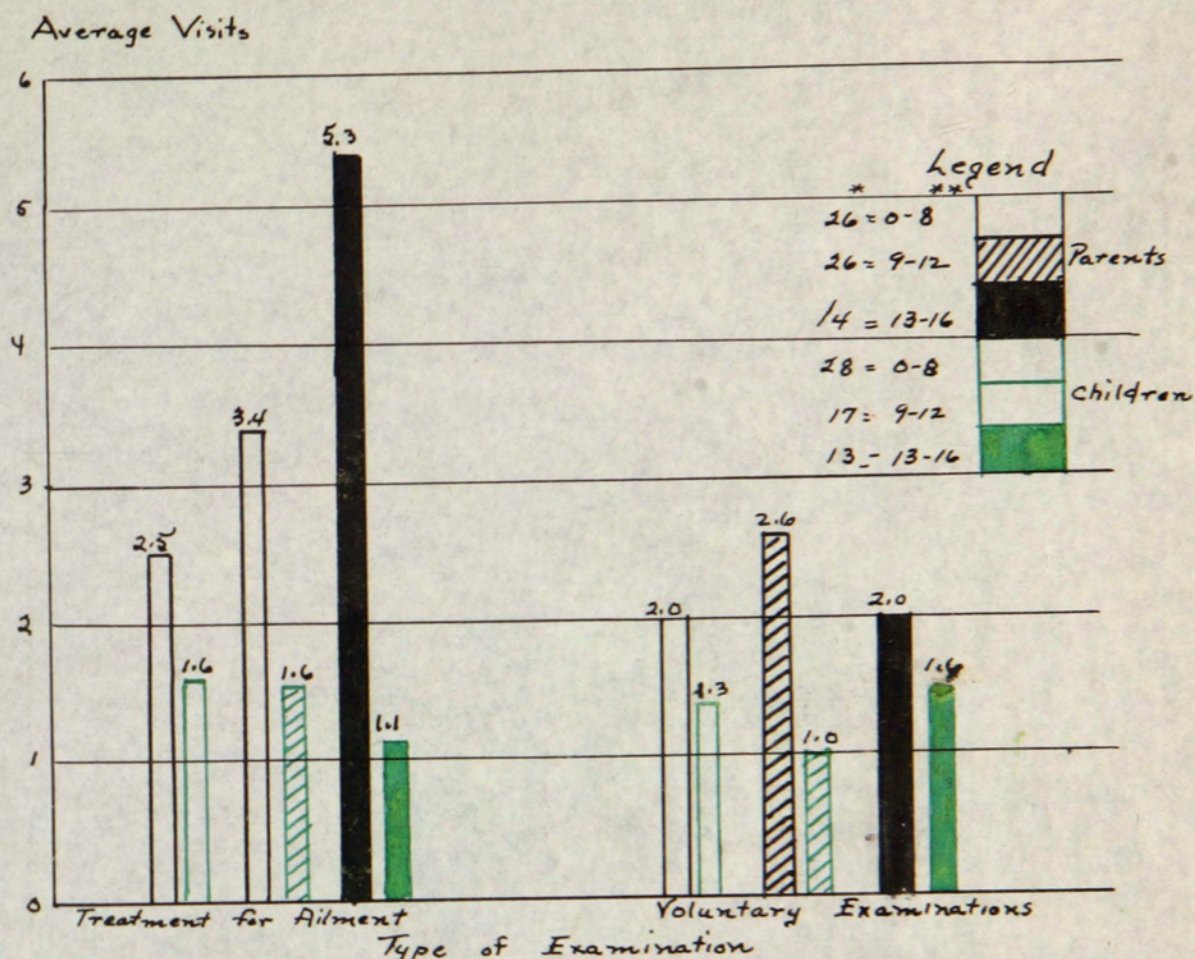


Fig. 4.--Average number of dental examinations for persons having such examinations (parents, children) classified with respect to education of the homemaker.

* Number of Cases

**
 0-8 Grade school education
 9-12 High school education
 13-16 College education

TABLE 3.--ATTITUDES OF HOMEMAKERS REGARDING SUFFICIENCY OF DENTAL EXAMINATIONS FOR
PARENTS AND CHILDREN COMPARED BY EDUCATION OF THE HOMEMAKER

ATTITUDES	0 - 8 YEARS						9 - 12 YEARS						13 - 14 YEARS					
	PARENTS			CHILDREN			PARENTS			CHILDREN			PARENTS			CHILDREN		
	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent	Number of Persons	Per- cent
Suffi- cient	53	77.5	76	92.7			51	80.9	48	92.8			16	55.2	21	77.7		
Nonsuffi- cient	15	22.5	6	7.3			12	19.1	10	17.2			13	44.8	6	22.3		
Total	68	100.0	82	100.0			63	100.0	58	100.0			29	100.0	27	100.0		

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In order to investigate more completely a possible bearing of education of the mother upon the practice of having dental examinations, as well as upon attitudes of sufficiency in this respect, attention is directed to Figure 4, depicting average number of dental examinations, and to Table 3, showing the distribution of attitudes regarding adequacy. From Figure 4, one new piece of information is obtained. There is a direct tendency for a greater average number of dentist visitations by parents for needed treatment to be associated with the degree of formal schooling possessed by the mother. This trend does not persist in the case of voluntary examinations, nor does it carry over to the children.

Table 3 gives evidence as to the existence of two somewhat different trends in attitudes of sufficiency. A substantial decrease in the prevalency of the feeling of satisfaction as to the sufficiency of dental examinations for parents is not noted until the education of the homemaker reaches the college level. On the other hand, with regard to their children, an inverse relationship between the degree of education possessed by the mother and the frequency with which satisfaction of sufficiency was expressed is rather definitely continuous.

In designing and planning the survey it was recognized that homemakers might very well have been

influenced by educational material dealing with fundamental health practices and precautions emanating from sources other than formal schooling. Participation of mothers in clubs, organizations, and community activities with at least a partial educational implication was selected as possibly having some bearing on the health practices of their families. Four degrees of such participation are employed in the subsequent analysis and discussion of dental hygiene habits.

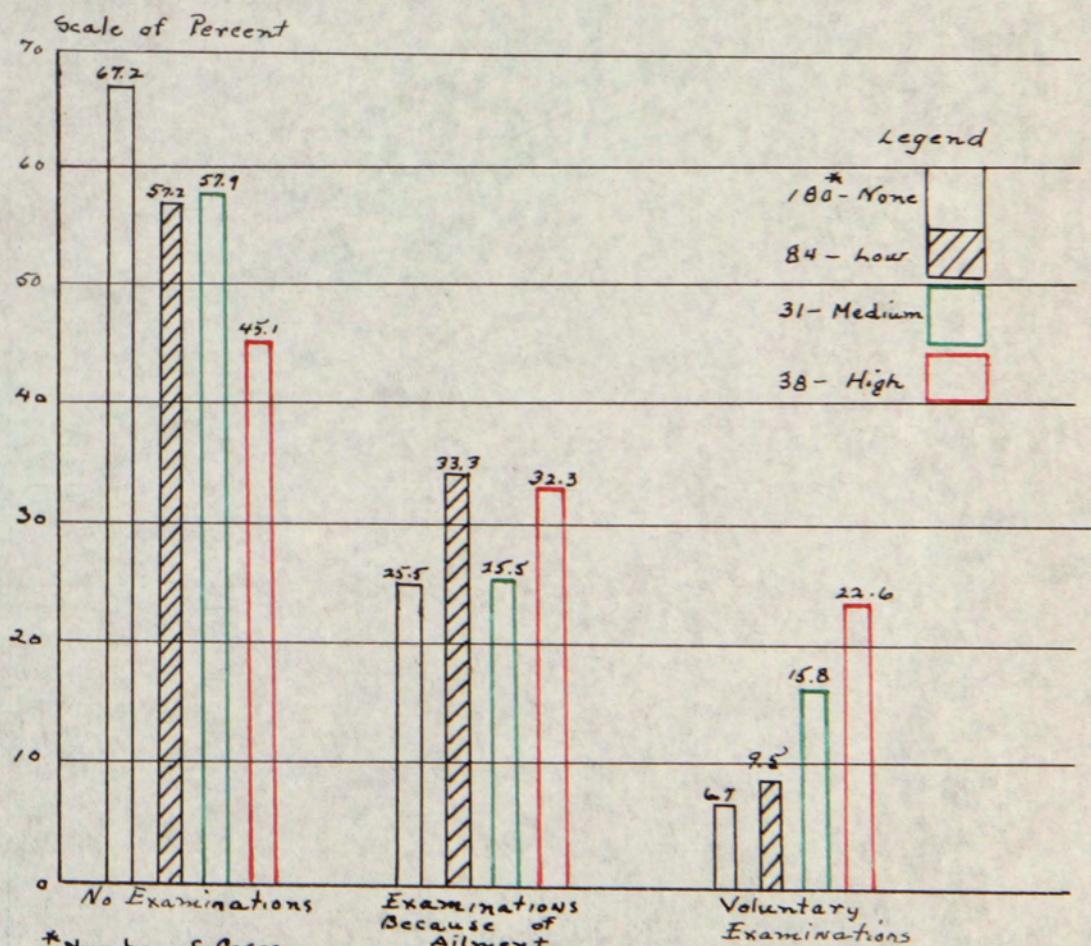


Fig. 5.--Percentage of family members who did not have dental examinations, who had such examinations because of ailment, or who had them voluntarily, classified by the degree of participation of the homemaker in organizations.

Figure 5 indicates that there exists something of a distinct trend for an increase in participation in such organizations to be accompanied by a decrease in the cases of neglect and an increase in the number of voluntary dentist visitations. With regard to cases where treatment was needed, no connection with organization activity is evidenced. It is true that organization participation might be strongly correlated with formal education, and hence it would be unwise to attempt any comparative evaluation of their relative importances in affecting dental hygiene practices.

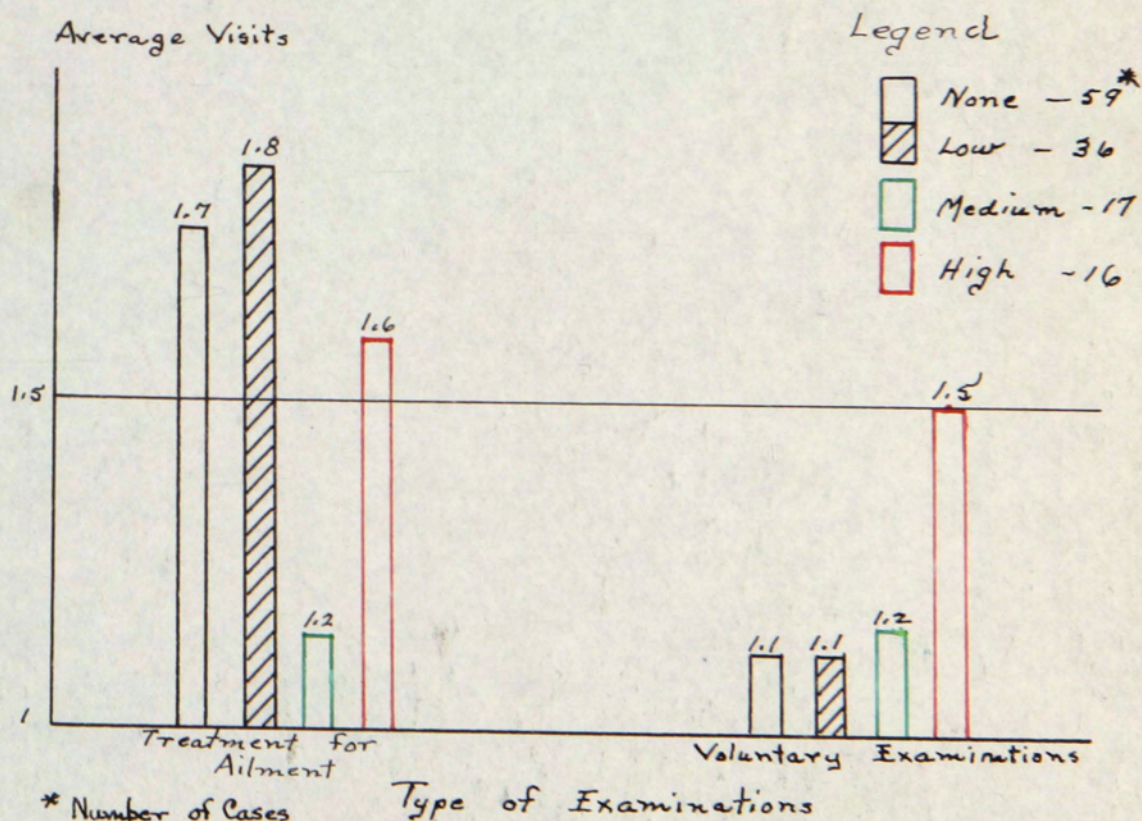


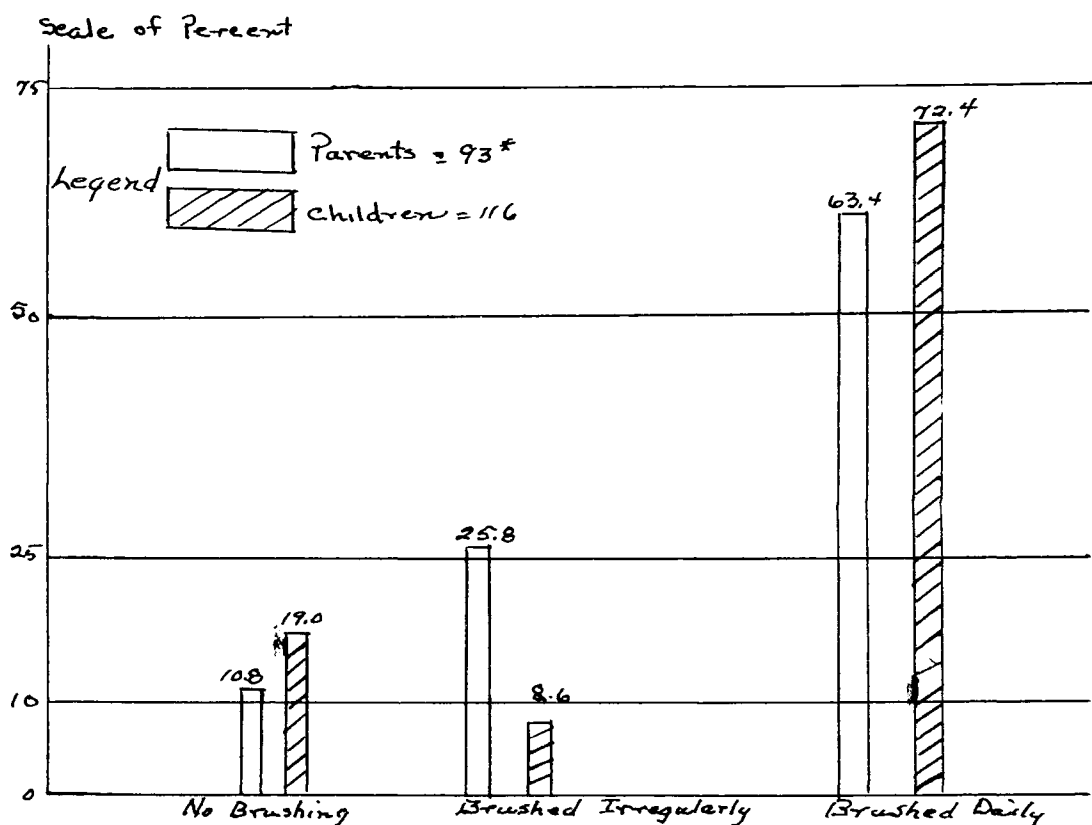
Fig. 6.--Average number of dental examinations for persons having such examinations, classified with respect to the degree of participation of the homemaker in organizations.

An examination of Figure 6 produces comparisons based upon the average number of dentist visitations, both voluntary and because of ailment, among the four classifications of participation by the homemaker in social, religious, educational, and service activities. There appeared to be less need for treatment due to ailment in families where the mother was active in varied organizations. Furthermore, in families where the mother was most active in this sort of work an increased tendency to make voluntary dental examinations a part of the general family health routine is clearly noticeable.

TABLE 4.--NUMBER AND PERCENT OF PERSONS IN EACH CLASSIFICATION OF PARTICIPATION BY THE
HOMEMAKER IN ORGANIZATIONS WHO, IN THE OPINION OF THE HOMEMAKER, HAD A SUFFICIENT
OR NONSUFFICIENT NUMBER OF DENTAL EXAMINATIONS

ATTITUDES	NONE		LOW		MEDIUM		HIGH	
	Number of Persons	Percent	Number of Persons	Percent	Number of Persons	Percent	Number of Persons	Percent
Sufficient	142	78.9	67	87.2	27	87.1	30	73.9
Not Sufficient	38	21.1	16	12.8	4	12.9	8	21.1
Total	180	100.0	83	100.0	31	100.0	38	100.0

Table 4, which presents frequencies and percentages with which attitudes of sufficiency and nonsufficiency regarding professional dental care were expressed by the mothers classified according to the degree of their organization activity, offers little hint of the existence of any trend.



* Number of Cases

FIG. 7.--Percentages of parents and children having no dental examinations, who did not brush their teeth, brushed them irregularly, or brushed them daily.

With regard to habits of brushing the teeth, Figure 7 suggests that the children possess better and more regular habits than do their elders. This conclusion results from a comparison of the percentages of those who brush their teeth irregularly with those who have acquired a daily habit. The fact that a greater percentage of children than parents have no toothbrush habit at all is easily accounted for by the infancy of many of the children.

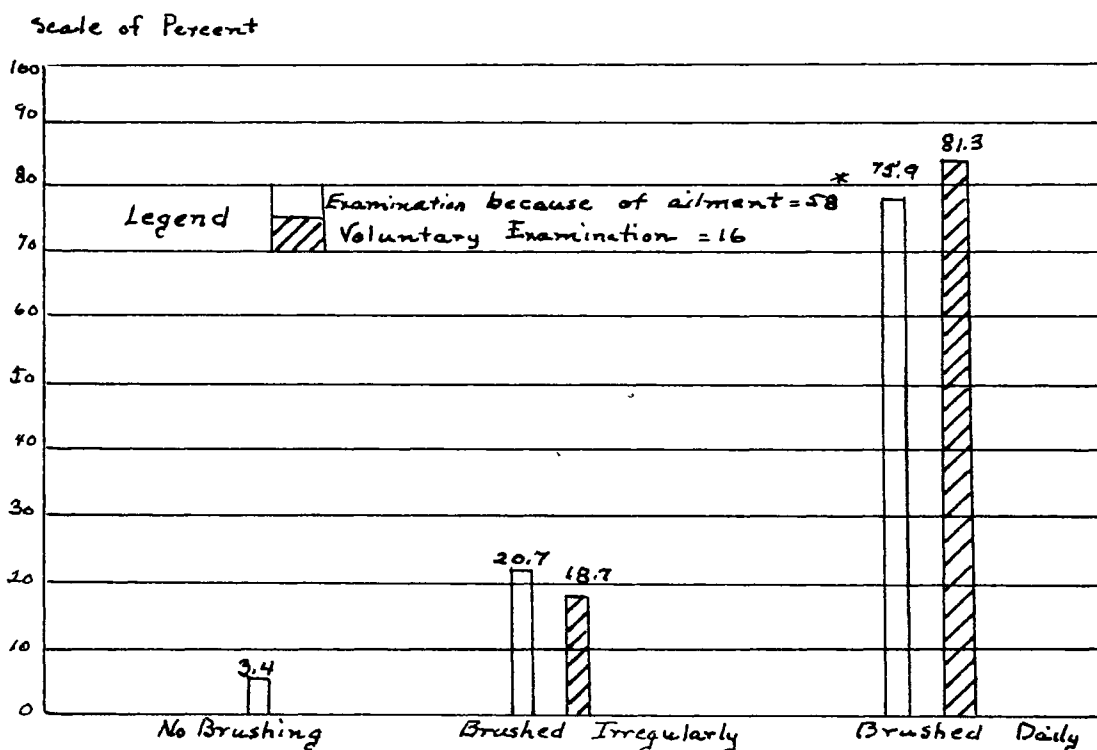


Fig. 8.--Percentage of parents having dental examinations, who did not brush their teeth, brushed them irregularly, or brushed them daily.

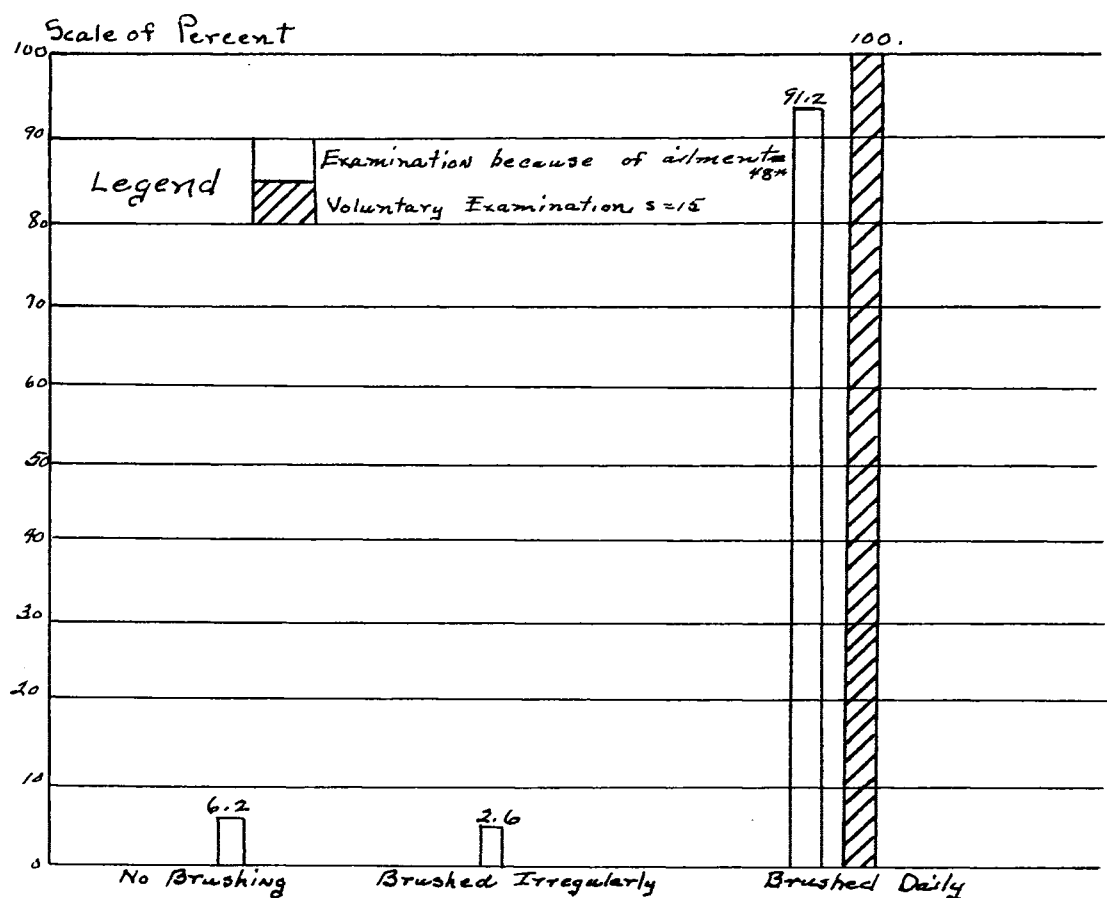


Fig. 8a.--Percentage of children having dental examinations, who did not brush their teeth, brushed them irregularly, or brushed them daily.

* Number of Cases

An analysis of Figures 8 and 8a permits several interesting inferences. It would appear that the people who have dental examinations are those who are most regular in the home care of the teeth. This fact is more pointedly evident with regard to the children than to the parents. However, cause and effect inferences in this matter may result in conclusions which are entirely unjustified. Nevertheless, it seems but natural to expect that a high percentage of those people who visit their

dentist voluntarily would be found to brush their teeth regularly. This conclusion is vividly illustrated by the graphs.

Paradoxically, however, those who needed a dentist's care because of ailment, also, for the most part (parents 75.9 percent, children 91.2 percent), brushed their teeth regularly. Various constructions may be placed upon this evidence, but since it is universally recognized that daily brushing cannot create good teeth but can only help to preserve them, it is reasonable to assume that concern over poor teeth and resultant dentist visitation tended to produce more regular home dental hygiene practices. The data confirm the contention that toothaches and consequent visits to the dentist tend to result in the formation of daily brushing habits.

Tables 5a, 5b, and 5c present frequencies with which various reasons were forwarded in explanation of attitudes of nonsufficiency in regard to dental examinations. These three tables are based upon tenure status, degree of education of the mother, and the extent of her participation in organizations, respectively.

TABLE 5a.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE NUMBER OF DENTAL EXAMINATIONS RECEIVED BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY TENURE STATUS

REASONS FOR ATTITUDE OF NONSUFFICIENCY	OWNER			TENANT		
	PARENTS		CHILDREN	PARENTS		CHILDREN
	Number	Per- cent	Number	Number	Per- cent	Number
			Per- cent			Per- cent
Fear of pain			1	1	3.9	
Lack of money	10	50.0	6	17	65.4	31.3
Put off visit	10	50.0	3	4	15.4	18.7
Fear of what may have to be done	0	0.0	2	4	15.3	
Neglect	0	0.0	1			
Total	20	100.0	13	26	100.0	16
			100.0			100.0

Note: Owner Additional (1 case) not included.

TABLE 5b.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE NUMBER OF DENTAL EXAMINATIONS RECEIVED BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY EDUCATION OF THE HOMEMAKER

REASONS FOR ATTITUDE OF NONSUFFICIENCY	0 - 8						9 - 12						13 - 16					
	PARENTS			CHILDREN			PARENTS			CHILDREN			PARENTS			CHILDREN		
	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent
Fear of pain			1	9.1									1	7.1				
Lack of money			5	45.5			12	66.7		7	70.0		9	64.3	7	87.5		
Put off visit	6	37.5	3	27.3			6	33.3		3	30.0		3	21.4				
Fear of what may have to be done	5	31.3	2	18.1									1	7.2				
Neglect	5	31.2														1	12.5	
Total	16	100.0	11	100.0	13	100.0	10	100.0	14	100.0	8	100.0	1	12.5				

TABLE 5c.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE NUMBER OF DENTAL EXAMINATIONS RECEIVED BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY THE DEGREE OF PARTICIPATION BY THE HOMEMAKER IN ORGANIZATIONS

REASONS FOR ATTITUDE OF	NONE			LOW			MEDIUM			HIGH		
	PARENTS Num- ber	PARENTS per- cent	CHILDREN Num- ber	PARENTS Num- ber	PARENTS per- cent	CHILDREN Num- ber	PARENTS Num- ber	PARENTS per- cent	CHILDREN Num- ber	PARENTS Num- ber	PARENTS per- cent	CHILDREN Num- ber
NON- SUFFI- CIENCY												
Fear of pain										1	25.0	1
Lack of money	15	12.5	14	63.6	10	71.4	2	50.0				
Put off visit	5	20.8	5	22.7	4	28.6	2	50.0	1	100.0	3	75.0
Fear of what may have to be done	4	16.7	2	9.1								
Neglect			1	4.6								
Total	24	100.0	22	100.0	14	100.0	2	100.0	4	100.0	4	100.0

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Sparse sampling and the danger of lack of honesty in these expressions make any attempt to interpret the data for possible trends rather futile. Lack of money and an apathetic inertia appear to be the principal reasons advanced for failure to visit the dentist. These data are included more for the sake of completeness than as evidence of the existence of any trends or patterns.

Finally, in connection with the actual survey, many thought-provoking and sometimes amusing comments were interpolated by the people interviewed. A frequent statement made in connection with dental examinations was, "If I didn't feel well, I'd go more often." One homemaker thought it wise not to see a dentist too frequently because "Cleaning cracks the teeth and makes them decay easier." Several men attributed their poor teeth to what they felt was inadequate dental care during the first World War.

In summary of the material of this chapter it seems worthwhile to reemphasize the following findings and conclusions.

1. A large majority of the people included in this study, both parents and children, had no dental examination whatever during the year preceding the survey.

2. With respect to those who did undergo examination, actual ailment was a far stronger motivating force than any educational influence.

3. Definite family patterns persist both as to dentist visitation and home practices in the care of the teeth.

4. Associations of tenure status with dental hygiene practices seemed to be slight and unworthy of serious consideration.

5. There exist definite trends of correlation of better dental health habits with a higher degree of formal education of the homemaker. Satisfaction with the adequacy of family dentist visitations diminished with a higher level of schooling possessed by the mother.

6. A greater degree of participation by the homemaker in activities appeared to have some influence in bettering the family dental hygiene practices.

7. Dentist visitation, both voluntary and because of ailment, was highly correlated with regular home care of the teeth.

8. The principal reasons advanced for insufficient professional care of the teeth were lack of money and an admitted apathy in regard to the matter.

Chapter IV

PRACTICES AND ATTITUDES RELATING TO CERTAIN PHASES OF FARM SANITATION

Within recent years much attention has been centered on the role which sanitation plays in the community. Most people in urban centers accept complacently the sanitary measures designed to safeguard the health of their families or are quite ignorant in regard to these measures. The incidence of milk- or water-borne diseases has fallen markedly by reason of regular and thorough inspections of these possible sources of infection. Likewise, with about 70 percent of the meat in the United States now inspected, there is less possibility of food poisoning from this source. In crowded centers of population these sanitary measures are enforced, but the extent to which they are practiced by rural families is open to question and invites inquiry. Again, is owner-tenant status or the degree of education of the homemaker in any way associated with the practice of certain types of sanitary precaution or with the recognition of a need therefore?

Because of the fact that inspection of water supply is primarily dependent upon the source of supply, it was regarded as essential to make inquiry regarding

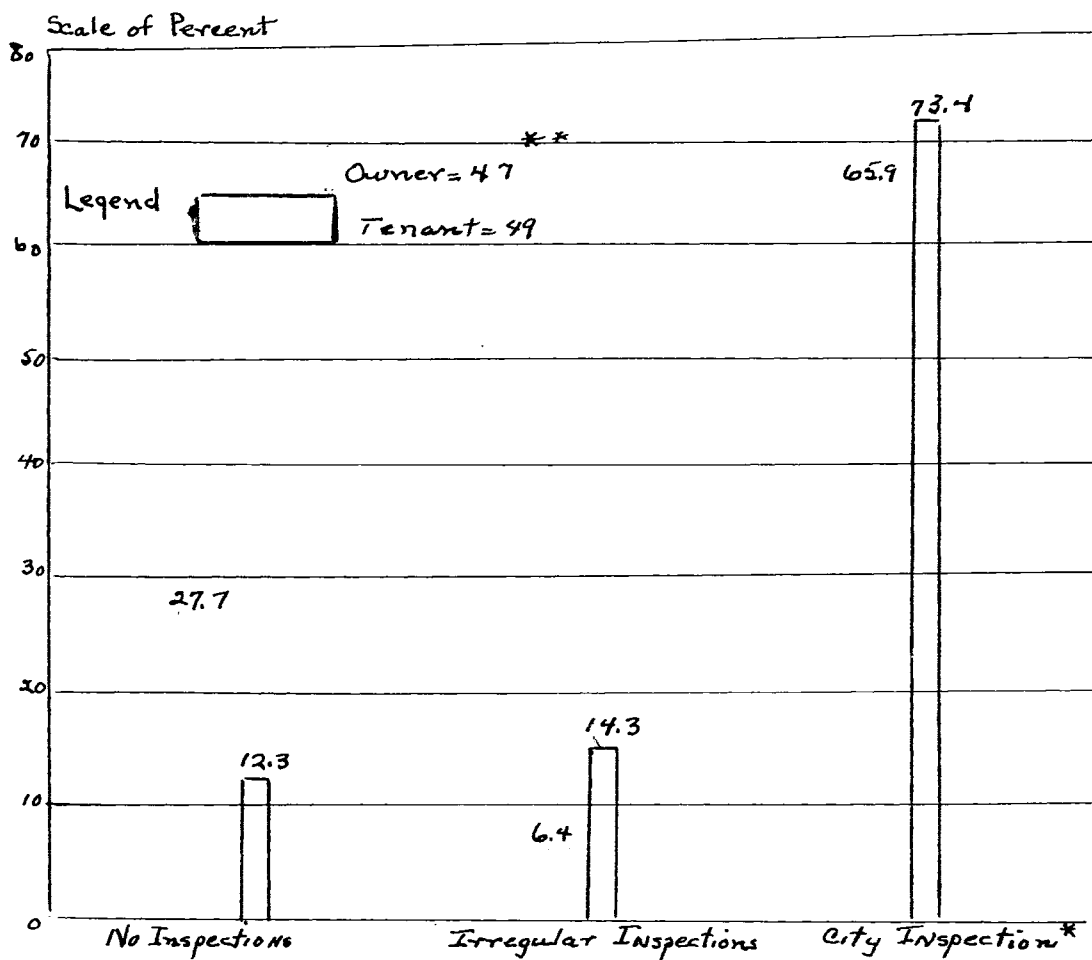
the nature of the source of supply. In the case of the 100 farms considered in this study, it was found that more than two-thirds were supplied with city water, either piped from the Fort Collins or Greeley waterworks or else hauled and then stored on the farm premises. Table 6 reveals the number of farms classified by tenure status, which were supplied with water by various means.

TABLE 6.--SOURCE OF WATER SUPPLY FOR 100 FAMILIES
CLASSIFIED BY TENURE STATUS

TENURE STATUS	Total Persons	SOURCE OF WATER					
		WELL		CITY WATER		HAULED	
		Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Owner	47	13	27.7	18	38.3	16	34.0
Tenant	51	7	13.7	18	35.3	26	51.0
Owner A.*	2			1	50.0	1	50.0

* Owner Additional

As to the owner-tenant status, about the same number of families in each category have city water piped to their farms. However, more of the owner families use wells, whereas more of the tenants haul and store their water. This may perhaps be accounted for by the fact that many of the owned farms are older and were operated before city water became readily available.



* Bacterial plate counts twice a week
Escheirchia coli counts twice a day

** Number of cases

Fig. 9.--Percentages of farms, classified by tenure status, the water supply of which is either city-inspected, irregularly inspected, or not inspected at all.

Figure 9 portrays in terms of percentages the nature of water supply inspection for these farms classified by tenure status. As might be expected in the case of farm families living in rather close proximity to a

city, the data indicate that substantial majorities of both owner (65.9 percent) and tenant (70.6 percent) families use city-inspected water. Like people living in cities, these families assumed for the most part that the municipal water supply was adequately inspected. It is interesting to note, however, that of the remaining 29 families, more tenants than owners had their water analyzed. This circumstance may possibly be explained by the fact that tenant farms had fewer wells and by a greater concern in the matter resulting from a less secure and less extensive community background.

TABLE 7.--ATTITUDES OF ADEQUACY EXPRESSED BY HOMEOWNERS REGARDING WATER INSPECTION,
UNDER A TENURE STATUS CLASSIFICATION

ATTITUDE TOWARD WATER INSPECTION	OWNER					TENANT				
	No Inspection		1 - 2 Inspections per year		City Inspected	No Inspection		1 - 2 Inspections per year		City Inspected
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber
Sufficient	11	84.6	3	100.0	30	6	100.0	7	100.0	36
Not Sufficient	2	15.4			1					
Total	13	100.0	3	100.0	31	6	100.0	7	100.0	36

Note: Two Owner Additional not included. Information for two other cases not available.

The data exhibited in Table 7 indicate a generally high degree of satisfaction relative to the adequacy of water inspection. Only in the case of two owner families was an expression of doubt advanced. All families who had irregular inspection of their water supply, i.e., once or twice a year, indicated that they believed their water to be free of contamination.

TABLE 8.--FREQUENCY OF THE WATER SUPPLY INSPECTION FOR 100 FARM FAMILIES CLASSIFIED ACCORDING TO THE DEGREE OF EDUCATION OF THE HOMEMAKER

EDUCATION OF THE HOMEMAKER	Total Per- sons	INSPECTIONS PER YEAR				CITY INSPECTED	
		NO INSPECTION		1 - 2 PER YEAR			
		Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
0 - 3	43	7	16.3	5	11.6	28	65.1
9 - 12	40	8	20.0	4	10.0	28	70.0
13 - 16	14	1	7.1	1	7.1	12	85.7

The data compiled in Table 8 fail to show any association between an insistence for water inspection where the source of supply was not municipal and the degree of education possessed by the mother of the farm family. However, where the homemaker was highly educated, the families with but two exceptions were served with city-inspected water. Also, an examination of the right-

hand column of Table 8 reveals an increasing percentage of families using city-inspected water accompanying a rise in the level of schooling possessed by the homemaker of the family.

Since the character of the attitudes regarding adequacy of inspection was, as noted previously, so universally one of satisfaction, no attempt is made to analyze these attitudes as affected by the education of the homemaker.

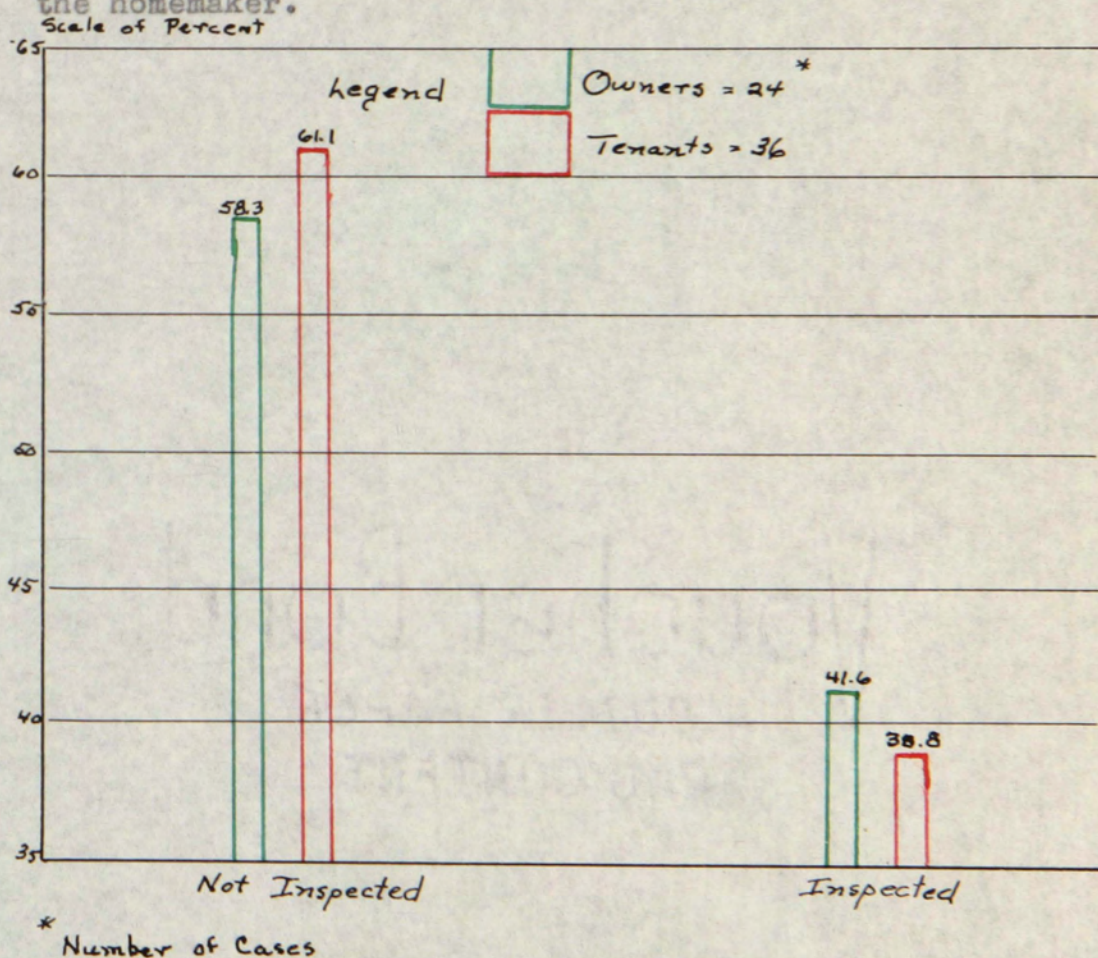


Fig. 10.--Percentages of owner and tenant families whose milk supplies were or were not inspected.

TABLE 9.--ATTITUDES OF HOMEMAKERS OF OWNER AND TENANT FAMILIES WITH RESPECT TO THE ADEQUACY OF THE INSPECTION OF THEIR MILK SUPPLIES

ATTITUDES OF SUFFICIENCY TOWARD MILK INSPECTIONS	OWNER				TENANT			
	NOT INSPECTED		INSPECTED		NOT INSPECTED		INSPECTED	
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Sufficiency	13	92.9	10	100.0	20	90.0	14	100.0
Non- Sufficiency	1	7.1			2	9.1		
Total	14	100.0	10	100.0	22	100.0	14	100.0

In order to gain some information in regard to milk inspection practices of these farm families and also to determine something of the nature of the attitudes of the homemakers relative to milk inspection, Figure 10 and Table 9 were compiled.

The principal conclusion derived from Figure 10 is that approximately only 40 percent of all the families had their milk inspected. Tenure status appeared to have little bearing on the prevalency of this practice. The data incorporated in Table 9 surprisingly indicate a high degree of satisfaction with the prevailing practices regarding milk inspection. From comments made during the interviews, the writer infers that inspections were often made only because the milk was to be sold rather than used for home consumption.

An attempt was made to gather data dealing with practices followed to insure a clean milk supply, as, for example, washing the hands before milking. However, the fact that the milk producers were able to enumerate only a few such sanitary practices other than those suggested by the interviewers indicated a lack of consciousness of the existence of this particular problem.

Figure 11 and Table 10 provide the fundamental information regarding the practices of these farm families in respect to meat inspection.

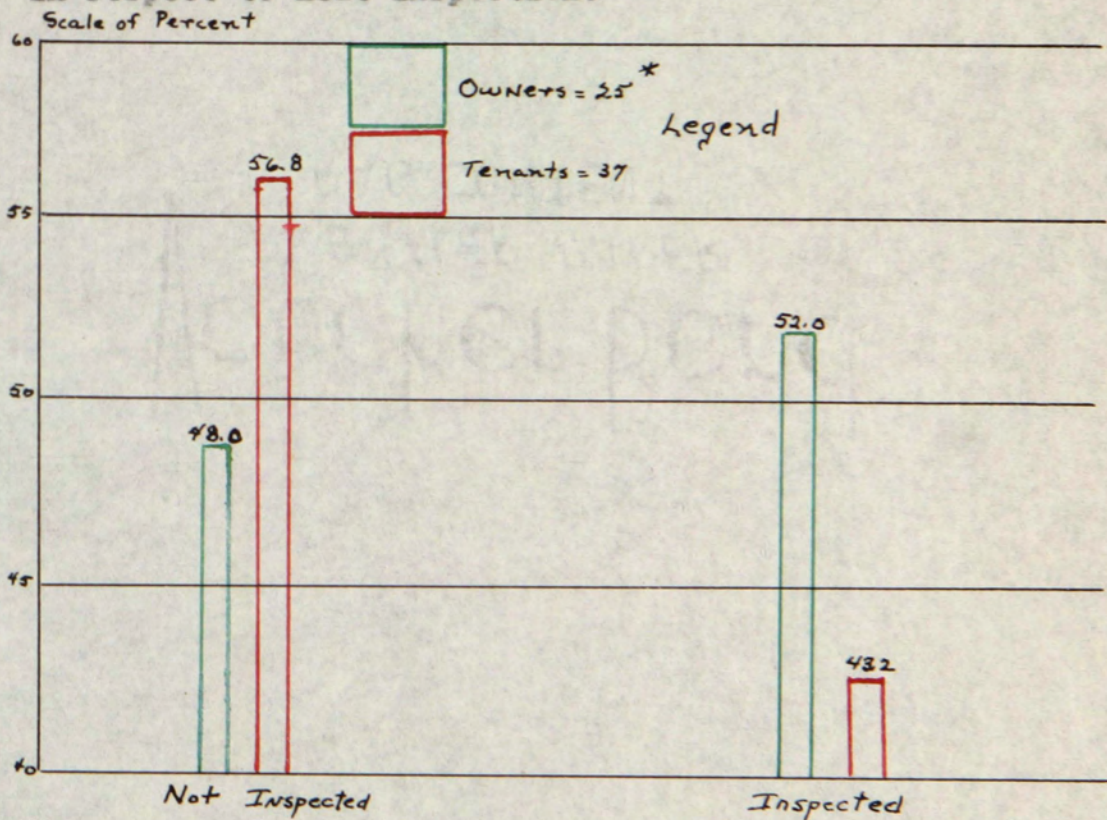


Fig. 11.--Percentages of owner and tenant families using inspected meat.

TABLE 10.--NUMBER AND PERCENTAGE OF FAMILIES, CLASSIFIED
ACCORDING TO EDUCATION OF THE HOMEMAKER, WHO USE
INSPECTED MEAT

NA = 3

EDUCATION OF THE HOMEMAKER	Total Fami- lies	MEAT INSPECTIONS			
		NOT INSPECTED		INSPECTED	
		Number	Percent	Number	Percent
0 - 8	43	13	56.5	10	43.5
9 - 12	40	11	47.8	12	52.2
13 - 16	14	6	54.6	5	45.5

More owners used inspected meat than did tenants but the difference seems slight. Of greater importance is the fact that the meat used by more than half of all the families was not inspected. The data in Table 10 give no indication that the education of the homemaker is in any way associated with the practice of meat inspection.

As to attitudes, it may be stated that homemakers in all families believed their home meat supply to be safe. Frequently the comments were made that "we butcher only healthy animals" and "we know when an animal is sick or well and don't need to have the meat inspected."

The fact that there is an increased use made of freezing lockers for the storage of meat might par-

tionally account for a certain amount of meat inspection, because in a good many cases the interviewee remarked that the meat was butchered and inspected at the lockers.

To summarize the findings of this chapter the following conclusions appear to be most noteworthy.

1. Approximately two-thirds of all the farmers were supplied with city-inspected water.

2. More owners than tenants used wells.

3. Homemakers of tenant families appeared to be slightly more concerned over the analysis of their water supply than did homemakers of owner families, although a high degree of satisfaction in the matter was expressed by the homemakers of the families as a whole.

4. A tendency to use city-inspected water seemed to accompany an increased level of education of the family homemaker.

5. Only about 40 percent of the families had their milk inspected. Neither tenure status nor education of the mother appeared to have any bearing relative to this practice.

6. The meat used by more than half of all the families was not inspected. At the same time a universal expression of satisfaction with regard to the safety of meat used for family consumption was advanced.

Chapter V

VEGETABLES IN THE DIET

Within recent years the use of vegetables in our diets has assumed an increasing importance. Modern transportation and refrigeration have made it possible to have fresh vegetables at a moderate cost even in midwinter. The discovery of vitamins has focused public interest upon the value of various types of vegetables in the diet as potential safeguards of health. Today, magazines display attractive pictures of vegetable dishes tempting to almost every taste and in many cases provide directions for preparing such dishes. Frequently instructions are presented for methods of preparing vegetables for the table which insure the preservation of their vitamin value. Thus there is every reason to believe that homemakers more than ever before are giving thought to balanced menus and the use of vegetables to achieve them.

It is proposed to present and discuss in this chapter the survey findings dealing with the extent to which vegetables of various types are eaten by the rural families, and also to show the attitudes expressed by the homemakers relating to the eating of vegetables

by their families. Four general types of vegetables are dealt with in the discussion: green leafy vegetables, such as spinach and lettuce; yellow vegetables, such as corn, carrots, and squash; other vegetables which are nonclassifiable, such as onions, parsnips, and radishes; and, lastly, potatoes, which have such an important place in the diet of most people.

The survey results make it possible to observe any difference relative to vegetables in the dietary practices of these families in summer as against winter, and also whether or not the possession of a garden has any influence on the extent to which vegetables are eaten.

Again tenure status, the degree of education of the homemaker, and how extensively she participates in organizations as these things are associated with the frequency with which these special types of vegetables are eaten, are a subject of inquiry.

In the subsequent tables and graphical distributions the extent to which the vegetables are eaten is measured by weekly frequency under three classes, 0 to 4, 5 to 9, and 10 to 14 times a week. The data presented refer to the numbers of individual persons, parents or children, having the stated dietary practices regarding the eating of vegetables. The

percentages merely reduce these frequencies to a common factor in order to facilitate comparisons based upon tenure status, degree of education of the homemaker, the extent of her participation in organizations, and whether or not the family possesses a garden.

GREEN LEAFY VEGETABLES

The pertinent data dealing with the extent to which green leafy vegetables are used winter and summer by these rural families, both parents and children, under a tenure classification of the families, are presented in Table 11.

TABLE 11.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT GREEN LEAFY VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED BY TENURE STATUS OF THE FAMILIES

TENURE STATUS AND FAMILY STATUS	FREQUENCY OF EATING	SUMMER		WINTER	
		Number	Percent	Number	Percent
OWNER	PARENTS				
	0 - 4	25	26.6	49	52.2
	5 - 9	59	62.8	35	37.2
	10 - 14	10	10.6	10	10.6
	Total	94	100.0	94	100.0
OWNER	CHILDREN				
	0 - 4	13	17.6	39	52.7
	5 - 9	47	63.5	24	32.4
	10 - 14	14	18.9	11	14.9
	Total	74	100.0	74	100.0
TENANT	PARENTS				
	0 - 4	33	32.4	65	63.7
	5 - 9	54	52.9	28	27.5
	10 - 14	15	14.7	9	8.8
	Total	102	100.0	102	100.0
TENANT	CHILDREN				
	0 - 4	38	37.3	71	69.6
	5 - 9	52	51.0	22	21.6
	10 - 14	12	11.7	9	8.8
	Total	102	100.0	102	100.0

Note: 2 owners additional not included. Information for 3 children not available.

Any attempt to analyze the tabulated material is obstructed by a complexity resulting from the several classifications. However, as might be expected, the dietary practices of the children in regard to the eating of green stuffs are quite similar to those of their elders. Therefore the data concerning the parents only is graphically depicted by means of Figure 12 to aid in making comparisons and in discussing trends and patterns.

These data corroborate the obvious inference that in general green leafy vegetables are eaten more frequently in summer than in winter. However, it is worth noting that those relatively few parents who eat these vegetables most frequently in summer also find means of having them very frequently during the winter.

Tenure status in general appears to have but slight bearing upon the extent to which these vegetables are employed in the diet. Owner families ate this type of vegetable more often than tenant families but the difference was so small it must be considered not significant.

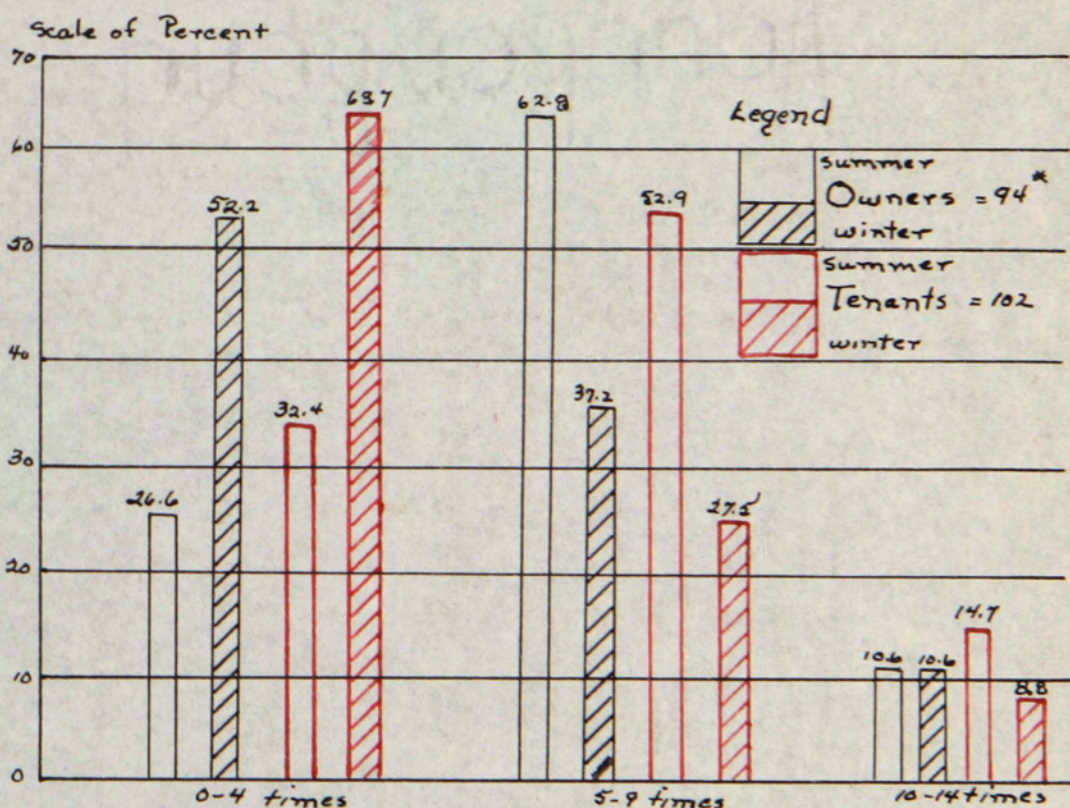


FIG. 12.--Percentages of parents in owner and tenant families who eat green leafy vegetables 0 to 4, 5 to 9, or 10 to 14 times a week, subclassified as to summer or winter

TABLE 12.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT GREEN LEAFY VEGETABLES DURING WINTER OR SUMMER, CLASSIFIED BY TENURE STATUS

SEASON TENURE AND FAM- ILY STA- TUS	SUMMER						WINTER									
	OWNER			TENANT			OWNER			TENANT						
	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber				
Attitude of Suffici- ency	90	95.7	70	94.6	94	92.2	96	94.1	90	95.7	65	87.8	84	82.4	88	86.3
Attitude of Nonsuffi- ciency	4	4.3	4	5.4	8	7.8	6	5.3	4	4.3	9	12.2	18	17.6	14	13.7
Total	94	100.0	74	100.0	102	100.0	102	100.0	94	100.0	74	100.0	102	100.0	102	100.0

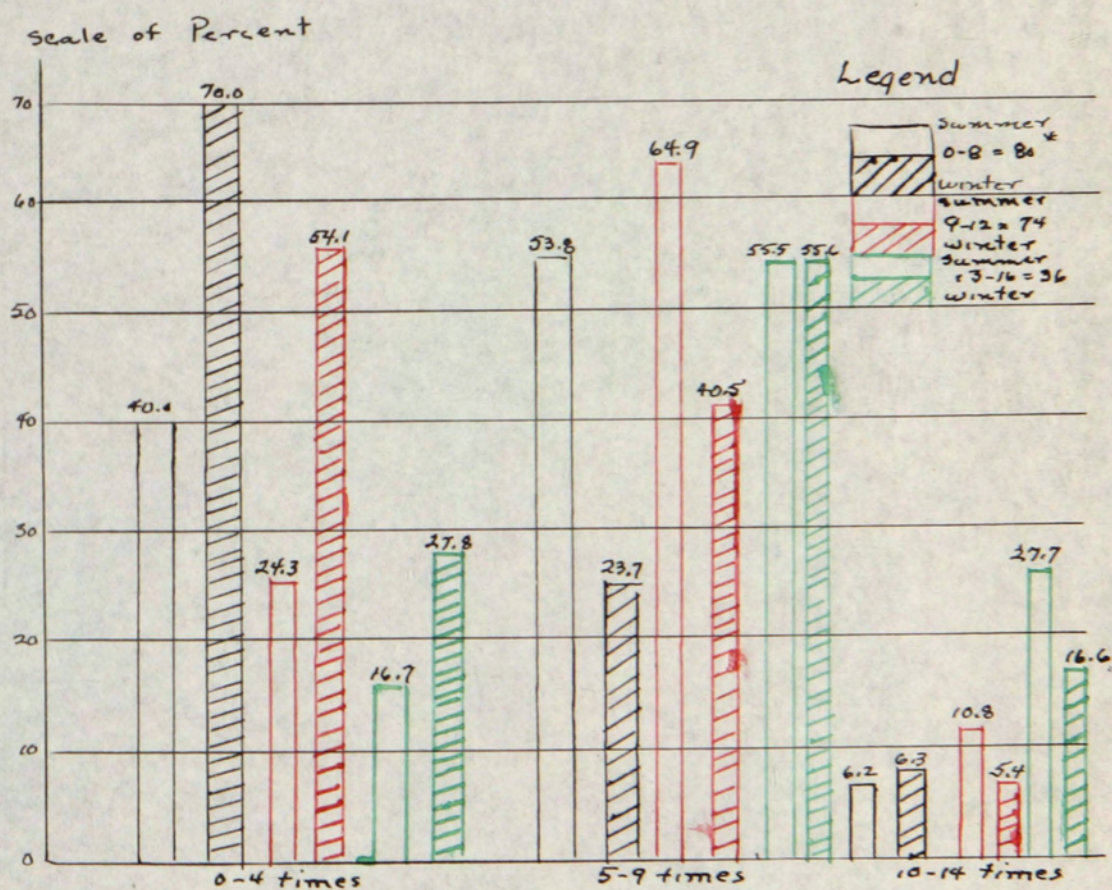
Table 12 dealing with attitudes of sufficiency expressed by the homemakers, indicates a high degree of satisfaction relative to the frequency with which green stuffs are served their families in the summer. As for winter practices, this feeling of satisfaction changed in some cases to one of doubt.

Most homemakers seemed to recognize the importance of green stuffs in the diet. Several women attributed the excellent health of their families in part to the frequent use of this particular diet item. One mother remarked that although her family disliked, lettuce, spinach, chard and similar foods, she nevertheless served them because she felt it to be the right thing to do. Still another mother expressed the opinion that the inclusion of more green leafy vegetables in her family's diet would be a definite health benefit.

TABLE 13.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT GREEN LEAFY VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED RELATIVE TO THE DEGREE OF EDUCATION OF THE HOMEMAKER

EDUCATION OF HOMEMAKER AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
0 - 8	0 - 4	32	40.0	56	70.0
	5 - 9	43	53.8	19	23.7
	10 - 14	5	6.2	5	6.3
	Total	80	100.0	80	100.0
9 - 12	0 - 4	32	40.0	65	81.3
	5 - 9	42	52.5	9	4.2
	10 - 14	6	7.5	6	7.5
	Total	80	100.0	80	100.0
13 - 16	0 - 4	18	24.3	40	54.1
	5 - 9	48	64.9	30	40.5
	10 - 14	8	10.8	4	5.4
	Total	74	100.0	74	100.0
17 - 20	0 - 4	11	18.3	28	46.7
	5 - 9	41	68.3	26	41.3
	10 - 14	8	13.4	6	10.0
	Total	60	100.0	60	100.0
21 - 24	0 - 4	6	16.7	10	27.8
	5 - 9	20	55.6	20	55.6
	10 - 14	10	27.7	6	16.7
	Total	36	100.0	36	100.0
25 - 28	0 - 4	10	35.7	14	50.0
	5 - 9	11	39.3	10	35.7
	10 - 14	7	25.0	4	14.3
	Total	28	100.0	28	100.0

Note: Information for 5 parents and 13 children not available.



* Number of Cases

FIG. 13.--Percentages of parents, for each classification of degree of education of the homemaker, who eat green leafy vegetables (summer, winter) with varying frequencies.

Information relative to the influence of the degree of education possessed by the mother upon family dietary habits as regards the use of green stuffs is made available in Table 13. Somewhat easier to analyze is Figure 13 which pictures in terms of percentages that portion of the data of Table 13 as pertains to the parents.

It is rather obvious that a definite trend exists relating a greater use of this type of vegetable with an increasing degree of education of the mother. This trend is consistent in regard to this dietary practice in both summer and winter. Furthermore there appears to be a greater similarity in the summer and winter patterns with regard to the eating of these vegetables in those families where the homemakers were most highly educated.

TABLE 14.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT GREEN LEAFY VEGETABLES (SUMMER, WINTER)

ED. OF HOME- MAKER		0 - 8						9 - 12								
Seasons Family Status	SUMMER			WINTER			SUMMER			WINTER						
	Parents	Children		Parents	Children		Parents	Children		Parents	Children					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent				
Attitude of Suffi- ciency	73	91.3	74	92.5	69	86.3	77	96.3	68	91.9	59	93.7	60	81.1	56	93.3
Attitude of Non- suffi- ciency	7	8.7	6	7.5	11	13.7	3	5.7	6	8.1	1	6.3	14	18.9	4	6.7
Total	80	100.0	80	100.0	80	100.0	80	100.0	74	100.0	60	100.0	74	100.0	60	100.0

Note: Information for 5 parents and 13 children not available.

TABLE 14.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT GREEN LEAFY VEGETABLES (SUMMER, WINTER)--Continued

ED. OF HOME- MAKER--con. Seasons	13 - 16							
	SUMMER				WINTER			
	PARENTS		CHILDREN		PARENTS		CHILDREN	
Family Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	34	94.4	25	89.5	34	94.4	26	92.9
Attitude of Nonsuffi- ciency	2	5.6	3	10.7	2	5.6	2	7.1
Total	56	100.0	28	100.0	36	100.0	28	100.0

No association seems to exist relating attitudes of sufficiency with the amount of schooling possessed by the mother. In general, approximately 90 percent of the mothers believe that their families eat enough of this type of vegetable. The general character of the attitudes as regards the adequacy of this particular dietary practice varies but little from summer to winter.

A close examination of the data compiled in Table 15 gives no indication of any trend relating the frequency with which green stuffs are eaten during either summer or winter with the degree of activity of the mother in various organizations. A surprising fact for which there appears no evident explanation is that in those families where the activity of the mother in organizations is moderate, green leafy vegetables are eaten far more frequently than in families corresponding to any other degree of activity participation by the homemaker.

TABLE 15.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT GREEN LEAFY VEGETABLES (SUMMER, WINTER) WITH VARYING FREQUENCIES, CLASSIFIED RELATIVE TO THE DEGREE OF PARTICIPATION OF THE HOMEMAKER IN ORGANIZATIONS

PARTICIPATION IN ORGANIZATIONS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
NONE	0 - 4	78	40.2	110	56.7
	5 - 9	91	46.9	63	32.5
	10 - 14	25	12.9	21	10.8
	14 +	0	0.0	0	0.0
	Total	194	100.0	194	100.0
LOW	0 - 4	21	20.8	55	54.3
	5 - 9	77	76.2	43	42.6
	10 - 14	3	3.0	3	2.9
	14 +	0	0.0	0	0.0
	Total	101	100.0	101	100.0
MEDIUM	0 - 4	5	15.6	7	21.9
	5 - 9	15	46.9	17	53.1
	10 - 14	12	37.5	8	25.0
	14 +	0	0.0	0	0.0
	Total	32	100.0	32	100.0
HIGH	0 - 4	10	28.6	32	51.2
	5 - 9	25	58.1	18	41.9
	10 - 14	3	13.6	3	6.9
	14 +	0	0.0	0	0.0
	Total	43	100.0	43	100.0

TABLE 16.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT GREEN LEAFY VEGETABLE, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS

SEASONS	SUMMER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	180	92.8	99	98.0	32	100.0	40	93.0
Attitude of Nonsufficiency	14	7.2	2	2.0	0	0.0	3	7.0
Total	194	100.0	101	100.0	32	100.0	43	100.0

TABLE 16.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT GREEN LEAFY VEGETABLES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS--Continued

SEASONS--con	WINTER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	175	90.2	95	94.1	32	100.0	35	81.0
Attitude of Nonsufficiency	19	9.8	6	5.9	0	0.0	8	18.6
Total	194	100.0	101	100.0	32	100.0	43	100.0

Table 16 shows that mothers whose participation in organizations is moderate were entirely satisfied with the frequency with which green stuffs are eaten by their families whereas the homemakers most active in organizations were the ones most doubtful as to whether their families obtained this type of vegetable sufficiently often. These conclusions appear to be justified as regards the attitudes toward both summer and winter practices.

The question of whether or not the possession of a garden had any influence on the extent to which green stuffs were served was considered a subject for investigation. The data assembled in Table 17 afford information on this point.

As might be expected, families with gardens used green leafy vegetables more often during the summer months than did those families without gardens. However, the possession of a garden is seen to have little or no bearing on this dietary question during the winter. The situation is summed up fairly well by the remark of one homemaker, "They (green stuffs) are harder to get when the garden goes."

Whether or not the family possessed a garden had little or no bearing upon the attitudes of adequacy expressed by the mothers concerning the extent to which

TABLE 17.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT GREEN STUFFS WITH VARYING FREQUENCIES (WINTER, SUMMER), CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

POSSESSION OF GARDEN AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
GARDEN	PARENTS				
	0 - 4	46	28.8	94	58.8
	5 - 9	91	56.8	51	31.8
	10 - 14	23	14.4	15	9.4
	Total	160	100.0	160	100.0
GARDEN	CHILDREN				
	0 - 4	46	30.9	97	65.1
	5 - 9	83	55.7	38	25.5
	10 - 14	20	14.4	14	9.4
	Total	149	100.0	149	100.0
NO GARDEN	PARENTS				
	0 - 4	14	41.2	18	52.9
	5 - 9	20	58.8	16	47.1
	10 - 14	0	0.0	0	0.0
	Total	34	100.0	34	100.0
NO GARDEN	CHILDREN				
	0 - 4	10	40.0	15	60.0
	5 - 9	15	60.0	10	40.0
	10 - 14	0	0.0	0	0.0
	Total	25	100.0	25	100.0

green stuffs were used in the family diet. This conclusion is based upon an examination of the data in Table 18.

TABLE 18.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT GREEN LEAFY VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

SEASONS	SUMMER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	146	91.3	146	92.9	32	94.1	21	84.0
Attitude of Nonsufficiency	14	8.7	3	2.1	2	5.9	4	16.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

TABLE 18.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT GREEN LEAFY VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN--Continued

SEASONS--con POSSESSION OF GARDEN AND FAMILY STATUS --con	WINTER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	142	88.8	134	89.9	23	82.4	22	38.0
Attitude of Nonsufficiency	18	11.2	15	10.1	6	17.6	3	12.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

YELLOW VEGETABLES

The extent to which yellow vegetables were used in the menus of these rural families was investigated. The data relevant to this usage was obtained and tabulated in a manner analogous to that pertaining to green leafy vegetables. In order to shorten somewhat the presentation of this material, the related tables and figures, which correspond precisely with those concerning the use of green stuffs, now follow as a group.

TABLE 19.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT YELLOW VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED BY TENURE STATUS OF THE FAMILIES

TENURE STATUS AND FAMILY STATUS	FREQUENCY OF EATING	SUMMER		WINTER	
		Number	Percent	Number	Percent
OWNER	PARENTS				
	0 - 4	74	78.7	78	83.0
	5 - 9	18	19.2	16	17.0
	10 - 14	2	2.1	0	0.0
	Total	94	100.0	94	100.0
OWNER	CHILDREN				
	0 - 4	62	82.8	62	83.8
	5 - 9	9	12.2	12	16.2
	10 - 14	3	4.0	0	0.0
	Total	74	100.0	74	100.0
TENANT	PARENTS				
	0 - 4	73	71.6	82	80.4
	5 - 9	25	24.5	13	17.7
	10 - 14	14	3.9	2	1.9
	Total	102	100.0	102	100.0
TENANT	CHILDREN				
	0 - 4	73	71.6	80	79.4
	5 - 9	22	21.6	18	17.7
	10 - 14	7	6.8	4	3.9
	Total	102	100.0	102	100.0

Note: 2 Owners Additional omitted. Information not available for 3 children.

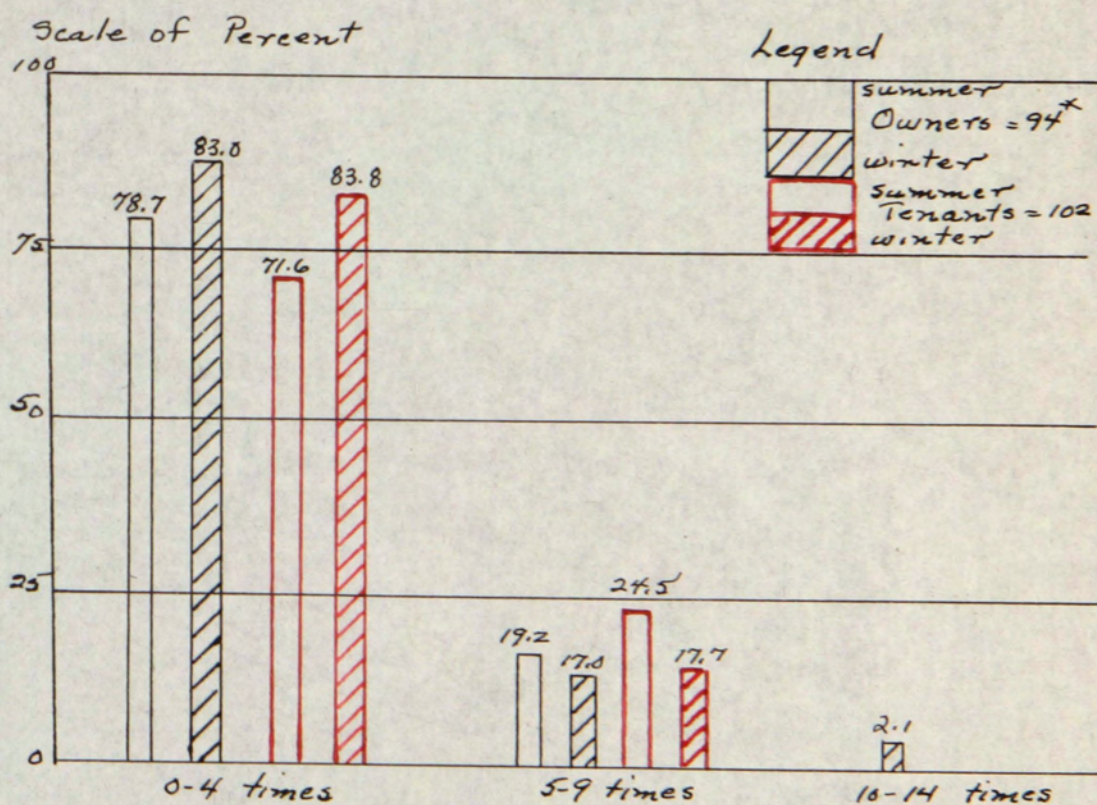


FIG. 14.--Percentages of parents in owner and tenant families who eat yellow vegetables 0 to 4, 5 to 9, or 10 to 14 times a week, subclassified as to summer or winter.

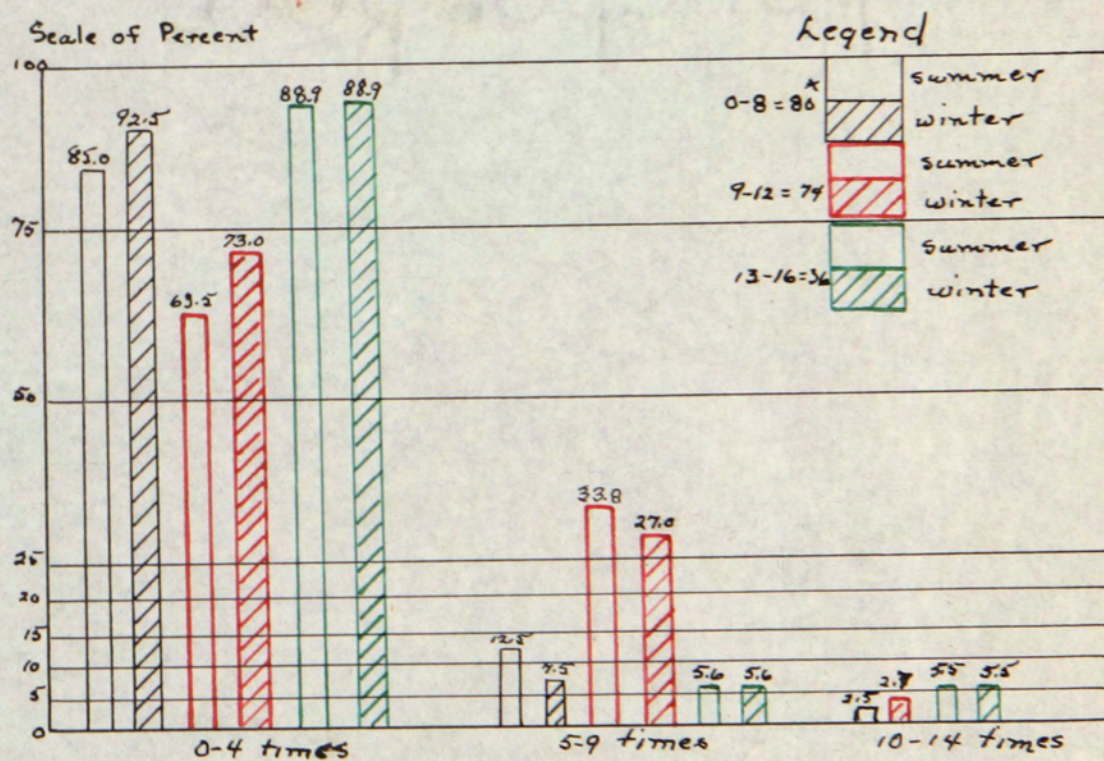
TABLE 20.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT YELLOW VEGETABLES DURING WINTER OR SUMMER, CLASSIFIED BY TENURE STATUS

SEASON TENURE AND FAM- ILY STA- TUS	SUMMER						WINTER									
	OWNER			TENANT			OWNER			TENANT						
	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Per- cent	Children Num- ber				
Attitude of Suffi- ciency	92	97.9	73	98.6	96	94.1	99	97.1	92	97.9	72	97.3	96	94.1	99	97.1
Attitude of Nonsuffi- ciency	2	2.1	1	1.4	6	5.9	3	2.9	2	2.1	2	2.7	6	5.9	3	2.9
Total	94	100.0	74	100.0	102	100.0	102	100.0	94	100.0	74	100.0	102	100.0	102	100.0

TABLE 21.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT YELLOW VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED RELATIVE TO THE DEGREE OF EDUCATION OF THE HOMEMAKER

EDUCATION OF HOMEMAKER AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
PARENTS	0 - 4	68	85.0	74	92.5
	5 - 9	10	12.5	6	7.5
	10 - 14	2	2.5	0	0.0
	Total	80	100.0	80	100.0
CHILDREN	0 - 4	71	88.8	75	93.6
	5 - 9	6	7.5	5	6.2
	10 - 14	3	3.7	0	0.0
	Total	80	100.0	80	100.0
PARENTS	0 - 4	47	63.5	54	73.0
	5 - 9	25	33.8	20	27.0
	10 - 14	2	2.7	0	0.0
	Total	74	100.0	74	100.0
CHILDREN	0 - 4	47	78.3	47	78.3
	5 - 9	10	16.7	13	21.7
	10 - 14	3	5.0	0	0.0
	Total	60	100.0	60	100.0
PARENTS	0 - 4	32	88.9	32	88.9
	5 - 9	2	5.6	2	5.6
	10 - 14	2	5.5	2	5.5
	Total	36	100.0	36	100.0
CHILDREN	0 - 4	23	82.1	23	82.1
	5 - 9	1	3.6	1	3.6
	10 - 14	4	14.3	4	14.3
	Total	28	100.0	28	100.0

Note: Information not available for 6 parents and 7 children.



* Number of Cases

FIG. 15.--Percentages of parents, for each classification of degree of education of the homemaker, who eat yellow vegetables (summer, winter) with varying frequencies.

TABLE 22.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT YELLOW VEGETABLES (SUMMER, WINTER)

ED. OF HOME- MAKER	0 - 8						9 - 12					
	SUMMER			WINTER			SUMMER			WINTER		
	Parents	Children	Parents	Children	Parents	Children	Parents	Children	Parents	Children	Parents	Children
Family Status	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	74	92.5	77	96.3	74	92.5	72	97.3	50	83.3	69	97.2
Attitude of Non-sufficiency	6	7.5	3	3.7	6	7.5	2	2.7	10	16.7	5	6.8
Total	80	100.0	80	100.0	80	100.0	74	100.0	60	100.0	74	100.0

TABLE 22.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT YELLOW VEGETABLES (SUMMER, WINTER)--Continued

ED. OF HOME- MAKER--con. Seasons Family Status	13 - 16							
	SUMMER				WINTER			
	Parents	Children	Parents	Children	Parents	Children	Parents	Children
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	32	88.9	25	89.3	32	88.9	25	89.3
Attitude of Insufficiency	4	11.1	3	10.7	4	11.1	3	10.7
Total	36	100.0	28	100.0	36	100.0	28	100.0

TABLE 23.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT YELLOW VEGETABLES (SUMMER, WINTER) WITH VARYING FREQUENCIES, CLASSIFIED RELATIVE TO THE DEGREE OF PARTICIPATION OF THE HOMEMAKER IN ORGANIZATIONS

PARTICIPATION IN ORGANIZATIONS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
NONE	0 - 4	144	74.2	157	80.9
	5 - 9	34	17.5	29	15.0
	10 - 14	16	8.3	8	4.1
	Total	194	100.0	194	100.0
LOW	0 - 4	80	73.2	80	79.2
	5 - 9	21	20.8	21	20.8
	10 - 14	0	0.0	0	0.0
	Total	101	100.0	101	100.0
MEDIUM	0 - 4	29	90.6	29	90.6
	5 - 9	3	9.4	3	9.4
	10 - 14	0	0.0	0	0.0
	Total	32	100.0	32	100.0
HIGH	0 - 4	38	88.4	41	95.4
	5 - 9	5	11.6	2	4.6
	10 - 14	0	0.0	0	0.0
	Total	43	100.0	43	100.0

TABLE 24.--NUMBER AND PERCENTAGE OF HOMEMAERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT YELLOW VEGETABLES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS

SEASONS	SUMMER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
PARTICIPATION IN ORGANIZATIONS AND ATTITUDES								
Attitude of Sufficiency	183	94.3	90	89.1	29	90.6	34	79.1
Attitude of Nonsufficiency	11	5.7	11	10.9	3	9.4	9	20.9
Total	194	100.0	101	100.0	32	100.0	43	100.0

TABLE 24.--NUMBER AND PERCENTAGE OF HOMEMAERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT YELLOW VEGETABLES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS--Continued

SEASONS--con	WINTER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
PARTICIPATION IN ORGANIZATIONS AND ATTITUDES --con								
Attitude of Sufficiency	185	95.4	90	89.1	29	90.6	36	85.7
Attitude of Nonsufficiency	9	6.6	11	10.9	3	9.4	7	16.3
Total	194	100.0	101	100.0	32	100.0	43	100.0

TABLE 25.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT YELLOW VEGETABLES WITH VARYING FREQUENCIES (WINTER, SUMMER), CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

POSSESSION OF GARDEN AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
GARDEN	0 - 4	120	75.0	132	82.5
	5 - 9	34	21.3	26	16.3
	10 - 14	6	3.7	2	1.2
	Total	160	100.0	160	100.0
	0 - 4	113	75.8	119	79.9
	5 - 9	26	17.5	26	19.5
	10 - 14	10	6.7	4	2.6
	Total	149	100.0	149	100.0
NO GARDEN	0 - 4	32	94.1	32	94.1
	5 - 9	2	5.9	2	5.9
	10 - 14	0	0.0	0	0.0
	Total	34	100.0	34	100.0
	0 - 4	25	100.0	25	100.0
	5 - 9	0	0.0	0	0.0
	10 - 14	0	0.0	0	0.0
	Total	25	100.0	25	100.0

Note: Information for 6 parents and 7 children not available.

TABLE 26.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT YELLOW VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

SEASONS	SUMMER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	152	95.0	139	93.3	28	82.4	22	88.0
Attitude of Nonsufficiency	8	5.0	10	6.7	6	17.6	3	12.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

TABLE 26.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT YELLOW VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN--Continued

SEASONS--con	WINTER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	148	92.5	136	91.3	28	82.4	25	100.0
Attitude of Nonsufficiency	12	7.5	13	8.7	6	17.6	0	0.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

Examination of the foregoing tables and figures leads to some conclusions and inferences. Tenure status may have a slight bearing upon the frequency with which families eat yellow vegetables but not upon their attitudes toward this dietary practice. A larger proportion of tenant families, generally speaking, serve yellow vegetables more frequently than owner families. Approximately one-fourth (24.5 percent) of tenant parents and one-fifth (19.2 percent) of those owning their farms eat these vegetables once a day on the average. Again, family patterns appear to be well defined, with the children eating yellow vegetables with about the same frequency as their parents. The differences between the owner and tenant families relative to this dietary practice during the winter season appear to be nonsignificant. See Tables 19, 20, and Figure 14.

It is interesting to note that the majority of families ate yellow vegetables less than four times a week. Especially was this true in the case of families wherein the mother possessed either the least or else the highest degree of formal education. In families where the mother had attended high school, yellow vegetables were served more often or about once a day. Of the three classes, the homemakers who had a college education expressed more dissatisfaction as to the fre-

quency with which vegetables were eaten. See Tables 21, 22, and Figure 15.

There seemed to be a tendency indicated by the data for families in which the homemaker took an active part in club work to eat yellow vegetables less frequently than families where the mothers were not affiliated at all with organizations or where the mothers' activity in club work was of a minor character. Under the classification of the degree of participation of the homemakers in organizations, but little difference is noted between summer and winter usage of yellow vegetables. Women who were extremely active in organizations expressed the greatest degree of dissatisfaction with the number of times their families ate this type of vegetable. See Tables 23, 24.

The absence of a garden in the winter months apparently resulted in fewer yellow vegetables being eaten during these months, since the data indicate that in general a larger proportion of families ate these vegetables less frequently than during the summer. The possession of a garden, however, did seem to have a bearing upon the frequency with which yellow vegetables were included in the diet, since many such vegetables were garden-grown. The majority of the families contacted had gardens, although in a few cases it was remarked that because of lack of moisture little had been

realized from them. Nevertheless, the data indicate that families who put out gardens were able to use yellow vegetables more often in their menus during both winter and summer. Families without gardens had a greater tendency to recognize a deficiency of these vegetables in their diet. See Tables 25, 26.

OTHER VEGETABLES

The survey also treated with the practices of the farm families in regard to the eating of other vegetables nonclassifiable in the two categories already considered. The data expressing the findings with respect to this subject are now presented in a single group of tables and figures just as the material concerning yellow vegetables was treated.

TABLE 27.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT OTHER VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED BY TENURE STATUS OF THE FAMILIES

TENURE STATUS AND FAMILY STATUS	FREQUENCY OF EATING	SUMMER		WINTER	
		Number	Percent	Number	Percent
OWNER	0 - 4	42	44.7	50	53.2
	5 - 9	50	53.2	42	44.7
	10 - 14	2	2.1	2	2.1
	Total	94	100.0	94	100.0
TENANT	0 - 4	29	39.2	30	40.5
	5 - 9	43	58.1	42	56.8
	10 - 14	2	2.7	2	2.7
	Total	74	100.0	74	100.0
OWNER	0 - 4	50	49.0	60	58.8
	5 - 9	50	49.0	40	39.2
	10 - 14	2	2.0	2	2.0
	Total	102	100.0	102	100.0
TENANT	0 - 4	58	56.9	71	69.0
	5 - 9	39	38.2	26	25.5
	10 - 14	5	4.9	5	4.9
	Total	102	100.0	102	100.0

Note: 2 Owner Additionals not included. Information for 3 children not available.

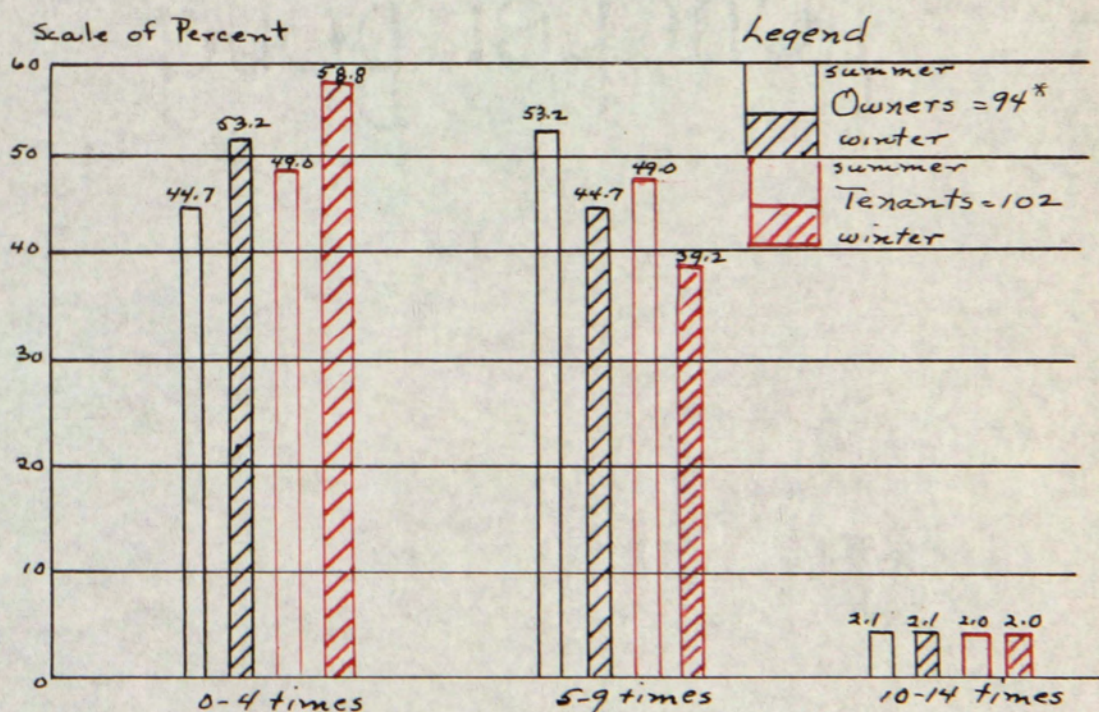


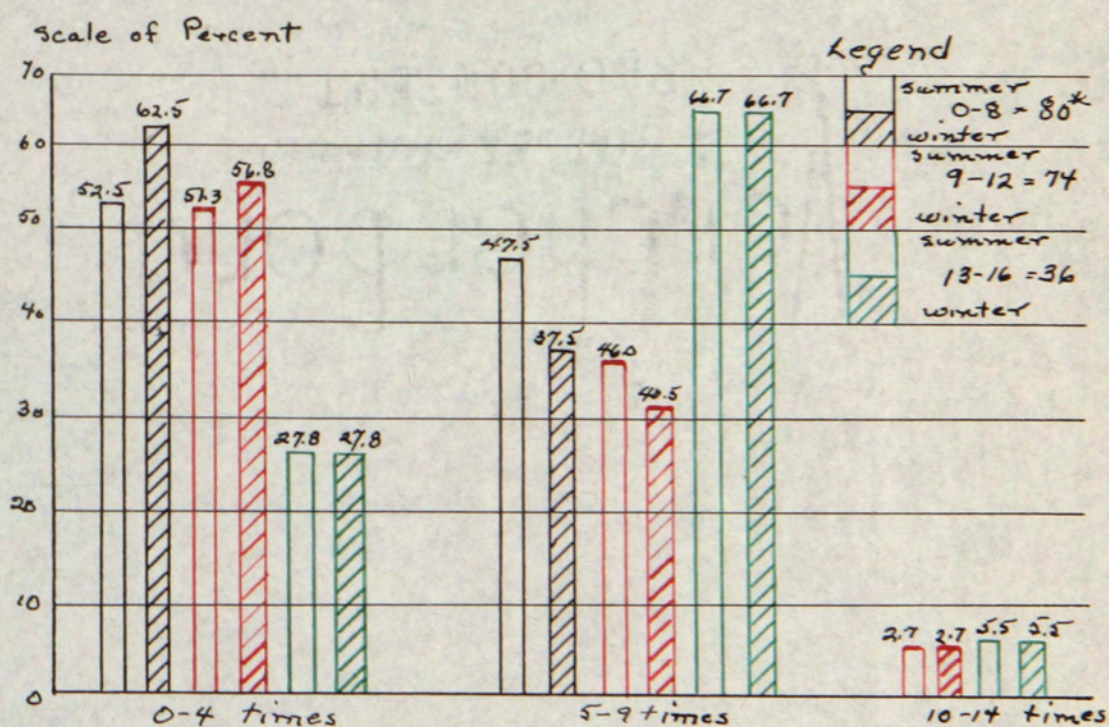
TABLE 28.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT OTHER VEGETABLES DURING WINTER OR SUMMER, CLASSIFIED BY TENURE STATUS

SEASONS TENURE AND FAM- ILY STATUS	SUMMER						WINTER								
	OWNER			TENANT			OWNER			TENANT					
	Parents Num- per cent	Children Num- per- cent	Parents Num- ber	Parents Per- cent ber	Children Num- per- cent	Children Num- ber	Parents Num- per- cent ber	Children Num- per- cent ber	Parents Num- per- cent ber	Children Num- per- cent ber	Parents Num- per- cent ber	Children Num- per- cent ber			
Attitude of Suffi- ciency	94	100.0	74	100.0	98	96.1	99	97.1	92	97.9	74	100.0	96	94.1	94.1
Attitude of Nonsuffi- ciency	0	0.0	0	0.0	4	3.9	3	2.9	2	2.1	0	0.0	6	5.9	5.9
Total	94	100.0	74	100.0	102	100.0	102	100.0	94	100.0	74	100.0	102	100.0	100.0

TABLE 29.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT OTHER VEGETABLES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED RELATIVE TO THE DEGREE OF EDUCATION OF THE HOMEMAKER

EDUCATION OF HOMEMAKER AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
0 - 0	0 - 4	42	52.5	50	62.5
	5 - 9	28	47.5	30	37.5
	10 - 14	0	0.0	0	0.0
	Total	80	100.0	80	100.0
1 - 10	0 - 4	41	52.3	50	62.5
	5 - 9	29	48.7	30	37.5
	10 - 14	0	0.0	0	0.0
	Total	80	100.0	80	100.0
2 - 13	0 - 4	28	51.2	42	56.8
	5 - 9	34	46.0	30	40.5
	10 - 14	2	2.7	2	2.7
	Total	74	100.0	74	100.0
3 - 16	0 - 4	36	60.0	39	65
	5 - 9	19	31.7	14	23.3
	10 - 14	5	8.3	7	11.7
	Total	60	100.0	60	100.0
13 - 16	0 - 4	10	27.3	10	27.6
	5 - 9	24	66.7	24	66.7
	10 - 14	2	5.5	2	5.5
	Total	36	100.0	36	100.0
17 - 20	0 - 4	12	42.9	13	46.4
	5 - 9	15	53.6	14	50.0
	10 - 14	1	3.5	1	3.6
	Total	28	100.0	28	100.0

Note: Information for 10 parents and 13 children not available.



* Number of Cases

FIG. 17.--Percentages of parents, for each classification of education of the homemaker who eat other vegetables (summer, winter) with varying frequencies.

TABLE 30.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT OTHER VEGETABLES (SUMMER, WINTER)

ED. OF HOME- MAKER	0 - 8						9 - 12					
	SUMMER			WINTER			SUMMER			WINTER		
	Parents Number	Parents Percent	Children Number	Children Percent	Parents Number	Children Percent	Parents Number	Parents Percent	Children Number	Children Percent	Parents Number	Children Percent
Attitude of Suffi- ciency	80	100.0	80	100.0	80	100.0	74	100.0	58	96.7	74	100.0
Attitude of Non- suffi- ciency	0	0.0	0	0.0	0	0.0	0	0.0	2	3.3	0	0.0
Total	80	100.0	80	100.0	80	100.0	74	100.0	60	100.0	74	100.0

TABLE 30.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT OTHER VEGETABLES (SUMMER, WINTER)--Continued

ED. OF HOME- MAKER--con. Seasons Family Status	13 - 16							
	SUMMER				WINTER			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	36	100.0	27	96.4	36	100.0	28	100.0
Attitude of Nonsuffi- ciency	0	0.0	1	3.6	0	0.0	0	0.0
Total	36	100.0	28	100.0	36	100.0	28	100.0

TABLE 31.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT OTHER VEGETABLES (SUMMER, WINTER) WITH VARYING FREQUENCIES, CLASSIFIED RELATIVE TO THE DEGREE OF PARTICIPATION OF THE HOMEMAKER IN ORGANIZATIONS

PARTICIPATION IN ORGANIZATIONS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
NONE	0 - 4	114	58.8	126	65.0
	5 - 9	73	37.6	61	31.4
	10 - 14	7	3.6	7	3.6
	Total	194	100.0	194	100.0
LOW	0 - 4	51	50.5	51	50.5
	5 - 9	50	49.5	50	49.5
	10 - 14	0	0.0	0	0.0
	Total	101	100.0	101	100.0
MEDIUM	0 - 4	10	31.2	10	31.2
	5 - 9	19	59.4	13	59.4
	10 - 14	3	9.4	3	9.4
	Total	32	100.0	26	100.0
HIGH	0 - 4	20	46.5	20	46.5
	5 - 9	23	53.5	23	53.5
	10 - 14	0	0.0	0	0.0
	Total	43	100.0	43	100.0

TABLE 32.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT OTHER VEGETABLES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS

SEASONS	SUMMER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
PARTICIPATION IN ORGANIZATIONS								
Attitude of Sufficiency	187	96.4	101	100.0	32	100.0	43	100.0
Attitude of Nonsufficiency	7	3.6	0	0.0	0	0.0	0	0.0
Total	194	100.0	101	100.0	32	100.0	43	100.0

TABLE 32.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT OTHER VEGETABLES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS--Continued

SEASONS--con	WINTER							
	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
PARTICIPATION IN ORGANIZATIONS --con								
Attitude of Sufficiency	180	92.8	101	100.0	32	100.0	43	100.0
Attitude of Nonsufficiency	14	7.2	0	0.0	0	0.0	0	0.0
Total	194	100.0	101	100.0	32	100.0	43	100.0

TABLE 33.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT OTHER VEGETABLES WITH VARYING FREQUENCIES (WINTER, SUMMER), CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

POSSESSION OF GARDEN AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
GARDEN	PARENTS				
	0 - 4	82	51.3	94	53.8
	5 - 9	74	46.2	62	33.7
	10 - 14	4	2.5	4	2.5
	Total	160	100.0	160	100.0
GARDEN	CHILDREN				
	0 - 4	77	51.7	31	31.1
	5 - 9	65	43.6	51	34.3
	10 - 14	7	4.7	7	4.7
	Total	149	100.0	149	100.0
NO GARDEN	PARENTS				
	0 - 4	12	35.3	14	41.2
	5 - 9	22	64.7	20	58.8
	10 - 14	0	0.0	0	0.0
	Total	34	100.0	34	100.0
NO GARDEN	CHILDREN				
	0 - 4	11	41.0	12	48.0
	5 - 9	14	56.0	13	52.0
	10 - 14	0	0.0	0	0.0
	Total	25	100.0	25	100.0

Note: Information for 6 parents and 7 children not available.

TABLE 34.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT OTHER VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

SEASONS	SUMMER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	156	97.5	146	98.0	34	100.0	25	100.0
Attitude of Nonsufficiency	4	2.5	3	2.0	0	0.0	0	0.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

TABLE 34.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT OTHER VEGETABLES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN--Continued

SEASONS--con	WINTER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	152	95.0	143	96.0	34	100.0	25	100.0
Attitude of Nonsufficiency	8	5.0	6	4.0	0	0.0	0	0.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

The circumstance of farm ownership does not appear to be closely associated with the family usage of these other vegetables such as peas, onions, and beets. The greatest differences appeared in the dietary practices of the children, with tenant children eating these vegetables less often than those of owners. However, these differences do not appear to be significant and are more likely to be accounted for as being the result of personal likes and dislikes than by any difference in economic status. The main inference to be drawn from the data is the obvious one that these vegetables are eaten less frequently in winter than in summer by the families in general. Tenure status seems to have no influence upon the opinions regarding adequacy of these vegetables in the diet. See Tables 27, 28, Figure 16.

The degree of education possessed by the mother has hardly any relation to the frequency with which family members eat these other vegetables. Summer and winter the relative frequencies under the homemaker-education classification are quite similar, although the college-trained mothers made a slightly greater use of this type of vegetable. Regardless of the degree of education possessed by the mother, there was a rather universal expression of satisfaction as to the adequacy of the usage of these other vegetables in the family

diet. See Tables 29, 30, Figure 17.

The usage of these vegetables, as well as the other types previously discussed, does not appear to be related to the degree of activity of the mothers in organizations. The only deviation to be noted is again the rather inexplicable fact that in homes where the organization activity of the mother is moderate these other vegetables are served more often. Furthermore, it was only this class of homemakers who expressed any appreciable degree of dissatisfaction with the sufficiency of these vegetables served to their families. See Tables 31, 32.

It might be expected that families having gardens would eat the vegetables under discussion more often than families without gardens, but the data indicate that actually the reverse was true. In families without gardens 64.7 percent of the parents and 56 percent of the children eat some of these vegetables approximately once a day, whereas only 46.2 percent of the parents and 46.2 percent of the children in families having gardens have these vegetables this often. This trend is noted for practices during the winter months as well as during the summer season. See Tables 33, 34.

Comments made by the interviewees were often interesting. A number of mothers felt that the lunches

served to the children by the schools had been a means of getting the children to eat vegetables more often. This same comment was made in connection with other diet items such as fruit. Several homemakers stated that when they were unable to obtain vegetables from the garden, they did not eat them a sufficient number of times because of the inconvenience of driving into town.

POTATOES

The data dealing with the usage of potatoes by these farm families and the attitudes of the mothers relative to the place of potatoes in the family diet are compiled in the group of tables which immediately follow.

TABLE 35.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT POTATOES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED BY TENURE STATUS OF THE FAMILIES

TENURE STATUS AND FAMILY STATUS	FREQUENCY OF EATING	SUMMER		WINTER	
		Number	Percent	Number	Percent
OWNER	0 - 4	23	25.0	23	25.0
	5 - 9	45	48.9	45	48.9
	10 - 14	23	25.0	23	25.0
	14 +	1	1.1	1	1.1
	Total	92	100.0	92	100.0
	0 - 4	10	14.1	10	14.1
TENANT	5 - 9	39	54.9	39	54.9
	10 - 14	21	29.6	21	29.6
	14 +	1	1.4	1	1.4
	Total	71	100.0	71	100.0
	0 - 4	22	22.0	22	22.0
	5 - 9	44	44.0	44	44.0
OWNER	10 - 14	32	32.0	32	32.0
	14 +	2	2.0	2	2.0
	Total	100	100.0	100	100.0
	0 - 4	19	19.1	19	19.1
	5 - 9	46	46.8	46	46.8
	10 - 14	35	35.3	35	35.3
TENANT	14 +	5	4.8	5	4.8
	Total	105	100.0	105	100.0

Note: 2 Owner Additional's not included. Information for 4 parents and 2 children not available.

TABLE 26.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR
 NONSUFFICIENCY AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN)
 EAT POTATOES DURING WINTER OR SUMMER, CLASSIFIED BY TENURE STATUS

SEASON AND FAMILY STATUS	SUMMER						WINTER					
	OWNER			TENANT			OWNER			TENANT		
	Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Children Per- cent	Parents Per- cent	Num- ber	Per- cent	Children Num- ber	Parents Num- ber	Children Per- cent	Parents Per- cent
Attitude of Suffi- ciency	92	100.0	71	100.0	100	100.0	105	100.0	71	100.0	100	100.0
Attitude of Monsuffi- ciency	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	92	100.0	71	100.0	100	100.0	105	100.0	71	100.0	100	100.0

TABLE 27.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO
EAT POTATOES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED RELATIVE
TO THE DEGREE OF EDUCATION OF THE HOME MAKER

EDUCATION OF HOMEMAKER AND FAMILY STATUS	FREQUENCY OF EATING VEGETABLES	SUMMER		WINTER	
		Number	Percent	Number	Percent
PARENTS	0 - 4	21	27.6	21	27.6
	5 - 9	31	40.8	31	40.8
	10 - 14	22	29.0	22	29.0
	14 +	2	2.6	2	2.6
	Total	76	100.0	76	100.0
CHILDREN	0 - 4	9	11.2	9	11.3
	5 - 9	42	52.5	42	52.5
	10 - 14	24	30.0	24	30.0
	14 +	5	6.3	5	6.3
	Total	80	100.0	80	100.0
PARENTS	0 - 4	14	18.9	14	18.9
	5 - 9	41	55.4	41	55.4
	10 - 14	19	25.7	19	25.7
	14 +	0	0.0	0	0.0
	Total	74	100.0	74	100.0
CHILDREN	0 - 4	12	20.0	12	20.0
	5 - 9	34	56.7	34	56.7
	10 - 14	14	23.3	14	23.3
	14 +	0	0.0	0	0.0
	Total	60	100.0	60	100.0

TABLE 37.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT POTATOES WITH VARYING FREQUENCIES (SUMMER, WINTER), CLASSIFIED RELATIVE TO THE DEGREE OF EDUCATION OF THE HOMEMAKER--Continued

EDUCATION OF HOMEMAKER AND FAMILY STATUS --con	FREQUENCY OF EATING VEGETABLES --con	SUMMER--con		WINTER--con	
		Number	Percent	Number	Percent
PARENTS	0 - 4	12	33.3	12	33.3
	5 - 9	14	38.9	14	38.9
	10 - 14	7	19.4	7	19.4
	14 +	3	8.4	3	8.4
	Total	36	100.0	36	100.0
CHILDREN	0 - 4	12	42.9	10	35.7
	5 - 9	7	25.0	9	32.1
	10 - 14	8	28.6	8	28.6
	14 +	1	3.5	1	3.6
	Total	28	100.0	28	100.0

TABLE 38.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT POTATOES (SUMMER, WINTER)

ED. OF HOME- MAKER	0 - 8						9 - 12					
	SUMMER			WINTER			SUMMER			WINTER		
	Parents	Children	Percent	Parents	Children	Percent	Parents	Children	Percent	Parents	Children	Percent
Seasons Family Status	Number	Percent	Number	Number	Percent	Number	Number	Percent	Number	Number	Percent	Number
Attitude of Suffi- ciency	76	100.0	80	100.0	76	100.0	80	100.0	74	100.0	60	100.0
Attitude of Non- suffi- ciency	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	76	100.0	80	100.0	76	100.0	80	100.0	74	100.0	60	100.0

TABLE 38.--ATTITUDES OF SUFFICIENCY EXPRESSED BY HOMEMAKERS, POSSESSING VARYING DEGREES OF FORMAL SCHOOLING, AS TO THE FREQUENCY WITH WHICH THEIR FAMILY MEMBERS (PARENTS, CHILDREN) EAT POTATOES (SUMMER, WINTER)--Continued

ED. OF HOME- MAKER--con		13 - 16							
Seasons Family Status		SUMMER				WINTER			
		Parents Number	Parents Percent	Children Number	Children Percent	Parents Number	Parents Percent	Children Number	Children Percent
Attitude of Sufficiency		36	100.0	28	100.0	36	100.0	28	100.0
Attitude of Nonsuffi- ciency		0	0.0	0	0.0	0	0.0	0	0.0
Total		36	100.0	28	100.0	36	100.0	28	100.0

TABLE 39.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO EAT POTATOES (SUMMER, WINTER) WITH VARYING FREQUENCIES, CLASSIFIED RELATIVE TO THE DEGREE OF PARTICIPATION OF THE HOMEMAKER IN ORGANIZATIONS

PARTICIPATION IN ORGANIZATIONS	FREQUENCY OF EATING POTATOES	SUMMER		WINTER	
		Number	Percent	Number	Percent
NONE	0 - 4	33	17.5	33	17.4
	5 - 9	90	47.6	90	47.6
	10 - 14	66	34.9	66	35.0
	14 +	0	0.0	0	0.0
	Total	189	100.0	189	100.0
LOW	0 - 4	26	25.7	26	25.7
	5 - 9	36	35.7	36	35.7
	10 - 14	32	31.7	32	31.7
	14 +	7	6.9	7	6.9
	Total	101	100.0	101	100.0
MEDIUM	0 - 4	4	12.5	4	12.5
	5 - 9	23	71.9	23	71.9
	10 - 14	4	12.5	4	12.5
	14 +	1	3.1	1	3.1
	Total	32	100.0	32	100.0
HIGH	0 - 4	14	32.6	14	32.6
	5 - 9	25	58.1	25	58.1
	10 - 14	4	9.3	4	9.3
	14 +	0	0.0	0	0.0
	Total	43	100.0	43	100.0

TABLE 40.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT POTATOES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS

SEASONS	SUMMER							
PARTICIPATION IN ORGANIZATIONS	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	189	100.0	101	100.0	32	100.0	43	100.0
Attitude of Nonsufficiency	0	0.0	0	0.0	0	0.0	0	0.0
Total	189	100.0	101	100.0	32	100.0	43	100.0

TABLE 40.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING ATTITUDES OF SUFFICIENCY OR NONSUFFICIENCY AS TO THE FREQUENCY (SUMMER, WINTER) WITH WHICH THEIR FAMILY MEMBERS EAT POTATOES, CLASSIFIED BY DEGREE OF PARTICIPATION IN ORGANIZATIONS--Continued

SEASONS--con	WINTER							
PARTICIPATION IN ORGANIZATIONS --con	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	189	100.0	101	100.0	32	100.0	43	100.0
Attitude of Nonsufficiency	0	0.0	0	0.0	0	0.0	0	0.0
Total	189	100.0	101	100.0	32	100.0	43	100.0

TABLE 41.--NUMBER AND PERCENTAGE OF FAMILY MEMBERS (PARENTS, CHILDREN) WHO
EAT POTATOES WITH VARYING FREQUENCIES (WINTER, SUMMER), CLASSIFIED
ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

POSSESSION OF GARDEN AND FAMILY STATUS	FREQUENCY OF EATING POTATOES	SUMMER		WINTER	
		Number	Percent	Number	Percent
GARDEN	0 - 4	40	25.0	40	25.0
	5 - 9	67	41.8	67	41.8
	10 - 14	50	31.3	50	31.3
	14 +	3	1.9	3	1.9
	Total	160	100.0	160	100.0
GARDEN	0 - 4	25	16.8	25	16.8
	5 - 9	63	43.9	63	43.9
	10 - 14	46	30.0	46	30.9
	14 +	5	3.4	5	3.4
	Total	149	100.0	149	100.0
NO GARDEN	0 - 4	9	26.5	9	26.5
	5 - 9	17	50.0	17	50.0
	10 - 14	6	17.7	6	17.7
	14 +	2	5.8	2	5.8
	Total	34	100.0	34	100.0
NO GARDEN	0 - 4	7	28.0	7	28.0
	5 - 9	14	46.0	14	46.0
	10 - 14	4	16.0	4	16.0
	14 +	0	0.0	0	0.0
	Total	25	100.0	25	100.0

Note: Information for 6 parents and 7 children not available.

TABLE 42.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT POTATOES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN

SEASONS	SUMMER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	160	100.0	149	100.0	34	100.0	25	100.0
Attitude of Nonsufficiency	0	0.0	0	0.0	0	0.0	0	0.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

TABLE 42.--NUMBER AND PERCENTAGE OF HOMEMAKERS EXPRESSING SATISFACTION OR DISSATISFACTION WITH THE EXTENT (SUMMER, WINTER) TO WHICH THEIR FAMILY MEMBERS EAT POTATOES, CLASSIFIED ACCORDING TO WHETHER OR NOT THE FAMILY HAD A GARDEN--Continued

SEASONS--con	WINTER							
	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Attitude of Sufficiency	160	100.0	149	100.0	34	100.0	25	100.0
Attitude of Nonsufficiency	0	0.0	0	0.0	0	0.0	0	0.0
Total	160	100.0	149	100.0	34	100.0	25	100.0

It is not surprising to note that most of the families eat potatoes approximately once a day. Tenure status appears to make no difference as to how often potatoes are eaten, either by parents or children. Consistent family patterns are evident relative to the eating of potatoes. As to attitudes, there is not a single instance where the homemaker expressed the opinion that her family did not get enough potatoes. Instead, a frequent comment was "we think we have potatoes too often." See Tables 35, 36.

Summer and winter practices relating to the use of potatoes by these families were identical. Considerable differences in how frequently potatoes are eaten in the families where the mother possessed varying degrees of schooling are evidenced by the data. These differences do not combine, however, to produce trends, and thus are difficult to account for. For one thing those homemakers who were college trained seemed to be less bound by the traditional custom of serving potatoes once a day. See Tables 37, 38.

In general, the data appear to justify the statement that potatoes were used less frequently in families where the homemaker was somewhat interested in organizations. There is evidence of a definite tendency for those mothers active in club work not to overempha-

size potatoes in the diet. See Tables 39, 40.

The possession of a garden had little or nothing to do with the frequency of eating potatoes. Potatoes are rarely grown in the ordinary vegetable garden. See Tables 41, 42.

Potatoes are, of course, one of the most popular American dishes and can be served on the table in many different ways. They can be stored for fairly long periods and are always available at food stores. Although the price of potatoes fluctuates considerably because of various reasons, this fact produces little effect on the usage of potatoes. Potatoes on the menu have become an accepted American custom.

Data relative to various reasons for not serving vegetables sufficiently often are presented in the next group of tables.

TABLE 42.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE FREQUENCY WITH WHICH CERTAIN VEGETABLES ARE EATEN BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY TENURE STATUS

REASONS FOR ATTITUDE OF NONSUFFICIENCY	OWNER				TENANT			
	Parents		Children		Parents		Children	
	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent
Lack of money	4	28.6	3	21.4	8	28.6	9	47.3
Dislike certain vegetables	3	21.4	6	42.9	11	37.3	10	52.7
No garden	0	0.0	0	0.0	2	7.1	0	0.0
Causes heartburn, indigestion	0	0.0	0	0.0	4	14.3	0	0.0
Don't get to town	2	14.3	3	21.4	2	7.1	0	0.0
Don't fix them just for self	3	21.4	0	0.0	1	3.6	0	0.0
Laziness	2	14.3	2	14.3	0	0.0	0	0.0
Total	14	100.0	14	100.0	28	100.0	19	100.0

TABLE 44.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE FREQUENCY WITH WHICH CERTAIN VEGETABLES ARE EATEN BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY EDUCATION OF THE HOMEMAKER

REASONS FOR ATTITUDE OF NONSUFFICIENCY	GRADE						HIGH SCHOOL						COLLEGE					
	Parents			Children			Parents			Children			Parents			Children		
	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Lack of money	4	18.2	6	42.9	6	33.3	5	35.7	2	50.0	1	33.3						
Dislike certain vegetables	9	40.9	5	35.7	7	38.9	9	64.3	0	0.0	0	0.0						
No garden	2	9.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0						
Causes heart- burn, indiges- tion	2	9.1	0	0.0	2	11.1	0	0.0	0	0.0	0	0.0						
Don't get to town	4	18.2	3	21.4	0	0.0	0	0.0	0	0.0	0	0.0						
Don't fix them just for self	1	4.5	0	0.0	3	16.7	0	0.0	0	0.0	0	0.0						
Laziness	0	0.0	0	0.0	0	0.0	0	0.0	2	50.0	2	66.7						
Total	22	100.0	14	100.0	18	100.0	14	100.0	4	100.0	3	100.0						

TABLE 45.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE FREQUENCY WITH WHICH CERTAIN VEGETABLES ARE EATEN BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY THE DEGREE OF PARTICIPATION OF THE HOMEMAKER IN ORGANIZATIONS

REASONS FOR ATTITUDE OF NONSUFFICIENCY	NONE		LOW		MEDIUM		HIGH	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Lack of money	15	34.8	6	21.6	0	0.0	5	38.4
Dislike certain vegetables	15	34.8	11	57.9	0	0.0	2	15.4
No garden	2	4.7	0	0.0	0	0.0	0	0.0
Causes heart- burn, indiges- tion	2	4.7	2	10.5	0	0.0	0	0.0
Don't get to town	7	16.3	0	0.0	0	0.0	0	0.0
Don't fix them just for self	2	4.7	0	0.0	0	0.0	2	15.4
Laziness	0	0.0	0	0.0	0	0.0	4	30.8
Total	43	100.0	19	100.0	0	0.0	13	100.0

TABLE 46.--REASONS ADVANCED BY HOMEMAKERS FOR CONSIDERING THE FREQUENCY WITH WHICH CERTAIN VEGETABLES ARE EATEN BY THEIR FAMILY MEMBERS AS INSUFFICIENT, CLASSIFIED BY POSSESSION OF A GARDEN

REASONS FOR ATTITUDE OF NON-SUFFICIENCY	GARDEN				NO GARDEN			
	Parents		Children		Parents		Children	
	Number	Per- cent	Number	Per- cent	Number	Per- cent	Number	Per- cent
Lack of money	12	42.9	12	41.8	0	0.0	0	0.0
Dislike certain vegetables	11	39.3	14	48.3	5	31.3	0	0.0
No garden	0	0.0	0	0.0	2	12.5	0	0.0
Causes heartburn, indigestion	2	7.1	0	0.0	2	12.5	0	0.0
Don't get to town	2	7.1	3	9.9	2	12.5	0	0.0
Don't fix them just for self	1	3.6	0	0.0	3	18.7	0	0.0
Laziness	0	0.0	0	0.0	2	12.5	2	100.0
Total	28	100.0	29	100.0	16	100.0	2	100.0

The chief reasons advanced for not serving vegetables sufficiently often were lack of money to buy and an admitted personal dislike for some kinds of vegetables. Inability to get into town during the week to buy vegetables was also a common reason. It was a frequent practice in families where one parent did not care for a certain vegetable for the homemaker to avoid serving that vegetable.

SUMMARY

In summarizing this chapter concerned with the use of vegetables in the diet, the more outstanding findings are now restated.

1. In general, consistent family patterns are evidenced, with children and parents having much the same dietary practices relative to the eating of vegetables.

2. With the exception of potatoes, vegetables were eaten less frequently in winter than in summer.

3. There is little or no reason to believe that tenure status has any influence upon the frequencies with which various types of vegetables appear on the family menu.

4. There is some indication that homemakers with a greater degree of formal education have a tendency to serve many types of vegetables more often than mothers having a lesser amount of schooling. Potatoes are the striking exception; they appear less often on the menus of the more highly educated homemakers.

5. Green leafy vegetables were eaten somewhat less frequently by families wherein the mother had no activity in organizations than by families where the mother did engage more or less in club work. Yellow vegetables and those classified as other vegetables were eaten most often by families where the organization activity of the mother was moderate.

6. In general there was an expression of satisfaction by the homemakers as to the sufficiency with which their families were served the various kinds of vegetables, this being true to a greater extent with regard to these dietary practices during the summer months than during the winter season.

7. With respect to the eating of many kinds of vegetables, the possession of a garden had a pronounced influence, particularly as regards the summer months. Gardens made many vegetables more available, with the result that they were eaten more frequently by the families who had gardens. This conclusion applies only to green leafy and yellow vegetables. Just the reverse was

true of other vegetables. Whether or not a family had a garden produced no effect on the frequency of serving potatoes.

8. In the cases where dissatisfaction was expressed as to the sufficiency of vegetables in the family diet, the principal reasons advanced were: lack of money, personal dislike for certain vegetables, and difficulty in getting to town regularly to buy vegetables.

Chapter VI

CONCLUSIONS

A broad view of the findings of this study discloses clearly one particularly important fact, namely an association between the educational status of the mother and the observance of basic health practices and attitudes toward them. As the education of the mother increased, there was a tendency for an increased observance of essential health practices.

Furthermore, the various educational possibilities connected with the activity of the mother in organizations have been seen to possess a definite implication in molding the character of certain family health practices. Somewhat contrary to expectations the findings indicate that the health measures and attitudes toward these practices did not appear to differ to any great extent between owners and tenants.

Health education and programs still have a tremendous task to perform. As has been noted, most of the family members covered by the survey had no dental examination within the year preceding the census. Moreover, actual ailment rather than a recognition of regular examination as a desirable health measure

appeared to be the more significant motivating influence relative to dentist visitation. Good dental hygiene habits at home were seen to be highly correlated with the frequency of dental examination. It is impossible in this study to estimate the extent of the influence of economic circumstances upon family dental hygiene practices, but there is reason to believe that lack of money serves as only a partial deterrent to better dental habits. The general educational program relating to this question must have points of deficiency. Compulsory dental examinations for school children and the provision of dental clinics would most certainly benefit this class of rural people.

This lack of conscious need for sanitary inspection services on the part of rural farm families is a more serious situation than among urban dwellers since the latter group is adequately protected, regardless of ignorance or apathy, by legal sanitary measures. The almost universal expression of a feeling of adequacy in regard to these health measures as now practiced would make it appear that the resources offered by the agricultural colleges for improving farm sanitation are for the most part unknown. The evidence in this thesis indicates a definite dealing with the problems of farm sanitation.

The family diet is a principal concern of the

homemaker. The data afforded by the survey indicate that much of the educational efforts and propaganda relating to the part that diet should play in maintaining family health have not missed their mark. There seems to be ample evidence that many homemakers are beginning to recognize the dietary value of various types of vegetables and that these rural women try to plan well-balanced menus for their families. The very fact that so often attitudes of dissatisfaction were expressed by the mothers with regard to the sufficiency of vegetables in the diet of their families is pointed evidence that educational efforts along this line are making their influence felt.

It may be concluded, then, that in education lies the chief hope for an improvement of health and sanitation practices among rural people such as those studied. The force of education may be slow to make its effect, in many instances, but nevertheless in a democracy education must be recognized as the principal means for achieving any sort of social betterment.

APPENDIX

Some Health Practices and Attitudes and Related Problems of 300 Rural Farm Families in Colorado .

Native: (N)		(F. or M.)		(F. b.)		Ed. Head		H' maker	
Res.: Irrig.		Dry land		Ranch		Tract		Size of Farm	
Tenure Status: Owner				Owner Additional				Tenant	
Budget: For Groceries? Y				N				: For Medical Care? Y	
								N	
Family Members in Household				T. B. Vaccination or Immun-				Organizations to which home-	
(Name)		S. A.		T. B. Vaccination				maker belongs	
		e g Insur.		Dip- Small Ty- Whoop-				Name	
		x e H A		th. pox phoid cough				Pa. Pre. E. M. L.	
Head									
H' maker									
1st child									
2nd child									
3rd child									
4th child									
5th child									
6th child									
7th child									
8th child									

Examination Per Year by:	Head				Homemaker															
	Freq.		Suff.		Freq.		Suff.		Freq.		Suff.		Freq.		Suff.		Freq.		Suff.	
	All.	Vol.	Y.N.	Rea.	All.	Vol.	Y.N.	Rea.	All.	Vol.	Y.N.	Rea.	All.	Vol.	Y.N.	Rea.	All.	Vol.	Y.N.	Rea.
M.D.																				
Osteopath																				
Chiropractor																				
Dentist																				

Brushing teeth daily	Freq. Suff.			Freq. Suff.			Freq. Suff.			Freq. Suff.		
	Y.	N.	Rea.	Y.	N.	Rea.	Y.	N.	Rea.	Y.	N.	Rea.
	PHYSICAL AND DENTAL EXAMINATION						BRUSHING THE TEETH					
Reasons for Attitude of Non- sufficiency	1.		Fear of pain				1.		Never think of brushing teeth more than once a day.			
	2.		Lack of money				2.		Can't afford brush or paste			
	3.		Put off visit till another time				3.		Makes gums sore			
	4.		Believe in healing by faith and prayer				4.		Temperature of water causes teeth to ache			
	5.		Don't go unless sick				5.		Dislike taste of paste			
	6.		Don't go unless teeth ache				6.		Haven't been taught to care for teeth			
	7.		Fear of what may have to be done				7.		Brushing teeth more than once a day unnecessary			
	8.		Feel check-ups unnecessary				8.		Never think of brushing teeth			
	9.		Use home remedies				9.		Have no toothbrush			
	10.						10.		Haven't started to brush teeth			
	11.						11.					

BRUSHING THE TEETH

[illegible]

D. FREQUENCY OF BATHING

2.

Baths per Week	Head						Homemaker						S						W						S						W					
	S			W			S			W			S			W			S			W			S			W								
	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.						
	Freq.	Y.		N.	Freq.		Y.	N.		Freq.	Y.		N.	Freq.		Y.	N.		Freq.	Y.		N.	Freq.		Y.	N.		Freq.	Y.		N.	Freq.	Y.	N.	Freq.	Y.
Reasons for Attitude of Non- sufficiency	1. Too many sharing bath												6. Feel present number baths suffi-																							
	2. Inconvenient to heat water												cient																							
	3. Too lazy to take a bath												7. Have no tub																							
	4. No convenient time to bathe												8. Can't use too much water																							
	5. Too tired to bathe												9.																							
													10.																							

E. SANITARY PRACTICES

Refrigeration	Electric		Ice	Other	None	Suff. Y.N.	Rea.
Source of water supply	Spring	Well	City supply	Other	Container of hauled water		
					Barrel Cistern Tank		
Condition of water container	Open		Encased	Cracks in Casing	Cracks in Platform		
Inspection of water supply	Times per year water tested for bacterial count						
Toilet	Distance from water source		Distance from house		Elevation from culinary water level		
					H. L.		
Inspection of milk supply	Times per yr. milk tested for bacterial count						
	Times per yr. herd tested for				Beng's Dis. T.B.	Re-actors Disposed Y. N.	
Practices to insure clean milk supply	1.		4.				
	2.		5.				
	3.		6.				
Screens	Item	None	Good	Fair	Poor		
	Doors						
	Windows						
Fly control	Are. fly traps used? Yes No						
Garbage dis- posal	Feed to stock		Haul away		Throw in yard		
	Other		Burn				
Meat Inspec.	Is the home meat supply inspected? Yes No						
Reasons for attitude of non-sufficien- cy	1. Can't afford screening				6. Inconvenient to get ice		
	2. Unnecessary to screen all doors and windows				7. Never think of testing milk or water		
	3. Can't afford electric refrigeration				8. Never think of inspecting meat		
	4. Have no electricity				9. Didn't know testing services avail- able		
	5. Can't afford ice				10. No other way of disposing garbage		
					11. Lack of facilities. (Water, etc.)		

F.		DIET																		3.	
		Head				Homemaker															
		S.		W.		S.		W.		S.		W.		S.		W.		S.		W.	
Diet items per wk.		S.	W.	S.	W.	S.	W.	S.	W.	S.	W.	S.	W.	S.	W.	S.	W.	S.	W.	S.	W.
		Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.
Cereal, bread																					
Green leafy vegg.																					
Yellow vegg.																					
Other vegg.																					
Fresh fruit																					
Canned fruit																					
Citrus fruit																					
Dried fruit																					
Vegetable prot.																					
Eggs																					
Ln. Meat, fish, fowl																					
Fats																					
Butter																					
Margarine																					
Sugar																					
Coffee, Tea																					
Milk																					
Milk P.																					
Water																					

	DIET			MILK			WATER		
Reasons for attitude of non-sufficiency	1.	Have no garden		1.	Prefer other liquids		1.	Prefer other liquids	
	2.	Have no orchard		2.	Dislike taste		2.	Drink it only at meals	
	3.	Lack of money		3.	Lack of money		3.	Don't get water during working hours	
	4.	Dislike certain vegetables		4.	Get enough in food		4.	Never feel thirsty	
	5.	Dislike certain fruits		5.	Don't want to get fat		5.	Dislike taste	
	6.	No means of preservation		6.	Afraid of getting disease		6.	Dislike cold water	
	7.	Fear disease from irrig. water		7.	Dislike it because someone else dislikes it		7.	Flushes kidneys	
	8.	Causes indigestion and heartburn		8.	Dislike pasteurized milk		8.	Causes digestive and intestinal disorders	
	9.	Eat only vegetables		9.	Dislike unpasteurized milk		9.	Think its impure	

[illegible][illegible]

G.	FREQUENCY OF RELAXING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Relax- ing per week	Head						Homemaker																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	S			W			S			W			S			W			S			W			S			W																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.	Suff.		Rea.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.		Freq.	Y. N.	Freq.	Y. N.	Freq.	Y. N.	Freq.	Y. N.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

Reasons	RELAXING	
for	1. Too busy	6. Do not have the time
atti-	2. Not tired at the time	7.
tude of	3. Not place to rest	8.
non-	4. Haven't formed habit	9.
suffi-	5. Have to watch children	10.
ciency		

H. Ventilation									
Is the house aired daily?				Yes	No	While dusting?			

I. DAYS OF ILLNESS - PER FAMILY MEMBER					
Severity	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.
Bed-ridden					
Indisposed and confined to home					
Indisposed but not confined to home					

J. MEDICAL COSTS				
Total costs last yr.	For Operations	For Medical Supplies	Office Visits	Home Visits
\$	\$	\$	\$	\$

K. MAJOR HEALTH NEEDS	
1.	
2.	
3.	
4.	
5.	

FREQUENCY OF RELAXING

Relax- ing per week	S		W		S		W		S		W		S		W		S		W		S		W	
	Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.		Suff.	
	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.	Y.	N.
	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.	Freq.	Rea.

DAYS OF ILLNESS - PER FAMILY MEMBER

Severity	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.	Freq. & Dur.
Bed-ridden					
Indisposed and confined to home					
Indisposed but not confined to home					

CEREALS: BREAD

BROWN RICE
 WHOLE WHEAT
 CRACKED WHEAT
 ROLLED OATS
 WHOLE CORN MEAL
 POLISHED RICE
 SPAGHETTI
 MACARONI
 NOODLES
 PREPARED BREAKFAST CEREALS
 WHITE BREAD
 WHOLE WHEAT BREAD
 RYE BREAD

GREEN LEAFY VEGETABLES

BEET GREENS
 DANDELION GREENS
 MUSTARD GREENS
 BRUSSEL SPROUTS
 CABBAGE
 CHARD
 ENDIVE
 WATERCRESS
 SPINACH
 LETTUCE

YELLOW VEGETABLES

CARROTS
 PARSNIP
 SQUASH
 SWEET POTATO
 TURNIP
 YELLOW CORN
 YELLOW BEANS

OTHER VEGETABLES

ASPARAGUS
 STRING BEANS
 LIMA BEANS
 BEETS
 CAULIFLOWER
 CELERY
 CORN
 EGG PLANT
 PEAS
 KOHLIRABI
 OKRA
 ONION
 RADISH
 POTATO
 CUCUMBER

FRESH FRUIT

APPLE
 PEAR
 PEACH
 PLUM
 APRICOT
 CHERRY
 BANANA
 BLACKBERRY
 STRAWBERRY
 BLUEBERRY
 GOOSEBERRY
 RASPBERRY
 RHUBARB
 DATE
 PINEAPPLE
 FIG
 GRAPE

CANNED FRUIT

PINEAPPLE
 FIG
 RASPBERRY
 BLUEBERRY
 STRAWBERRY
 BLACKBERRY
 CHERRY
 PEACH
 PEAR
 PLUM
 APRICOT

CITRUS FRUIT

LIME
 LEMON
 ORANGE
 GRAPEFRUIT
 TOMATO

DRIED FRUIT

DATE
 RAISIN
 APRICOT
 FIG
 PRUNE
 APPLE
 PEACH

VEGETABLE PROTEIN

DRIED BEANS
 DRIED PEAS
 LENTILS
 NUTS

EGGS

LEAN MEAT, FISH, FOWL

PORK
 BEEF
 HAM
 LAMB
 CHICKEN
 TROUT
 SALMON

FATS

LARD
 VEGETABLE OIL
 VEGETABLE FAT
 SALT PORK
 BACON
 OTHER SHORTENING

BUTTER

MARGARINE

SUGAR

BROWN SUGAR
 MOLASSES
 WHITE SUGAR
 HONEY
 JELLY
 JAM
 PRESERVES
 SYRUP

COFFEE, TEA

MILK

MILK PRODUCTS

CHEESE
 COTTAGE CHEESE
 BUTTERMILK
 COCOA
 ICE CREAM

WATER

ABBREVIATIONS USED IN THE SCHEDULE

Part A

1.	H.H.-----	Household
2.	N.-----	Native born
3.	F. or M.-----	Foreign or mixed parentage
4.	F. B.-----	Foreign born
5.	Ed.-----	Education
6.	H'Maker-----	Homemaker
7.	Res.-----	Residence
8.	Irrig.-----	Irrigated
9.	Y.-----	Yes
10.	N.-----	No
11.	Insur.-----	Insurance
12.	H.-----	Health Insurance
13.	A.-----	Accident Insurance
14.	T.B. Test-----	Tuberculin Test
15.	Diphth.-----	Diphtheria
16.	Whoop. cough-----	Whooping Cough
17.	Pa.-----	Past
18.	Pre.-----	Present
19.	Partic.-----	Participation
20.	H.-----	High participation
21.	M.-----	Medium participation
22.	L.-----	Low participation

Part B

1.	M.D.-----	Medical doctor
2.	Freq.-----	Frequency
3.	Ail.-----	Examinations made because of ailment
4.	Vol.-----	Examinations made voluntarily
5.	Suff.-----	Sufficiency
6.	Y.-----	Yes or sufficient
7.	N.-----	No or insufficient
8.	Rea.-----	Reason

Part C*Part D*

1.	S.-----	Summer
2.	W.-----	Winter

Part E*

1. H.----- Higher
2. L.----- Lower
3. Yr.----- Year
4. Bang's Dis.----- Bang's Disease
5. T.B.----- Tuberculosis
6. Y.----- Yes
7. N.----- No
8. Inspec.----- Inspection

Part F*

1. Wk.----- Week
2. S.----- Sufficiency
3. Vegg.----- Vegetables
4. Prot.----- Protein
5. Ln.----- Lean
6. P.----- Products

Part G*Part H*Part I*

1. Dur.----- Duration

Part J and K*

*See previous explanations of abbreviations.

INDIVIDUALS INTERVIEWED

1. Mrs. Shanstrum
Superintendent of Nurses
Larimer County Hospital, Fort Collins, Colorado
2. Miss Ruth E. Phillips
Director Division of Public Health Nursing
State Division of Public Health, Denver, Colorado
3. Miss Norma Michaelson
Larimer County Public Health Nurse
200 East Laurel, Fort Collins, Colorado
4. Dr. Ruth Sumner
Assistant Professor of Physiology
Colorado State College, Fort Collins, Colorado
5. Mrs. Carmen Johnson
Larimer County Home Demonstration Agent
428 South Howes, Fort Collins, Colorado

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