

CHAPTER SEVEN

Attitudes Toward Food and Eating

Teaching nutrition will be more effective than it now is when we are able to recognize the many factors that influence attitudes toward food and food habits. One of the most frustrating experiences in nutrition education is the extent to which people allow preferences for foods to determine what they eat, and their reluctance to modify food practices in light of knowledge of nutrition. Our acceptance of food is a complex form of behavior determined by our sense organs, by the chemical conditions within our bodies, and by the psyche. Since our present psychological reactions to food result from the whole gamut of our life experiences, a simplified explanation of them is impossible. On the other hand, certain observations have been made of the behavior of individuals and of groups, which may be helpful to educators.

INDIVIDUAL DIFFERENCES

We do not know conclusively how greatly our choice of food is determined by our physical and chemical make-up, but facts have been discovered which reveal interesting variations among individuals. One great advantage of the use of a daily food plan such as the "Basic Seven" (1) is that it permits a wide choice of foods within each of the basic groups.

Some of us are keen-sensed; others, dull (2). There is a wide variation in the sensory response to the same food. Some people may not

enjoy good food as much as others because their taste sense is dull. This condition may account for many poor eaters, as it may also account for the popularity of strong seasonings, pickles, and other food accessories, designed to shock the taste buds.

Individual variations in the sense of taste have also been stressed by Williams (3) who summarized several studies on this subject. In one instance, the taste thresholds of 47 individuals to 17 substances were noted. Wide variations were observed. For one individual, saccharine was only 32 times as sweet as sugar; for another it was 2,000 times as sweet. For one subject, quinine was 256 times as bitter as cascara; for another, quinine was only half as bitter as cascara. One person could not tell the difference between the taste of quinine and hydrochloric acid. One substance (phenyl thiocarbamide) which was given in moderately concentrated solution to 6,377 people, (Blakeslee, as cited by Williams) was pronounced tasteless by 21.3 per cent, bitter by 65.4 per cent, sour by 5.4 per cent, salty by 4.8 per cent, and sweet by 2.1 per cent. The remaining one per cent could not be fitted into any category, since, according to them, the substance was described as "astringent," "like lemon," "like rhubarb," "like cranberries," or "like vinegar."

Furthermore, the same foods may taste different to the same person on different days. The taste threshold varies from time to time. Williams suggests that this variation appears to respond to changes in internal physiology. Williams also calls attention to the phenomenon of "psychological conditioning," which is responsible for some children noting the taste of castor oil or cod liver oil in orange juice because these substances have been given to them together.

If people differ so much in their taste of food, perhaps we should be wary of setting rigid taste standards, and more tolerant than we are

... a wide variation in
sensory response!



toward people whose reaction to a food differs from ours. The acceptance of many foods may be improved if the seasoning is mild and people are allowed to add seasonings as desired. If we hold to rigid standards for flavor or texture we may defeat our purpose of increasing the consumption of important foods.

FATIGUE OF SENSE ORGANS AS A FACTOR IN FOOD ACCEPTANCE

Food loses much of its interest when we cease to register perceptions of it. The ease with which sense organs are fatigued or dulled may be as important as variations in the sensation itself. The continuous sniffing of bread from 1 to 4 minutes is sufficient for some



When children dawdle with their food . . .

people to lose their perception of the odor (2). Here again, people differ in the rate of responses. When children dawdle with their food, the practice of requiring them to sit with the plate of food under their noses for an interminable period of time seems ill advised. A revival of interest in the food is improbable, and unpleasant associations with it may result in a permanent dislike for it.

Interest in food may be sustained by protecting the sense organs against fatigue. Alternating strongly flavored foods, such as meat, with mild ones, such as bread and potatoes, is effective in prolonging the enjoyment of eating. When strongly flavored foods are not accepted, the contrast with milder ones may change the picture.

In a study of the acceptability of foods served in the school lunch in a west Texas school, cabbage slaw was the least popular salad. Its acceptability was increased by adding milder substances, especially

apples. When students are expected to eat such foods as strong vegetables, suitable accompaniments of mild flavor can reduce fatigue of the sense organs.

INFLUENCE OF TEXTURE UPON ENJOYMENT OF FOOD

The extreme sensitivity to textural differences is another factor to be considered in the acceptance of foods. From early times people have desired smooth food. Renner points out that "pestle and mortar" was an ever-present piece of equipment of ancient times. Today many gadgets have been devised to produce textural improvements, such as the meat chopper, the electric mixer, and the electric blender. Manufacturers spend large amounts of money to produce foods with smooth, creamy textures.

Undesirable reactions to food are often brought about either by unpleasant particles left between the teeth or by scratchy sensations produced by slight roughness in the food. The skins of some foods may be actually unpleasant to some people. If objectionable textures of some foods are modified, aversions may be overcome and the range of food acceptance widened. For example, some people refuse celery, not because of its flavor but because of the "strings." When these are removed, it becomes an acceptable food.

PHYSIOLOGICAL CHANGES WITH AGE AS FACTORS IN FOOD ACCEPTANCE

The physiological changes in the taste buds as we grow older affect our choice of foods. Our knowledge of these changes with aging is meager, but it has been pointed out that there is a gradual disappearance of taste buds throughout life. According to Laird and Breen (4), taste buds, abundant in early childhood inside the cheeks and in the throat, disappear during adolescence until chiefly those of the tongue remain. In adulthood little change takes place until later years, when there is a decline both in structure and function of the buds. These physiological changes may help to explain changes in attitudes toward food as the individual passes from childhood to old age. The child may, indeed, have taste sensations very different from those experienced by older people with the same food. The experimental work of Laird and Breen indicates that the youthful disappearance of taste buds from the cheeks and throat is completed by the twelfth year.

In late adulthood, there is a noticeable shifting from the preference for sweet tastes to "tart, fruity" tastes. Women indicated their preferences for tart flavors even more than men, although as both groups grew older they desired fewer sweet foods. Laird and Breen comment, "Age apparently becomes sour in taste, if not in disposition."

CHEMICAL STATE OF BODY AS A FACTOR IN FOOD ACCEPTANCE

The extent to which the urge to eat or the selection of specific foods is influenced by the chemical state of the body is not known. The most basic drive for food is hunger. The pang of hunger has been thought to be caused by the contractions of the empty stomach. These, in turn, may be started by the level of various substances in the blood. Glucose, the primary fuel of the body, has been studied in this connection. The difference between the concentrations of glucose in the venous and arterial blood may trigger the hunger sensations (5).

Hunger and appetite are not the same. To satisfy the appetite is to be more selective than to satisfy hunger. In nutrition education, it is probably more important to understand the factors that influence appetite than hunger. Starved or semi-starved people generally appear interested in any kind of food. Filling the stomach is of major importance. In fact, under these circumstances, substances commonly disgusting or nutritionally valueless often satisfy. The main urge of the hungry person is to eat food which will make his stomach feel comfortable whether it is nourishing or not.

Research with rats has shown that the appetite can be astonishingly accurate in selecting the food most needed. Richter (6,7) and his associates found that rats subjected to conditions which profoundly disturbed their metabolic process showed a marked ability to select the substances needed. The well-known craving of cattle for salt may drive them to the salt licks. Chickens are said to supply the need for calcium by eating the shells of eggs (8).

This relationship has not been established with human beings although there are some evidences of drives which have seemed to originate from body needs. Richter has stated that children with low blood calcium have been known to eat the plaster off their nursery walls in an apparent attempt to make up for their deficiency. Macy (9) has observed that some children whose dietaries were poor had an abnormal craving for sweets. But fortunately, as their diets were adjusted to meet body needs, they voluntarily reduced their sugar consumption. However, more often than not, appetite appears to lead human beings in erroneous ways. We crave sweets, pie, cake, or rich main dishes which in most cases we do not need.

EMOTIONS AND EATING

The psychological aspects of food acceptance represent an area in which much information is needed. Graubard (10) has said, "Food lies more in the realm of psychology than in the sphere of biology or even in economics." According to him, the establishment of sound food habits implies some knowledge of the psychology of eating, of the

past record of man's attitude toward food, and of the social factors influencing the choice of food. He adds, "Repeating nutritional truths without regard to these forces is like singing of spring in the dark of a winter storm and expecting flowers to blossom forth on the spot." Bruch (11) has pointed out that the feeding situation is the first interpersonal experience, and she also uses Bettelheim's expression in speaking of food as "the great socializer," which often serves as the first line of contact for the child with someone in the new environment. It is not surprising, therefore, that an infinite variety of "nonnutritional uses" of food develops. She further states that any type of



Joe enjoys his food!

emotional problem may be expressed or acted out through overeating: demand for love and affection, defiance, helpless submission, or self-contempt (11). Interestingly enough, for the same reasons food may be rejected.

Keeping the proper perspective on food and eating is vital to health and happiness. Although eating should be a pleasurable experience, care should be exercised in the use of food as a reward or punishment, or as a means of cementing friendships, particularly with young children.

In order to understand the food practices of an individual, one must understand what food means to him. To Bill, food at the "training table" will make him into a successful athlete. Lois may eat, or not eat, to have a beautiful figure. To Mary, the food she eats, or does not eat, may symbolize personal independence. Sue may obey authority and eat the food she is expected to eat. Joe may eat simply because he enjoys it. John may follow his gang in order to have a feeling of belonging. Jim may enjoy new experiences with food but Ruth may feel more secure when eating the food to which she is accustomed.

INFLUENCE OF OTHER PEOPLE UPON ACCEPTANCE OF FOOD

Many individuals would rather depend upon their group in making food choices than to be independent. Foods may taste better when they are eaten with friends. "Belonging" gives more satisfaction than eating an adequate diet to most children (and even to some adults). Studies of the influence of others upon what an individual eats have revealed this.

Working with a group of nursery school children, McCarthy (12) observed that 35 per cent of their aversions could be traced to food dislikes in the family. The nursery school youngsters more often had food dislikes identical with those of their sisters and brothers instead of those of their parents.

Dunker (13) noted a considerable tendency for nursery school children in London past the age of about three years to follow others in their selection of foods in a test situation with six different foods. The young child followed the example of the older child more often than the reverse. The tendency was pronounced when a high degree of friendship existed between the two children being observed. Imitation of adults in the selection of food by the children was not marked.

Teachers are in a unique position to influence children's food practices when a free choice can be made. If you identify leaders of a group of children and get them to try "new" foods in the classroom or the school lunchroom, many other children may do likewise.

FOOD PREFERENCES AMONG SCHOOL CHILDREN

As part of a study of nutrition education in Iowa, Adams (14) discovered which foods students in one school district (*a*) liked and would always eat, (*b*) would eat but did not enjoy, (*c*) disliked and would not eat, and (*d*) had not tasted. The data were collected by a questionnaire adapted to Iowans by Adams from a comprehensive list of foods used by Irene and Calvin Hall (15). Common methods of preparation were listed for each food.

Vegetables

Thirteen of the 31 vegetables listed in the questionnaire were accepted in some form by at least 75 per cent of students in the study; seven were accepted by more than 90 per cent of the group. The seven most acceptable vegetables were potatoes, carrots, lettuce, cabbage, peas, tomatoes, and celery. With the exception of potatoes and peas, all of these were much more acceptable raw than cooked. The other six vegetables accepted by 75 per cent or more of the group studied were corn, string beans, radishes, cucumbers, onions, and sweet potatoes.

Unfamiliarity was given more often than dislike as a reason for

rejecting the 18 least acceptable vegetables. More students had not tasted 14 of the 18 vegetables than had tasted and disliked them. On the other hand, more students had tasted and disliked peppers, spinach, asparagus, and beets than had refused to taste them. Age level made no difference in the acceptance or rejection of vegetables.

It would seem that one way to increase acceptance of vegetables would be to plan education so that students would have opportunities to taste unfamiliar vegetables and would be encouraged to eat them. In the lower grades students might prepare, serve, and eat some of these vegetables in order to extend their experiences. A plan for introducing these vegetables through the school lunch might increase acceptance if students participated in making the plan and were willing to taste those with which they were unfamiliar.

When young people begin to eat meals away from home where others will not cater to their preferences and aversions as their mothers may have done, the disadvantages of liking only one or two vegetables will be more evident. If children could know the nutritive contributions of the different kinds of vegetables, they might be more willing to try them.

Fruits

The acceptance of fruit by the 168 students in the study was much higher than the acceptance of vegetables. Every fruit except gooseberries was accepted by 75 per cent or more of the students. Apparently children in this study were willing to eat fruit if it was available.

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Meats, Poultry, Fish

Pork, beef, poultry, miscellaneous meats, fresh fish, and canned salmon would be eaten by more than 75 per cent of the students in the study. More students said that they had not tasted lamb and veal than had tasted and disliked them.

Only three of the organ meats listed in the questionnaire would be eaten by 50 per cent of the students. Liver was the most acceptable. About half of the students had never tasted brains and more than half of them had never tasted sweetbreads or kidney.

The miscellaneous meats listed were frankfurters, luncheon meats, minced ham, and bologna. All of these were well accepted. The percentage of students who liked these meats increased with their age level.

Apparently then, acceptance of meat was not a problem. Cost might influence the amount of meat served by families with low food budgets, but the children liked the relatively inexpensive miscellaneous meats.

Dairy Foods

Cheese, cream, and available forms of milk were included in the category of dairy products. Eighty-eight per cent or more of the students indicated that they accepted fresh whole pasteurized milk and fresh whole raw milk, chocolate milk, and American cheese. Five per cent or less of these students said that they had tasted these dairy products but would not eat them.

Other dairy foods such as cottage cheese, cheese spreads, whipping cream, skim milk, and buttermilk were accepted by fewer children. These foods were unfamiliar to a larger proportion of the group.

Inadequate amounts of milk in the diets of only 12 per cent of the students in this study were due to dislike for it. Possibly milk was not available to some children, either because of its cost or because other beverages were preferred in family meals or snacks.

Eggs

Eighty-seven per cent of the students would eat eggs in some form. Fried, hard- or soft-cooked, deviled, and scrambled eggs were most popular. Creamed eggs, omelet, and baked eggs were accepted by less than 60 per cent of the group. Three times as many children reported they had never tasted eggs prepared in these three ways as reported that they would not eat them.

Bread and Cereal Products

Bread and cereals were well accepted by the students in this study, with the exception of soy bread, cooked whole-wheat cereal, corn-meal mush, and fried mush. All prepared cereals listed in the questionnaire were popular with 83 per cent or more of the children. They did not

care for cooked cereal, except for oatmeal, which 80 per cent of the children said they would eat. A total of 70 per cent of the children said they would eat rice. Noodles, macaroni, and spaghetti were acceptable to more than 75 per cent of the students when served either creamed, with cheese, or combined with tomatoes.

Desserts

Desserts were popular with students in the study by Adams, as might be expected. Only three children did not like ice cream and chocolate cake, and all had tasted these foods. All of the group liked white cake and sugar cookies. Generally, puddings were more popular than



Desserts were popular!

custard. Ninety-three per cent of the group would eat gelatin desserts, butterscotch and chocolate pudding. Only 78 per cent would eat baked custard and only 79 per cent custard pie.

Summary

Varying numbers of foods from the different food groups were accepted by the boys and girls in Adams' study; no food group was completely rejected. Some green or yellow vegetables were eaten, if served raw or in another acceptable form. Generally, fruits were well liked. Meats were popular. Fresh whole milk was readily accepted. Eggs, in some form, were eaten by a large majority of the students. Most of the bread and cereals were well accepted. Desserts were popular.

ACCEPTANCE OF FLAVORS AND TEXTURES

Irving (16) studied the acceptance of foods by students in five schools drawn at random to represent independent and consolidated

school districts of Iowa. She wanted to discover whether there were differences either among grade levels or between sexes in the acceptance or rejection of four food groups: (1) foods rich in vitamin C, (2) green and yellow vegetables, (3) milk and milk products, (4) eggs. These food groups are the ones most likely to be inadequately represented in the diets of school children.

The popularity poll among the four food groups resulted in the following percentages of children accepting them: eggs, 90 per cent; foods rich in vitamin C, 89 per cent; green and yellow vegetables, 87 per cent; and milk and milk products, 80 per cent.

When differences between acceptances of each of the four food groups by boys and girls were analyzed, it was found that a larger proportion of boys than of girls accepted milk and milk products, and contrary to some of the other studies, more boys accepted green and yellow vegetables.

Another purpose of Irving's study was to discover whether there were differences among grades or between sexes in the acceptance or rejection of foods because of certain flavors or textures. A jury of four faculty members from the Food and Nutrition Department of Iowa State College was asked to classify a large list of common foods according to flavor as (1) mild, (2) strong, (3) highly seasoned, (4) sweet, or (5) sour, and according to texture as (1) soft, (2) firm, or (3) crisp.

In this same study sweet foods were liked best and strongly flavored foods, such as turnips, spinach, broccoli, and Brussels sprouts, were liked least. Strongly flavored foods were accepted more by the boys than the girls in the study. Mild-flavored foods were more popular with the girls than with the boys.

More older (grades 9 and 10) than younger (grades 5, 6, 7, 8) children in the study said they would eat strong or mild foods. The youngest children (grades 3 and 4) would eat both firm and soft foods, but dislikes for soft foods were found in grades 5 and 6, and for firm foods in grades 7 and 8. The students did not differ in their acceptance of sour or crisp foods.

Possibly children's diets could be improved if preferences for certain flavors and textures were considered. Most foods can be modified in flavor by seasoning and combining with other foods; textures can be modified by processing if raw foods are not acceptable. Actually children often prefer raw to cooked vegetables and fruits.

Since preferences for flavors and textures change as some children grow, it would seem wise to avoid trying to force the acceptance of disliked foods at any one time. When resistance to eating a food is built up, the food may be rejected later even when its texture or flavor has become acceptable.

SEX DIFFERENCES IN FOOD ACCEPTANCE

In another study, women were found to be familiar with more foods than were men, but also they had more food dislikes. This was reported by Hall and Hall (15), who made an analysis of food acceptance among 693 students (215 men and 478 women) in Western universities. A check list of 150 foods was used.

In 1943, Wallen (17) prepared a list of 143 foods which was presented to 308 women and 237 men. Considerable uniformity existed in the foods disliked; for a small proportion of items, however, there were reliable differences. In most cases where sex differences occurred, a larger proportion of females than of males disliked the food. The investigator suggested that these differences may be associated with

Women had more food dislikes.



social pressures operating in the early years of life. Little boys are expected to refrain from tears, stand discomfort "like a man," and refuse to shrink from new experiences. Little girls' reactions, on the other hand, are viewed with a more permissive attitude; the tendency to discourage timidity is less pronounced.

Wallen found that internal organs are highly unpopular as food, and foods conspicuously disliked by all groups were buttermilk, Limburger cheese, and pigs' feet. Foods for which few people had aversions were orangeade, lettuce, grapes, pears, and plums.

Combining age and sex, McCluney (18) studied the food likes and dislikes of 250 persons in a Texas community. Her subjects were grouped as follows: 25 males and 25 females from fifth grade, eighth grade, high school, college, and adults. In each group except the eighth grade, the dislikes of the females exceeded those of the males. The eighth grade children, both boys and girls, had a conspicuously large number of food dislikes. This observation is of interest in connection with the previously mentioned change in taste buds at the age of twelve, and the marked decrease in nutrient intake of girls of this age, as noted by Eppright *et al.* (19). At all ages only a small proportion of the foods was merely accepted; foods were either liked or disliked.

Although the list was composed of 175 fairly common foods, a surprisingly large percentage was unfamiliar. Foods unknown to the

largest number of subjects were found among the green and yellow vegetables and the meats. This and other studies suggest that with many people, the range of familiarity with foods is limited.

PREFERENCES OF IOWA PEOPLE OF TWO AGE GROUPS

A study was made of the food habits and preferences of two groups of Iowa people, the 17- to 19- and the 46- to 58-year-old men and women (20). The information, obtained through personal interviews, consisted of daily menus and answers to a questionnaire designed to determine the degree of preference for food items and groups.

Food preferences and practices were found to be closely related. Preferred menus, *i.e.*, menus given as those desired if there were no restrictions of any kind, did not differ markedly from the actual. In general the backbone of the diet was meat, bread, potatoes, dessert, and beverage other than milk, and this is the plan which people prefer.

Differences in attitudes toward food were noted with age, sex, place of residence, and probably with national origin. Milk was preferred and used by many more of the younger than of the older people. Eggs were more highly favored by older than younger people. Women favored vegetables and fruits and used them more frequently than men. In the groups studied, food dislikes were more prominent among older men and younger women. Zest for food seemed greater for people of the open country than elsewhere. Attitudes toward foods varied somewhat with nationality. Scandinavians, in particular, differed from other groups in their preferences for many food items, and furthermore, showed signs of adhering to customs and habits of their ancestors.

Foods that provided variety to the diet and foods that were considered healthful were more frequently among the less popular than among the well-liked foods. Older people more than the younger people thought of the health aspects of food; younger people more frequently mentioned flavor as a reason for liking a food. The qualities most frequently mentioned in connection with well-liked foods referred to flavor ("tastes good") and satiety value (expressed as "satisfying and filling"). Odor was mentioned as an unfavorable quality of food but seldom as a favorable one. Color and texture were infrequently mentioned as reasons for preference.

Meat as a class of food was very popular; 96 per cent of these Iowans had meat in their daily menus. More people, however, would like meat at all meals than had it. Chicken was probably the best-liked meat by the two age groups of Iowans, with certain cuts of beef

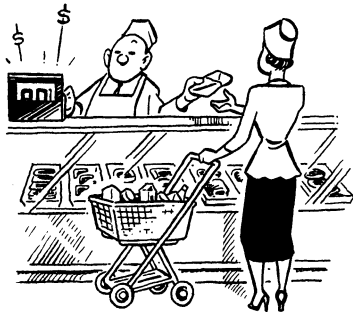
next, and pork liked least of the three. Lamb was rated as well liked by less than 10 per cent and was actually disliked by about one-half. Organ meats were highly unpopular, and fish well liked by only about one-third of the respondents. Turkey was less well-liked than chicken particularly in some nationality groups. Cut of meat made a difference in preference. Beefsteak was more popular than roast, and stew less popular than groundbeef.

Eggs were more highly favored than milk but less well liked than meat. They were used more frequently at breakfast than at other meals. More people would like them at breakfast than had them. They were more likely to appear at the evening meals of people in the open country than in urban places. As the size of the group eating together increased, the use of eggs in the evening meal tended to decrease. The use of legumes as a substitute for meat and eggs was apparently accompanied by a loss in appetite appeal.

Green and yellow vegetables as a class were well represented on only 43 per cent of the daily menus. Half of the people considered them very good and only 2 per cent disliked the group as a whole. Attitudes varied widely with the different vegetables in this class. Mild-flavored ones seemed more acceptable than strong-flavored ones, such as peppers, turnip greens, and broccoli. These vegetables, when served, were usually an accompaniment of the main meal of the day. Sixty-one per cent of these Iowans had three servings a day of other vegetables. Sweet corn and Irish potatoes were best liked by most people. Irish, or white, potatoes were much more popular than sweet potatoes.

The food group consisting of citrus fruits, tomatoes, melons, and raw cabbage was included to the extent of one serving a day in the meals of 53 per cent of these Iowans. More than half of the people consider these foods very good. Salads, which appeared in only about

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... than had it!



25 per cent of actual noon and evening meals, were listed more frequently in the preferred than in the actual meals. Fruits and vegetables were regarded as a health-giving group of foods and were liked because of their flavor. With fruits in general, however, the nonacid and dried were less popular than others.

Only 28 per cent of the people used 2 cups or more of milk per day. Use of milk in prepared foods was also very limited. As a beverage it was used least often at breakfast and with about equal frequency at noon and evening meals. The most conspicuous difference observed in this study was between the two age groups in their use of milk; 58 per cent of the younger but only 20 per cent of the older subjects had the commonly accepted standard of 2 cups a day. The preference for milk was not great; in fact, if people represented in this study could have just what they wanted, few would have more milk. Few people, however, actually disliked it. The chief characteristic mentioned by the respondents was that it is a healthful food. One of the problems involved in education for use of milk is that it is age-linked, since people usually think of it as food for the young. Furthermore, it is often thought to be fattening.

In contrast to milk, butter was one of the most highly favored foods. Cheese was rated lower than milk in appetite appeal, and was used by no more than 10 per cent of the people at the noon or evening meals.

As observed in the Iowa studies, the attitudes of children toward food are much like those of their elders. This study of Iowa older youth and adults therefore suggests important considerations in efforts to change the food habits of children.

OTHER STUDIES ON ATTITUDES TOWARD FOOD

Some groups of food seem less popular than others the country over. Young and her associates studied food dislikes among 645 homemakers in Rochester and Syracuse, New York (21). Here, as in Iowa, by far the most frequently disliked group of foods was vegetables. Twenty-six to 30 per cent of the families had dislikes in this group. Next was the group of meats described as non-beef, followed by organ meats and fish or sea food. The principal disliked vegetables were much the same as noted in Iowa; and in the order of expressed dislikes were turnips, squash, spinach, and cabbage; cauliflower, sauerkraut, and eggplant; parsnips and Brussels sprouts; broccoli, carrots, and asparagus.

These authors point out that, in this study, nutritionally important foods as milk, beef, citrus fruits, and many vegetables were not disliked by a single family. They question the significance of

food dislikes as a factor related to the adequacy of the intakes of most individuals. Again it was noted that people are generally unable to verbalize their reasons for food dislikes.

That food dislikes do enter into the family diet was shown in a Virginia study in which one-third of the urban families and two-thirds of the rural families reported foods not served because they were not liked. In this study too, vegetables were the foods most mentioned as disliked.

Increasing the popularity of vegetables would seem to be one of the very important measures for improving the diets of the people of this country.

GOOD NUTRITION MAY REQUIRE FEW CHANGES

There are many dietary patterns that can result in adequate nutrition. The milk-meat-vegetables-salad-dessert pattern popular in upper-middle class American homes is only one way to secure an adequate diet. Why should we impose this pattern on others? The goal of nutrition education is to have meals which contain all essential nutrients in desirable amounts. If you would teach the student to identify the weaknesses in his home food pattern and to modify them until meals are nutritionally adequate, you would probably have better results and greater satisfaction to both the student and the teacher. Barriers to change would thus be lowered.

Contradictions characterize the psychological reactions to food. Monotony in food is a frequent cause for discontent. "Something different" has a strong appeal. Ventures in eating new dishes are welcomed—even sought. Yet, in general, people are reluctant to change their accustomed ways of eating, particularly when it comes to mainstays of the diet, such as bread, meat, and potatoes. This principle has been variously expressed: "That to which we are accustomed seems natural, while the strange seems unnatural and undesirable." "We like what we eat, rather than eat what we like." An old German proverb states, "What the peasant does not know, he does not eat."

G.I. Joe, it was stated, did not go in for new taste sensations. Thus the fellow from Mississippi complained that it was a pretty sorry meal when you didn't get rice or grits along with your potatoes. The young man from Tennessee wanted to know just how you could get along without some sort of hot bread to stick to your ribs, and the gripe of the North Carolinian was that he had never yet tasted vegetables which were not cooked with a ham hock or salt pork and he wasn't going to start now. Probably in most instances the men finally became accustomed to the Army food. In many cases they have actually preferred the new foods to their previous diet. It would seem then

that a liking of more foods could result from trying new foods until they become familiar.

PEOPLE CAN EAT FOR PLEASURE AS WELL AS FOR GOOD NUTRITION

Possibly when educators and parents have tried to be scientific about nutrition, they have taken the zest out of eating. One's reaction to trying a new food is likely to be different depending upon whether the appeal is to eat something because it is "good for you" or because it is "good to eat."

Much more needs to be known about why people like and eat certain foods and do not eat others. There is some information about rejected foods, but reasons for rejections have not been determined adequately. Not having tasted a food seems to be responsible for failure to eat it at least as often as actual dislike for it.



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