CONSUMER REACTIONS to "ALAYAM" CANDY

A Nation-Wide Acceptance Test of a New Type of Cocoanut Brittle Made of Sweetpotatoes



AGRICULTURAL EXPERIMENT STATION of the ALABAMA POLYTECHNIC INSTITUTE

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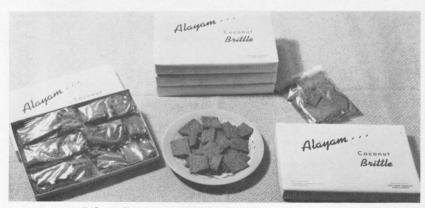
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"Alayam" Cocoanut Brittle — a sweetpotato product

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INTRODUCTION

During the last decade, considerable attention was focused on the sweetpotato industry in the United States. Beginning in 1941 and 1942, and continuing to the present, commercial exports and shipments of sweetpotatoes increased in importance. New and improved methods of processing sweetpotatoes through dehydration, canning, and manufacture of starches were accelerated. During this same period, an increase in military demand for sweetpotatoes occurred. Despite all of these factors, however, the annual carry-over of sweetpotatoes during the last decade differed little from that of 20 to 30 years earlier.

Total annual production and consumption of sweetpotatoes

Total annual production and consumption of sweetpotatoes averaged about the same during the last decade as during the 1909-19 period. Per capita consumption, however, failed to keep pace with increases in population. For the United States as a whole, consumption declined during the last three decades from 26 pounds per capita in 1909 to 14 pounds per capita in 1949.

Production and consumption of candy in the United States greatly increased during this period. During the last two decades alone, per capita consumption of candy increased from less than 15 pounds in 1927 to more than 19 pounds in 1947. There was an unprecedented increase in the demand for candy in the United States during the period of World War II. Because of rationing and other government-controlled programs during that period, the confectionery industry was unable to supply the demands of consumers.

^{*} The research on which this report is based was made possible by funds provided by the Agricultural Research and Marketing Act of 1946. The Department of Agricultural Economics, Alabama Agricultural Experiment Station, assumed major responsibility for conducting the study under provisions of a cooperative agreement between the Alabama Agricultural Experiment Station and the Bureau of Agricultural Economics, United States Department of Agriculture.

Beginning in 1942, a research project at the Alabama Agricultural Experiment Station on development of new products from sweetpotatoes¹ for food uses placed major emphasis on the possibilities of developing candies that would require less sugar in manufacturing and that would also possess a higher nutritional value than most candies currently on the market. These efforts resulted in the development of a number of different candies derived from sweetpotatoes.²

One of the more promising of these new candies was a cocoanut brittle — a product made from sweetpotato puree, finely ground cocoanut, and sugar. This product was not subjected to comprehensive consumer acceptance tests when first developed, and therefore little was known of its potential market possibilities.

In view of the recent trend in per capita consumption of candy, an opposite trend in per capita consumption of sweetpotatoes, and the realization that candy could be made from sweetpotatoes, it appeared that additional research on this problem might be profitable both from the standpoint of farmers as producers of the raw product and of consumers as users of the finished product.

This is the first of a series of reports that present results of a nation-wide consumer acceptance test of several new food products made from sweetpotatoes. This particular report deals with "Alayam" candy. It is concerned primarily with the over-all problem involved in measuring whether a candy of this type, made from sweetpotatoes, would be accepted by the consuming public. Upon the results of this and other similar studies will depend, in large part, the type of work to be carried on with other sweetpotato food products. These results also will determine largely the extent to which additional research on this particular product will be undertaken.

¹ For a detailed discussion of the development of these products see L. M. Ware, "Nature of Alayam Products," Sweet Potato Journal, December 1946.

² For a detailed description of these candies, their properties, et cetera, see Mildred S. Van DeMark and L. M. Ware, "Candies from Sweet Potatoes," Sweet Potato Journal, March 1947.

⁸ The word "Alayam" is a coined word devised to represent the words Alabama sweetpotato ("Ala" for Alabama and "yam" for sweetpotato). It was first used as a brand name to apply to all specialty food products developed by the sweetpotato food research projects of the Alabama Agricultural Experiment Station during World War II. It is used in this report to distinguish the product tested from all other types and kinds of similar products.

⁴ Concurrent with this study, technicians on production and manufacture have been working on the problems involved in the development of continuous or semi-continuous processes to manufacture the product. All previous manufacturing, including the manufacture of sample products used in making this test, has been done on a pilot-plant basis.

DESCRIPTION OF "ALAYAM" CANDY

The "Alayam" candy used in this test was made by combining equal proportions, on a dry-weight basis, of sweetpotatoes, cocoanut, and sugar. The finished product was essentially a cocoanut brittle. Its final flavor was a rich blend of cocoanut and caramel. A wide variety of flavors may be obtained by adding different kinds of fruits to the basic ingredients of the product, thereby blending fruit flavors with the cocoanut and caramel flavors already present.

In manufacturing the candy, sweetpotatoes were prepared by washing, trimming, baking, peeling, and pulping. This process resulted in a smooth, well-colored puree, free of fiber, and with a moisture content of approximately 60 per cent. The puree was used immediately, or was frozen and stored at 0° F. and used as needed. Cocoanut was prepared by grinding it finely enough to pass through a 20-mesh screen. Grinding of cocoanut was best accomplished by a cutting operation. Fruits, when used, were prepared in the same way.

The prepared ingredients, including the sugar, were thoroughly mixed and blended by passing them through a pulper screen. The mixture was then loaded on trays by an extrusion operation, dried, and toasted to a moisture content of approximately 2.5 per cent. Drying and toasting was done in an oven at a temperature of 270° F. with air circulated at a velocity of 1,000 feet per minute.

The product was dried and toasted in the form of ribbons or strips, approximately 1½ inches wide and ½ of an inch thick, extending full length of the trays on which it was extruded. During the process of unloading from trays and preparing for packaging, the candy was broken into odd lengths and irregular shapes.

The product was packaged in heat-sealing duplex cellophane bags containing approximately 4 ounces of "Alayam" candy per bag. These containers were approximately 7 by 3¾ by ¾ inches in size. Because these containers had no markings or coloring on them, respondents were able to see the product even before opening the sample package.

The "Alayam" candy tested was golden-yellow in color with a slight brownish tinge. This brownish tinge, together with the crisp texture, was developed during the final stage of toasting.

When packaged in moisture-proof containers, the shelf-life of "Alayam" candy is exceptionally long. When exposed to the air,

however, the product absorbs moisture readily and soon loses its crispness.

DESIGN AND SIZE OF SAMPLE

This study was designed as a nation-wide consumer acceptance test. The consumer panel approach was used in selecting the consultants who cooperated with this phase of the study.⁵ The sample was drawn to represent three major geographic areas — the area east of the Mississippi River and north of the Ohio, the Census South, and the remainder of the United States — so that, when regional tabulations were combined by differential weighting, they would be representative of United States total tabulations. The sample was drawn so that the total expected returns for the northeastern region would be not less than 475, and for the southern and western regions not less than 450.

Of the 1,620 questionnaires mailed to consultants comprising the sample, 1,343 were returned in usable condition. Regionally, the number of returned usable questionnaires totaled 470 in the northeastern area, 421 in the southern area, and 452 in the western area. Differential weighting to bring these area totals into their proper relation with the United States as a whole was necessary. Weights⁶ applied to area totals were 101.0 for the northeastern area, 106.9 for the southern area, and 99.5 for the western area.

The questionnaires returned from these 1,343 households represented a total of 3,525 individual testers for the United States as a whole. By areas, the number of individual respondents totaled 1,276 in the northeastern area, 1,126 in the southern area, and 1,123 in the western area, Table 82. Differential weighting of area totals resulted in a weighted United States total of 3,610 individual respondents. The weights applied to the area totals of the number of individual respondents and the number of consultant families were the same, thus eliminating the effects of differences in size of families between the three areas.

The 1,620 consultant families used in the test were selected

⁵ Accomplished under provisions of a formal contract between the Alabama Polytechnic Institute, Auburn, Alabama, and National Family Opinion, Incorporated, Toledo, Ohio (a private research organization). This contract specified the conditions under which the sample of consultants would be drawn, the instructions to be given to consultants, the content and form of the questionnaire, etc.

⁶ The weights applied represent the difference between expected returns and actual returns of usable questionnaires from consultant families in each of the three major geographic areas.

from the nation-wide panels of consumer families maintained by National Family Opinion, Incorporated. These panels, which are interviewed by use of mail questionnaires, parallel the United States Census averages by geographic areas, places of residence and city size, age of homemakers, and annual family incomes.

The 1,343 consultant families that returned usable questionnaires were generally representative of the nation's consuming households. The percentage of usable questionnaires returned, as shown in Tables 82 through 86, indicates that the characteristics of responding and non-responding families were more or less similar, both in regard to geographic areas and to other measurable factors. Some differences, however, were noted between the consultant families returning usable questionnaires and the remainder of the sample. The data in Tables 82 through 86 indicate that the 17.1 per cent of families that did not return usable questionnaires possessed the following general characteristics: A greater proportion lived in the southern area than in other areas; and a higher percentage lived in cities of 500,000 or more population than in other places. A relatively greater number of the heads of these families had completed high school but had not attended college; and, by occupational status, they were mainly owners, partners, or proprietors, or were engaged in unskilled, semi-skilled, or service work.

OBJECTIVES OF THE STUDY

The purposes of this study were to ascertain on a nation-wide basis and by the designated geographic areas consumers' acceptance of a candy made from sweetpotatoes. In addition, consumer reactions and attitudes toward the candy tested were related to such factors as: (1) family incomes, (2) place of residence and city sizes, (3) sex and age of individual respondents, (4) educational status of family heads, and (5) occupational status of family heads.

A carefully pretested questionnaire was mailed to each of the testing families, together with detailed instructions for testing the product and for completing the questionnaire, to determine for each individual in the family (5 years of age and over) the following:

- 1. Background information for previous week (April 24-30, 1949)
 - (a) Frequency of candy purchases by individuals.
 - (b) Types of candy individual respondents bought.

(c) Kind of candy bought most often by individual respondents.

(d) Place of candy purchases by individual respondents.

(e) Frequency of candy consumption by individual respondents.

(f) Types of candy individual respondents consumed.

- (g) Reasons consumers buy different kinds of candy.
- 2. Consumer reactions and attitudes toward the "Alayam" candy tested
 - (a) Comparison of "Alayam" candy with the candies usually eaten by individual consumers.

(b) Reasons consumers liked or disliked the "Alayam" candy tested.

(c) Consumers' reactions to sweetness, general appearance, texture or quality, and flavor or taste of "Alayam" candy.

(d) Suggestions from consumers for the improvement of the general appearance, texture or quality, and flavor or taste of "Alayam" candy.

(e) Willingness of consumers to buy "Alayam" candy, and their reasons for buying or for not buying the product.

(f) Consumers' anticipated purchase of "Alayam" candy.

(g) Consumers' reactions to the size of the sample package, and their suggestions for a change in its size.

TIME OF TESTING

Testing took place simultaneously all over the nation. On April 29, 1949, samples of the candy, together with instruction sheets and questionnaire forms, were mailed to consultants. Background information on consumer purchases and consumption of candy "during the past week," therefore, refers to the week of April 24-30, 1949. The testing of "Alayam" candy was accomplished during a period of the year when sales of candy normally about equal the annual monthly average for the country as a whole.

SURVEY FINDINGS

This report, designed primarly to present results of a nation-wide consumer acceptance test of one type of candy made from sweetpotatoes, includes additional data that may be used in computing market potentials for this particular product. These data, however, lend themselves more readily to qualitative than to quantitative computations. The limitations on the use of these data in making quantitative estimates are obvious. In most cases, respondents cannot determine accurately what their reactions and attitudes will be or what they will do in the future.

In reading and studying the data presented herein, it should be emphasized that individuals tend to answer "yes" more often than "no" to questions that involve some degree of uncertainty.⁷ This is particularly true in answering questions such as those posed in consumer acceptance tests of this nature.

Purchasing Habits of Candy Buyers. In reply to a question as to frequency of candy purchases during the week previous to the test, the data in Table 1 indicate that nearly half of the respondents made no purchases during that period. A fourth bought candy only once; 2 in 10 made two or three purchases; while the remaining 1 in 10 bought candy four to seven times during the previous week.

The importance of bar goods as a type of candy is emphasized by the data shown in Tables 2 and 6. Three-fourths of the respondents who bought candy during the previous week reported that they bought some bar goods, while two-thirds of the total reported that they bought bar goods more often than any other kind of candy. Some respondents bought more than one type or kind of candy. In terms of types of purchases, bagged candy was nearly twice as important as boxed candy, Table 2, and chocolates were bought more often than hard candies, caramels, brittles, and fudges combined, Table 6.

More than half of all candy purchases reported for the week previous to this test were made from grocery stores, Table 3. Nearly 2 in 10 were made from drug stores and 1 in 10 from candy stores. Other important places where candy was bought included movies, cafes, dime stores, places of employment, schools, general stores, department stores, and candy machines.

Consuming Habits of Candy Eaters. In reply to a question as to frequency of candy consumption during the week previous to this test, the data in Table 4 indicate that nearly a third of the respondents consumed no candy during that period. Fifteen per cent reported that they ate candy every day during the previous week. Almost as many reported that they ate candy 2 days; 12 per cent, 3 days; and 10 per cent, 1 day; the remaining 15 per cent ate candy either 4, 5, or 6 days during that period.

A comparison of the data in Tables 1 and 4 indicates that a large number of the respondents who are candy did not buy candy during the previous week. These data also indicate that the

⁷ "The product (if placed on the market) may be better or worse . . . than anticipated. A competing product of superior quality may appear. Or the prospective users may have more or less money than anticipated." Paul D. Converse, "Determining Potential Demand for a New Product," Current Economic Comment. University of Illinois, Urbana, Illinois. Volume 11, Number 2, May 1949.

number of individual purchases were less frequent than the

number of days the product was eaten by individuals.

Results in Table 5 indicate that the relative importance of the different types of candy eaten by respondents during the previous week was generally the same as that of the types of candy bought by respondents during the same period.

Reasons Consumers Buy Different Kinds of Candy. Respondents who bought candy during the week previous to this test indicated that their principal reason for buying the candy they most often purchased was that it was their favorite kind of candy. More than a fifth of the candy purchases was made because of convenience or availability of the product; an eighth was made because respondents usually preferred chocolates; while a tenth was made mainly because of the product's sweetness or because of its flavor or taste. Other reasons were of lesser importance, Table 7.

The relative importance of the reasons reported by respondents who bought different kinds of candy varied widely between different kinds of products. Convenience and availability were of greater importance for bar goods and for brittle and hard candy buyers than for buyers of other kinds of candy. Sweetness of product and flavor or taste were of greater importance for caramel and fudge buyers than for buyers of other kinds of candy. Nearly a third of those who bought chocolate candy did so simply because they preferred it to any other kind available. Variations in these and other factors by kind of product are shown in Table 7.

Comparison of "Alayam" Candy with Other Kinds of Candy. In comparison with the kinds of candy most often bought by respondents during the week previous to this test, respondents' reactions were more favorable toward "Alayam" candy when compared to brittles and hard candies than when compared to other kinds of candy. Part of this reaction, however, may be attributable to the similarity in texture, flavor, and taste of "Alayam" candy and many of the brittles and hard candies currently on the market.

Results in Table 8 indicate that more than half of the respondents who bought brittles or hard candies during the week previous to this test liked the "Alayam" candy as well as or better than the products they bought. Less than 40 per cent of those who bought bar goods, chocolate products, and other kinds of candies liked the "Alayam" product as well as or better than the kinds they bought.

In comparison with all of the types and kinds of candies usually bought and eaten by respondents, 12 per cent of the respondents reported that they liked "Alayam" candy better, 30 per cent about the same, and 54 per cent less than the candies usually eaten. The data in Table 9 indicate that 42 per cent of all respondents liked "Alayam" candy as well as or better than the type or kind of candies they usually eat.

In reply to the question "Why do you like the sample candy better or less than the candies you usually eat?" respondents reported the same types of answers whether they liked the product better or less. For instance, some liked it better because of its flavor or taste; others liked it less because of the same reason, Table 10. The data in Table 10, therefore, should be carefully analyzed before forming a conclusion based purely upon the answers given to this question. In addition, it should be recognized that a high percentage of the respondents in each of these groups failed to report any specific reasons as to why they liked the "Alayam" candy better or less than other candies.

The 12 per cent of respondents who indicated that they liked "Alayam" candy better than the candies usually eaten listed their reasons for liking it better in the following order: flavor or taste factors, sweetness, texture or quality factors, and general appearance, Table 10. Forty-seven per cent of the respondents in this group gave no specific reasons as to why they liked this product better than the candies usually eaten.

The 54 per cent of respondents who liked "Alayam" candy less than the candies usually eaten gave their reasons in the following order: flavor or taste factors, general appearance, texture or quality factors, and sweetness, Table 10. Among individual comments from respondents in this group was "this candy looks too much like a cookie." This comment occurred among the reasons listed by more than 1 in 10. Thirty-seven per cent of this group gave no specific reasons for liking the product less than other candies.

REACTIONS TO THE SWEETNESS OF "ALAYAM" CANDY. Of the respondents who tested "Alayam" candy, 55 per cent indicated that the sweetness of the product was about right. Nearly a fourth of the total reported that the product was not sweet enough, while a tenth felt that it was too sweet, Table 11.

REACTIONS TO THE GENERAL APPEARANCE OF "ALAYAM" CANDY. For the nation as a whole, respondents were about equally

divided in their reactions to the general appearance of this product. About an equal number indicated that they liked the general appearance of "Alayam" candy, were indifferent to it, or did not like it, Table 12.

In reply to a question as to suggestions for improvement of the general appearance of "Alayam" candy, the points most frequently mentioned were: Need more uniformity in size and shape of product; make larger or thicker pieces; the product is too crumbly; make it look like candy; make it into bars; use chocolate coating; and make it uniform in color. Sixty per cent of those who tested the product made no definite comments or suggestions for improving its general appearance.

REACTIONS TO THE TEXTURE OR QUALITY OF "ALAYAM" CANDY. More than half of the respondents who tested this product liked its texture or quality. Nearly a fourth were indifferent in their reactions, while about a fifth said they did not like the texture or quality of this candy, Table 13.

In reply to a question as to suggestions for improvement of the texture or quality of "Alayam" candy, comments and suggestions mentioned most frequently by respondents were: The product is too grainy; it is too much like a cookie; it absorbs moisture easily when exposed to air; it is too hard or too brittle; the product is too crumbly; make it crisp or crunchy but not hard; and eliminate the cocoanut strings. About 8 in 10 of those who tested the product made no specific comments or suggestions for improving its texture or quality, while nearly 1 in 10 commented that the texture or quality needed no improvement.

REACTIONS TO THE FLAVOR OR TASTE OF "ALAYAM" CANDY. Half of the respondents who tested the product liked its flavor or taste, while nearly a third said they disliked the flavor or taste. The remaining respondents were either indifferent or reported no particular reaction to the product's taste or flavor, Table 14.

In reply to a question as to suggestions for improvement of the flavor or taste of "Alayam" candy, respondents replied as follows: Add more sugar; make it taste like candy; use chocolate coating; eliminate the product's peculiar flavor; add flavoring; use milder flavoring; add salt; eliminate the molasses flavor; and add nuts or butter. Two-thirds of those who tested the product made no definite comments or suggestions for improving its flavor or taste.

FLAVORS DETECTED IN "ALAYAM" CANDY. In reply to the question "What flavor do you detect most in this candy?" respondents

reported the detection of more than 15 different groups of flavors. Most of these, however, were related to the flavors of the actual ingredients of the product.

Two different flavors of the same product were tested. Both contained the same basic ingredients — sweetpotatoes, cocoanut, and sugar. In one flavor, a small quantity of orange-peel pulp was added for flavoring purposes only; this flavor is designated as "orange" in Tables 15 and 16. The other flavor, containing the basic ingredients only, is designated as "cocoanut" in Tables 15 and 16.

Fifty-five per cent of the respondents who tested the "cocoanut" product detected cocoanut as this product's dominant flavor, Table 15. Only 25 per cent of those who tested the "orange" product detected cocoanut as the dominant flavor in this product. Apparently the addition of the orange-peel pulp masked the taste or flavor of the cocoanut for a large number of the respondents who tested the "orange" product. Of the respondents who tested the "orange" product, 44 per cent detected orange, or some other related citrus flavor as the product's dominant flavor. Apparently a dominant flavor could not be detected as easily in the "cocoanut" as in the "orange" product; about a fourth of the respondents who tested the "cocoanut" failed to detect a dominant flavor, while only a fifth of those who tested the "orange" were unable to detect a dominant flavor.

Respondents were not informed that the "Alayam" candy tested was a product derived from sweetpotatoes; neither were they told that the product contained sweetpotatoes as an ingredient. The sweetpotato, however, was one of the principal ingredients of the product. Its effect upon the flavor of the product was apparently negligible. Only 1 per cent of the respondents who tested the "cocoanut" product reported sweetpotato as the product's dominant flavor, and less than 1 per cent of those who tested the "orange" reported sweetpotato as the dominant flavor in the "orange" product.

Ingredients Detected in "Alayam" Candy. In replying to the question "What ingredients do you detect in this candy?" respondents were asked to name as many ingredients as they could detect. The detection of more than 20 different groups of ingredients was reported. Most of these, however, were related to the flavors or possessed characteristics similar to the characteristics of the actual ingredients of the product.

Cocoanut was detected as an ingredient by nearly two-thirds of the respondents for both the "orange" and the "cocoanut" product, Table 16. Almost as many detected orange or some other related citrus fruit as an ingredient of the "orange" product, as those who detected the cocoanut in this product. A higher percentage of respondents detected sugar in some form in the "cocoanut" product than in the "orange" product.

Sweetpotato was detected as an ingredient by only 1 per cent of the respondents who tested the "orange" product and by only 2 per cent of those who tested the "cocoanut" product. Nearly twice as many respondents failed to report the detection of any ingredients in the "orange" product as in the "cocoanut" product.

RESPONDENTS' WILLINGNESS TO BUY "ALAYAM" CANDY. Of the respondents who tested "Alayam" candy, 38 per cent indicated that they would buy the product if it were placed on the market, Table 17. This does not mean that 38 per cent of the nation's purchasing consumers, as represented by this sample, would shift from all other types and kinds of candies to this particular product. It means only that 38 per cent of the respondents who tested this product felt, on the day that the test was made, that they would buy some of the product if it were available on the market at a fair price at that particular time. In addition, this 38 per cent might make only one purchase of "Alayam" candy out of any number of purchases of other types and kinds of candies. This is an indication of the probable percentage of consumers who might be expected to buy some of the product if it were placed on the market at a fair price and in competition with all other products of a similar nature. It does not indicate the size of such probable purchases, the frequency of purchases, or the attitude of respondents in regard to repeat purchases.

Respondents who reported that they would buy "Alayam" candy if it were placed on the market gave their reasons in the following order: flavor or taste factors, personal preference, texture or quality factors, sweetness, and general appearance, Table 18. Forty-one per cent of the respondents in this group reported no specific reasons for their willingness to buy the candy if it were placed on the market.

Fifty-one per cent of the respondents reported that they would not buy the candy if it were placed on the market. This 51 per cent is probably much more reliable as a market potential indicator than the 38 per cent who said they would buy the product, Table 17. Although for this 51 per cent, the answers reported represent an initial reaction to a new product that might be different at a later date, the chances of a change in consumer attitude and reaction is less likely to occur with this group than with the group of respondents whose initial reaction toward the product was favorable.⁸

Respondents who stated that they would not buy "Alayam" candy if it were placed on the market gave their reasons in the following order: flavor or taste factors, personal preferences, texture or quality factors, sweetness, and general appearance, Table 18. Typical and frequent comments from respondents in this group were: Dislike the product, prefer other types, does not look like candy, dislike the color, and not sweet enough. About a third of the respondents in this group did not indicate any particular reasons for their unwillingness to buy the candy if it were placed on the market.

RESPONDENTS' ANTICIPATED PRICE OF "ALAYAM" CANDY. Respondents who said they would buy "Alayam" candy if it were placed on the market reported a wide range in anticipated price to be paid for the product, Table 19. The sample package mailed to respondents for testing contained 4 ounces of candy. Respondents suggested that a package of this size should sell for about 10 to 15 cents. In reply to the question "Is the sample package (4 ounces of product) the approximate size you would prefer to buy at one time?" half of the respondents testing the product said the sample package was of satisfactory size, Table 20.

About a fifth of the total reported that the sample package was not of satisfactory size. This group was widely divided in its opinion as to the size of preferred package. About a fourth of the respondents in this group wanted a smaller "individual" package containing about 2 ounces of product, which respondents suggested should sell for about 5 cents. Another fourth of the respondents in this group wanted a package containing about 8 ounces of product, and still another fourth suggested a 1-pound package, Table 21. Nearly a third of the respondents who tested the candy failed to indicate whether the sample package was of satisfactory size.

⁸ Consumer preferences and consumer practices are often quite different. For a discussion of these possible differences see the statement on "Methodology" by the Demand and Consumer Preference work group reported in "Marketing Research Notes from National Workshop," Special Report, Agricultural Research Administration, United States Department of Agriculture. pp. 81-85. 1949.

VARIATIONS IN CONSUMER REACTIONS

Consumer reactions and attitudes are highly variable. There are differences from individual to individual. There are differences in the same individual from one time to another. There are differences due to changes in climatic conditions and in the seasons of the year. Because of the wide variability and the continuous and erratic rates of change in the differences in consumer reactions and attitudes due to factors of this nature, no attempt has been made to measure such factors or to relate them to consumer reactions and attitudes toward "Alayam" candy.

Certain measurable factors, which are less variable and of far more importance from the standpoint of appraising the immediate potential market possibilities of a product, were related to the consumer reactions and attitudes toward this product. These factors include:

1. Flavors of "Alayam" candy tested.

2. Major geographic areas of the United States.

3. Family income groups.

- 4. Place of residence, including city sizes.
- 5. Sex and age of individual respondents.6. Educational status of family heads.
- 7. Occupational status of family heads.

No attempt has been made to explain variations found to exist in consumer reactions and attitudes toward "Alayam" candy in relation to these several factors, or to explain why such variations occur as they do. The fact that wide variations exist indicates that no one product appeals to all consumers. In addition, the existence of these variations emphasizes the importance of recognizing them as major factors that will influence the potential marketing possibilities of this product.

Extreme caution should be used in evaluating the relationships found to exist between consumer reactions and attitudes toward this product and the several factors listed. It should be emphasized that results of this test merely indicate that such relationships do exist; they do not imply that these several factors are causes of these variations.

Further caution should be exercised in interpreting and evaluating the information reported by respondents. The reactions and attitudes reported by respondents should be considered only as a reflection of their initial reactions and attitudes toward the pro-

duct. These reactions and attitudes may be quite different at a later date.

Basically, the interpretations and evaluations of the data resulting from this test are left to those who wish to use the data in actually studying the present over-all candy situation and/or in studying the potential marketing possibilities of "Alayam" candy.

FLAVOR OF "ALAYAM" CANDY TESTED. Two flavors of the same type of "Alayam" candy were tested. Both contained the same basic ingredients with the exception that the product designated as "orange," Tables 15 and 16, had a small quantity of orange peel-pulp added for flavoring purposes only. The other product was designated as "cocoanut." Consultants were equally divided into two groups; one group received the "orange" and a second the "cocoanut" product. Each consultant family received only one product.

By analyzing the answers on the questionnaires returned by respondents, certain comparisons were made possible. The percentage of respondents who stated that they liked "Alayam" candy was slightly higher for the group that tested the "cocoanut" than for the group that tested the "orange." The percentage of respondents who said they would buy the product if it were placed on the market was also slightly higher for those who tested the "cocoanut" than for those who tested the "orange." Many of the respondents who tested the "orange" suggested the elimination of or a reduction in the orange flavor or taste of this product.

Major Geographic Areas of the United States. The data in Table 1 indicate that during the week previous to this test the percentage of respondents who bought candy was higher in the southern area than in other parts of the country. However, results in Table 4 indicate that the percentage of respondents who did not eat candy during that period was also higher in the South than in other parts of the country. In addition, the data in Table 4 indicate that relatively more respondents ate candy only a few days during the week and relatively fewer respondents ate candy every day during the week in the southern area than in other areas. Frequency of purchases by individuals are shown in Table 1 for the three geographic areas studied.

A smaller percentage of candy buyers in the northeastern area bought (Table 2) and consumed (Table 5) bar goods than in other sections of the country. Candy buyers in this area made relatively more purchases for bagged and boxed candies than did respondents in the southern and western areas, Table 2. In addition, candy buyers in the northeastern area made a higher percentage of their purchases for chocolates than did buyers in other areas, Table 6. They also made a larger percentage of their candy purchases from candy stores than did buyers in other areas, Table 3. Buyers in the southern and western areas made larger

percentage purchases from grocery stores.

Respondents in the southern area were more favorable toward "Alayam" candy than were respondents in the northeastern and western areas, Tables 9-14. The percentage of respondents who said they would buy the product if it were placed on the market was also higher for respondents in the southern area than for those in other parts of the country, Table 17. The prices that respondents in the southern area expected to pay for "Alayam" candy, however, were generally much lower than those reported by respondents in other areas, Table 19.

Family Income Groups. Considerable differences were noted in the percentage of respondents who bought candy (Table 22) and in the frequency of candy purchases (Table 22) and consumption (Table 25) between different levels of family income. These variations, however, indicated no significant relationship between candy purchases and consumption and family income. A smaller percentage of respondents from families in high-income groups bought and consumed bar goods than in low-income groups, Table 23. The proportion of purchases made for bagged and boxed candies was highest in the high-income groups, Table 23. In addition, a higher percentage of purchases in the highincome groups was for chocolates, Table 27. In buying candy, the percentage of high-income buyers who bought candy from candy stores was higher than that of low-income buyers, while the percentage who bought candy from grocery stores was lower than that of low-income groups, Table 24.

Respondents in the low-income groups were generally more favorable toward "Alayam" candy than were those in the high-income groups, Tables 28-32. The percentage of respondents who said they would buy the product if it were placed on the market was also higher for the low-income groups than for the high-income groups, Table 33.

PLACE OF RESIDENCE, INCLUDING CITY SIZES. No significant difference was found between residents of rural and urban areas in the percentage of respondents who bought candy (Table 34)

or in frequency of purchase (Table 34) and consumption (Table 37). A higher percentage of rural residents bought (Table 35) and consumed (Table 38) bar goods, while the percentage of rural residents who bought and consumed chocolates (Table 39) was lower than that of urban residents. The percentage of rural residents who bought boxed candy was much lower that that of urban residents, Table 35. The proportion of rural respondents who bought candy from grocery stores was higher than that of urban respondents, Table 36, while the proportion who bought candy from candy stores was lower than that of urban respondents.

Respondents who lived in rural areas were, in general, more favorable toward "Alayam" candy than were those living in urban areas, Tables 40-44. In urban areas, respondents of small towns and cities were, in general, more favorable toward the product than were those living in large cities, Tables 40-44. The percentage of respondents who said they would buy "Alayam" candy if it were placed on the market was highest for those living in rural areas, Table 45. In urban areas, this percentage was highest for those respondents living in small cities and towns and relatively lowest in large cities, Table 45.

SEX AND AGE OF INDIVIDUAL RESPONDENTS. A higher percentage of females than males bought candy (Table 46) possibly because the homemaker often bought for the entire family. Female respondents, however, bought candy less frequently than did male respondents, Table 46. More than a third of the males did not eat candy, whereas only about a fourth of the females did not eat it, Table 49. For those who did, however, females ate it less frequently than males, Table 49. Purchases by males were higher for bar goods, while those by females were relatively higher for all other types of candies, Table 47. Relative to male purchases, female purchases of chocolates, caramels, and hard candies were higher, Table 51. Relative to male purchases, female purchases were higher from grocery stores, candy stores, and dime stores, Table 48. Male purchases, however, in relation to female purchases, were higher from drug stores, movies, cafes, places of employment, and vending machines.

Female respondents, in general, were more favorable toward "Alayam" candy than were male respondents, Tables 52-56. The percentage of female respondents who said they would buy the candy if it were placed on the market was higher than for male respondents, Table 57.

For respondents who were 35 years of age or older, the percentage who did not buy candy was higher than for those who were less than 35, Table 46. Frequency of purchase by those who did buy candy showed no significant differences between different age groups, Table 46. Practically all of the purchases in the lower-age groups were for bar goods. The percentage of purchases for bar goods decreased from lower- to upper-age groups, while the percentage of purchases for bagged or boxed candy increased from lower- to upper-age groups, Table 47. The percentage of purchases for chocolates increased in relative importance from the lower- to the upper-age groups, Table 51. The percentage of respondents in each age group who bought candy from different sources varied widely for all sources. In general, the percentage that bought from these different sources showed no particular pattern of movement, Table 48.

The lower- and upper-age groups, in general, were more favorable toward "Alayam" candy than were the middle-age groups, Tables 52-56. The percentages of respondents who said they would buy the candy if it were placed on the market were higher for the lower- and upper-age groups than for the middle-age groups, Table 57.

EDUCATIONAL STATUS OF FAMILY HEADS. The percentage of respondents who did not buy candy and the frequency of purchase of those who did buy showed no significant variations relative to the educational status of family heads, Table 58. As the educational status of family heads increased, in terms of formal education completed, the relative percentage of purchases for bar goods decreased, while that for most other candies increased, Table 59. In addition, the percentage of purchases for chocolates and hard candies increased, Table 63. The percentage of purchases from grocery stores decreased as the level of formal education of family heads increased, while the percentage of purchases from drug stores and candy stores increased, Table 60.

Respondents in families where the educational status of family heads was low were, in general, more favorable toward "Alayam" candy than were respondents in families where the educational status of family heads was high, Tables 64-68. The percentage of respondents who said they would buy the product if it were placed on the market was higher for respondents from families where the educational status of family heads was low than for those from families where educational status was high, Table 69.

OCCUPATIONAL STATUS OF FAMILY HEADS. The six groups of respondents studied on the basis of occupational status of family head showed no significant variations in the percentage of respondents who did not buy candy, Table 70. In addition, for those respondents who did buy candy, there were no significant variations in frequency of purchases between these groups, Table 70. Bar goods and bulk bagged candy were bought most frequently and most other types of candy less frequently by respondents whose family heads were engaged in agricultural, service, unskilled, or semi-skilled work, Table 71. These groups made a higher percentage of their purchases at grocery stores than did respondents in other groups, Table 72.

Respondents from families where family heads were engaged in agricultural, service, unskilled, or semi-skilled work were more favorable toward "Alayam" candy than were respondents from families where family heads had a different occupational status, Tables 76-80. The percentage of respondents who said they would buy the product if it were placed on the market was higher for respondents from families where family heads were engaged in agricultural, service, unskilled, or semi-skilled work than for respondents from families where family heads had some other occupational status, Table 81.

SUMMARY

During the period 1942-45, research workers at the Alabama Agricultural Experiment Station developed a number of new food products from sweetpotatoes under the brand name "Alayam" products. Among the more promising of these new products were several types of candies.

This bulletin presents the results of a nation-wide consumer acceptance test of one type of "Alayam" candy—a cocoanut brittle made from sweetpotato puree, finely ground cocoanut, and sugar.

In comparison with the different types of candies usually bought by respondents, this new-type candy stood up better against brittles and hard candies than against other types. In comparison with all types of candies, 12 per cent of the respondents liked this product better, 30 per cent about the same, and 54 per cent liked it less than the candies usually bought.

More than half of the respondents indicated that the sweetness of this product was about right. Nearly a fourth stated that the product was not sweet enough, while a tenth felt that it was too sweet.

Respondents were about equally divided in their reactions to the general appearance of this new candy. About an equal number liked its general appearance, were indifferent to it, or did not like it at all.

More than half of the respondents liked the texture or quality of the candy. Nearly a fourth were indifferent in their reaction, and about a fifth disliked its texture or quality.

Half of the respondents liked the flavor or taste. A third disliked the flavor or taste. The remaining respondents were either indifferent or reported no particular reaction to the product's flavor or taste.

More than a third of the respondents who tested the candy indicated that they would buy the product if it were placed on the market. An additional 11 per cent were undecided or failed to express an opinion. Slightly more than half said they would not buy the candy if it were placed on the market.

Sweetpotato, one of the principal ingredients of this candy, was detected as the dominant flavor and/or as an ingredient by less than 2 per cent of the total number of respondents who tested the product.

Respondents living in the Census South were more favorable toward this product than were those living in other sections of the country. The percentage of respondents who expressed a willingness to buy this candy was also higher in the Census South than in other areas.

Respondents in low-income groups were more favorable toward the product than were those in high-income groups.

Respondents living in rural areas were, in general, more favorable toward the candy than were those living in urban areas. Respondents living in small towns and cities were generally more favorable toward the product than were those living in large cities.

Female respondents were more favorable toward the candy than were male respondents. Respondents in the lower- and upper-age groups were, in general, more favorable toward the product than were those in the middle-age groups.

Respondents from families where the educational status of the family head was low were, in general, more favorable toward the candy than were those in families where the educational status

of the family head was high.

Respondents from families where the occupational status of the family head was that of one engaged in agricultural, service, unskilled, or semi-skilled work were, in general, more favorable toward the candy than were those in families where the family head had a different occupational status.

The interpretation and evaluation of these data on consumer habits, attitudes, and reactions are left to those who wish to apply the findings of this test to a study of the confectionery industry as a whole or of this product and its potential market possibilities in particular.

STATISTICAL APPENDIX

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CONSUMER REACTIONS TO "ALAYAM" CANDY

By Major Geographic Areas and United States Totals

Table 1. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

Doubles	G	eographic are	a1 ``	United
Replies	North	South	West	States ²
	Per cent	Per cent	Per cent	Per cent
None	46	45	49	46
One day Two days Three days Four days Five days Six days Seven days	25 12 7 4 3 1	23 15 8 3 1 2	20 14 8 4 3 1	23 14 8 4 3 1
Total	100	100	100	100
Number of respondents	1,276	1,126	1,123	3,610

¹ Geographic areas, for purposes of this study, were designated as follows: North—the area east of the Mississippi River and north of the Ohio; South—the Census South; and West—the remainder of the United States.

² Differential weighting to bring the three areas into their proper relation with the United States as a whole was necessary. Weights applied to geographic area totals were 101.0 in the northeastern area, 106.9 in the southern area, and 99.5 in the western area.

Table 2. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

D1:	(United		
Replies -	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	67 19 14 17 7 9	80 16 13 11 2 10	77 23 14 14 5 8	75 19 13 14 5
Total ¹	100	100	100	100
Number of respondents	694	621	568	1,930

¹ Percentages total more than 100 because some respondents bought more than one type of candy.

Table 3. (If You Bought Any Candy During the Past Week) Replies to the Question: "Where Did You Buy Candy Most Often?"

D1:	(United			
Replies	North South		West	States	
	Per cent	Per cent	Per cent	Per cent	
Grocery Store	44	58	59	54	
Drug store	16	20	14	17	
Candy store	18	$oldsymbol{4}$	9	10	
Movie, cafe	6	9	8	7	
Dime store	6	8	7	7	
At work, school	6	3	4	4	
Gen. store, dept. store	3	1	1	2	
Candy machine	3	1	1	1	
Miscellaneous places	1	3	1	2	
Not ascertained	6	4	6	6	
Total ¹	100	100	100	100	
Number of respondents	694	621	568	1,930	

¹Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 4. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

n - 1: -	(United		
Replies	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
None	30	33	30	31
One day Two days Three days Four days Five days Six days Seven days	8 12 13 8 6 5	11 15 11 9 6 4 11	9 14 12 8 7 3 17	10 14 12 8 6 4 15
TOTAL	100	100	100	100
Number of respondents	1,276	1,126	1,123	3,610

TABLE O.		"WHAT TYPE OF CANDY DID YOU EAT?"	LIES TO THE
1	Renlies	Geographic area	United

n1:	(United		
Replies -	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	51 18 14 24 4 8	69 19 15 17 4 9	67 22 14 17 7 9	62 20 14 19 5 9
Total ¹	100	100	100	100
Number of respondents	899	752	779	2,487

 $^{^{1}}$ Percentages total more than 100 because some respondents ate more than one type of candy.

Table 6. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

Replies ¹ -	(United		
Replies	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
Bar goods Chocolates Hard candies Caramels Brittles Fudges Other kinds	63 21 7 2 1 1 5	65 15 8 5 2 2 3	69 12 9 3 1 6	65 16 9 3 1 1
Total	100	100	100	100
Number of respondents	694	621	568	1,930

¹Kind of candy refers to kind as classified by respondents. Therefore, some "bars" may be *chocolate-bars*; some "chocolates" may be chocolate-bars; et cetera.

²Less than 1 per cent.

Table 7. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Were Your Reasons for Buying the Kind You Bought Most Often?"

		Kind of candy bought most often				
Reasons	Bar goods	Chocolate products	Brittles and hard candies	All other candies¹	All candy	
	Per cent	Per cent	Per cent	Per cent	Per cent	
Favorite kind Convenience, availability Prefer chocolates Flavor, taste, sweetness Cost, price Food value, energy Lasts longer Texture, quality Miscellaneous reasons	26 28 10 10 4 4 1 1	22 6 30 6 2 2 1 1	34 19 0 10 5 2 13 2	29 6 1 17 9 2 2 2 16	26 22 12 10 4 3 2 1 8	
No specific reason given	14	20	15	21	15	
Total ²	100	100	100	100	100	
Number of respondents	1,247	306	185	173	1,911	

Table 8. Comparison of "Alayam" Candy With Specified Kinds of Candy Bought Most Often Last Week. (April 24-30, 1949)

	Kind of candy bought most often				
Comparison	Bar goods	Chocolate products	Brittles and hard candies	All other candies¹	All candy
	Per cent	Per cent	Per cent	Per cent	Per cent
Liked sample better About the same Liked sample less	10 27 60	12 27 58	11 44 44	26 11 57	12 27 58
Not ascertained	3	3	1	6	3
Total	100	100	100	100	100
Number of respondents	1,247	306	185	173	1,911

¹ Includes caramels, fudges, and other miscellaneous kinds.

¹ Includes caramels, fudges, and other miscellaneous kinds.
² Percentages total more than 100 because some respondents reported more than one reason.

Table 9.		: "How Do You		DY COMPARED
	TO THE CAND	ES YOU USUALLY	7 EAT?"	

D1:	(United			
Replies -	North	South	West	States	
	Per cent	Per cent	Per cent	Per cent	
Like sample better About the same Like sample less	12 27 56	13 34 49	11 29 57	12 30 54	
Not ascertained	5	4	3	4	
Total	100	100	100	100	
Number of respondents	1,276	1,126	1,123	3,610	

Table 10. Replies to the Question: "Why Do You Like the Sample Candy BETTER or LESS Than the Candies You Usually Eat?"

Respondents who liked sample LESS than the candies usually eaten	Reasons	Respondents who liked sample BETTER than the candies usually eaten
Per cent ¹		$Per\ cent^1$
25 17 16 8 1	Flavor or taste General appearance Texture or quality Sweetness Miscellaneous reasons	29 8 15 15 2
37	No specific reason given	47
1,948	Number of respondents	448

 $^{^{\}rm 1}$ Percentages total more than 100 because some respondents reported more than one reason.

Table 11. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

D	(United		
Replies -	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
Too sweet About right Not sweet enough	11 53 25	10 59 19	8 53 27	10 55 23
Not ascertained	11	12	12	12
Total	100	100	100	100
Number of respondents	1,276	1,126	1,123	3,610

TABLE 12.	REPLIES	то	THE	QUESTION:	"How	Do	You	LIKE	THE	GENERAL
				ARANCE OF						

Daulia	(United			
Replies	North	South	West	States Per cent	
	Per cent	Per cent	Per cent		
Like it Indifferent Do not like it	25 29 31	35 27 22	26 32 26	29 29 26	
Not ascertained	15	16	16	16	
TOTAL	100	100	100	100	
Number of respondents	1,276	1,126	1,123	3,610	

Table 13. Replies to the Question: "How Do You Like the Texture or Quality of This Candy?"

D1:	(United		
Replies	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
Like it Indifferent Do not like it	50 24 19	58 21 14	52 23 18	53 23 17
Not ascertained	7	7	7	7
Total	100	100	100	100
Number of respondents	1,276	1,126	1,123	3,610

Table 14. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

Dli.	(United			
Replies	North	South	West	States	
	Per cent	Per cent	Per cent	Per cent	
Like it Indifferent Do not like it	44 18 33	58 12 25	49 16 31	50 15 30	
Not ascertained	5	5	4	5	
Total	100	100	100	100	
Number of respondents	1,276	1,126	1,123	3,610	

Table 15.	REPLIES	то	THE	QUESTION	: "Жнат	FLAVOR	Do	You	DETECT	Most
					s Candy?"					

Flavor	Flavor of sample ¹				
Flavor	Orange	Cocoanut			
	Per cent	Per cent			
Cocoanut	25*	55*			
Orange	32*	1			
Other citrus flavors	12	1			
Molasses	3	7			
Syrup	2	. 2			
Sugar	1*	1*			
Sweetpotato	24	1*			
Miscellaneous flavors ³	6	$\bar{7}$			
No specific flavor detected	19	25			
Total	100	100			
Number of respondents	1,778	1,832			

¹ Both samples contained the same basic ingredients with the exception that the sample designated as "orange" had a small quantity of orange-peel pulp added for flavoring purposes only.

² Less than 1 per cent. ⁸ Includes extracts, caramel, cereal, nuts, butter, salt, eggs, and other product flavors.

* These items were actual ingredients of the product.

Table 16. Replies to the Question: "What Ingredients Do You Detect in This Candy? — Name As Many As You Can Detect."

Y., 3:t.	Flavor o	of sample ¹
Ingredients	Orange	Cocoanut
	Per cent	Per cent
Cocoanut	61*	65*
Orange	39*	2
Other citrus fruits	18	2
Sugar	9*	11*
Molasses	7	13
Syrup	. 7	10
Cereal	6	7
Caramel	5	. 8
Extracts	5	5
Butter	2	2
Nuts	3	ī
Sweetpotato	1*	$ar{2}^*$
Miscellaneous ingredients	6 5 5 2 3 1* 5	$ar{7}$
No specific ingredients detected	19	10
Total ²	100	100
Number of respondents	1,778	1,832

¹ Both samples contained the same basic ingredients with the exception that the sample designated as "orange" had a small quantity of orange-peel pulp added for flavoring purposes only.

² Percentages total more than 100 because some respondents reported the detec-

tion of more than one ingredient.

* These items were actual ingredients of the product.

TABLE 17.	REPLIES	то	THE	QUESTION:	"Would	You	Buy	THIS	CANDY	\mathbf{Ir}	Iτ
		7	WERE	PLACED ON	THE MA	RKET	,,,				

Douling	(United			
Replies -	North	South	West	States	
	Per cent	Per cent	Per cent	Per cent	
Would buy it Would not buy it	34 56	44 44	34 54	38 51	
Not ascertained	10	12	12	11	
Total	100	100	100	100	
Number of respondents	1,276	1,126	1,123	3,610	

Table 18. Replies to the Question: "Why Would You BUY or NOT BUY This Candy If It Were Placed On the Market?"

Respondents who WOULD NOT BUY this candy	Reason	Respondents who WOULD BUY this candy
Per cent ¹		Per cent ¹
38 11 11 3 2 4	Flavor or taste Personal preferences Texture or quality Sweetness General appearance Miscellaneous reasons	26 18 9 6 2
34	No specific reason given	41
1,848	Number of respondents	1,354

¹ Percentages total more than 100 because some respondents reported more than one reason.

Table 19. (If You Would Buy This Candy When Placed On the Market) Replies to the Question: "How Much Would You Expect to Pay for the Amount¹ That Was in the Sample Package?"

D1:	(United		
Replies -	North	South	West	States
	Per cent	Per cent	Per cent	Per cent
5 cents and under	3	4	· · 2	3
6 to 9 cents	1	1	1	1
10 cents	19	30	23	25
11 to 14 cents	1	2	1	2
15 cents	17	15	20	17
16 to 19 cents	2	2	2	2
20 cents	13	8	11	11
21 to 24 cents	2	2	2	2
25 cents and over	19	15	19	18
Not ascertained	25	25	21	23
Total	100	100	100	100
Number of respondents	433	498	387	1,354

¹ The sample package contained 4 ounces of product.

² Less than 1 per cent.

D 1	(Geographic area				
Replies -	North	South	West	States		
	Per cent	Per cent	Per cent	Per cent		
Sample package is of satisfactory size Sample package is not	49	54	51	51		
of satisfactory size	23	15	20	19		
Not ascertained	28	31	29	30		
Total	100	100	100	100		
Number of respondents	1,276	1,126	1,123	3,610		

Tabel 20. Replies to the Question: "Is the Sample Package" the Approximate Size You Would Prefer to Buy at One Time?"

Table 21. (If the Sample Package Is Not of Satisfactory Size) Replies to the Question: "In Comparison With the Sample Package, How Large Would You Prefer An Individual Package¹ to Be?"

Dline	(United		
Replies	North South		West	States
	Per cent	Per cent	Per cent	Per cent
1 ounce 2 ounces 3 ounces 4 ounces (¼ lb.)² 5 to 7 ounces 8 ounces (½ lb.) 12 ounces (¾ lb.) 16 ounces (1 lb.) Over 16 ounces	5 16 1 9 4 24 4 26	5 25 5 9 1 23 1 22	2 18 2 16 1 26 1 20	4 19 2 11 2 24 3 23
Not ascertained	10	8	13	11
Total	100	100	100	100
Number of respondents	294	175	222	705

¹ Respondents were instructed to report their answers to this question in number of ounces.

¹ The sample package contained 4 ounces of product.

² Respondents who gave 4 ounces as their answer to this question probably failed to fully read and understand this question and the preceding question. The sample package contained the amount of product (4 ounces) they wished to buy.

Consumer Reactions To "Alayam" Candy

By Family Income Groups

Table 22. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

	Family income group						
Replies	\$2,000 \$2,001- and under \$3,000		\$3,001- \$5,000	Over \$5,000			
	Per cent	Per cent	Per cent	Per cent			
None	46	42	48	48			
One day Two days Three days Four days Five days Six days Seven days	23 14 7 4 3 1 2	25 14 8 4 3 1 3	22 13 8 4 3 1	22 14 6 3 4 2			
Total	100	100	100	100			
Number of respondents	811	799	1,147	768			

Table 23. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

	Family income group						
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000			
	Per cent	Per cent	Per cent	Per cent			
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	78 19 16 12 3 9	77 20 14 13 5 8	73 18 13 15 6 9	69 21 12 18 6 10			
Total ¹	100	100	100	100			
Number of respondents	436	464	591	392			

¹Percentages total more than 100 because some respondents bought more than one type of candy.

Table 24.	(IF	You l	Bought	ANY CA	ANDY I	DURING	THE]	Past	Week)	REPLIES	то
TI	ie Qu	ESTIO	n: "Wi	HERE DI	D You	Buy C	CANDY	Mos	r Often	1?"	

	Family income group						
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000			
	Per cent	Per cent	Per cent	Per cent			
Grocery store	61	53	51	48			
Drug store	13	14	18	24			
Candy store	8	12	10	14			
Movie, cafe	5	10	9	5			
Dime store	7	7	7	5			
At work, school	3	4	7	2			
Gen. store, dept. store	1	1	2	3			
Candy machine	1	2	2	2			
Miscellaneous places	2	3	1	2			
Not ascertained	6	7	5	5			
Total ²	100	100	100	100			
Number of respondents	436	464	591	392			

Table 25. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

	Family income group						
Replies	\$2,000 \$2,001- and under \$3,000		\$3,001- \$5,000	Over \$5,000			
	Per cent	Per cent	Per cent	Per cent			
None	35	29	30	30			
One day Two days Three days Four days Five days Six days Seven days	9 14 11 9 6 2 14	11 12 12 8 6 5	10 14 13 8 8 5	9 13 10 9 5 4 20			
Total	100	100	100	100			
Number of respondents	811	799	1,147	768			

¹Less than 1 per cent. ²Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 26. (If You Ate Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Eat?"

	Family income group					
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000		
	Per cent	Per cent	Per cent	Per cent		
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	69 17 15 14 5 7	65 22 13 19 4 7	61 20 15 21 5 9	54 21 13 25 6 11		
Total ¹	100	100	100	100		
Number of respondents	526	563	806	535		

¹Percentages total more than 100 because some respondents ate more than one type of candy.

Table 27. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

	Family income group						
Replies ¹	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000			
	Per cent	Per cent	Per cent	Per cent			
Bar goods Chocolates Hard candies Caramels Brittles Fudges Other kinds	70 13 5 3 1 2 6	67 15 8 4 1 1	64 17 11 2 2 1 3	60 19 10 3 1 1 6			
TOTAL	100	100	100	100			
Number of respondents	436	464	591	392			

 $^{^1}$ Kind of candy refers to kind as classified by respondents. Therefore, some "bars" may be chocolate-bars; some "chocolates" may be chocolate-bars; et cetera.

TABLE 28.	REPLIES TO	THE	QUESTION:	"How	Do	You	Like	THIS	CANDY	Сом-
	PAREI	от о	THE CANDIES	You	Usu.	ALLY	EAT?	**		

Replies	Family income group			
	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000
	Per cent	Per cent	Per cent	Per cent
Like sample better About the same Like sample less	16 32 49	10 31 55	11 30 57	14 24 60
Not ascertained	3	4	2	2
TOTAL	100	100	100	100
Number of respondents	811	799	1,147	768

Table 29. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

Replies	Family income group			
	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000
	Per cent	Per cent	Per cent	Per cent
Too sweet About right Not sweet enough	8 56 23	12 56 20	9 55 24	11 52 28
Not ascertained	13	12	12	9
Total	100	100	100	100
Number of respondents	811	799	1,147	768

Table 30. Replies to the Question: "How Do You Like the General Appearance of This Candy?"

Replies	Family income group			
	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000
	Per cent	Per cent	Per cent	Per cent
Like it Indifferent Do not like it	36 27 19	28 32 24	25 28 31	26 31 31
Not ascertained	18	16	16	12
TOTAL	100	100	100	100
Number of respondents	811	799	1,147	768

Table 31. Replies to the Question: "How Do You Like the Texture or Quality of This Candy?"

	Family income group							
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000				
	Per cent	Per cent	Per cent	Per cent				
Like it Indifferent Do not like it	59 17 16	53 23 18	52 25 16	49 24 20				
Not ascertained	8	6	7	7				
TOTAL	100	100	100	100				
Number of respondents	811	799	1,147	768				

Table 32. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

	Family income group							
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000				
	Per cent	Per cent	Per cent	Per cent				
Like it Indifferent Do not like	57 13 24	50 16 31	49 15 31	45 18 34				
Not ascertained	6	3	5	3				
Total	100	100	100	100				
Number of respondents	811	799	1,147	768				

Table 33. Replies to the Question: "Would You Buy This Candy If It Were Placed On the Market?"

	Family income group							
Replies	\$2,000 and under	\$2,001- \$3,000	\$3,001- \$5,000	Over \$5,000				
•	Per cent	Per cent	Per cent	Per cent				
Would buy it Would not buy it	$\begin{array}{c} 45 \\ 44 \end{array}$	40 47	33 54	33 59				
Not ascertained	11	13	13	8				
TOTAL	100	100	100	100				
Number of respondents	811	799	1,147	, 768				

CONSUMER REACTIONS TO "ALAYAM" CANDY By Place of Residence, and by City Sizes

Table 34. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

	D1	Urban	City size (urban residents)				
Replies	residents1 residents2		2,500- 25,000	25,001- 100,000	100,001- 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
None	47	46	48	47	46	43	
One day Two days	22 15	23 13	21 12	27 13	23 13	23 13	
Three days Four days	7 4	8 4	9	6 3	8	8 4	
Five days Six days Seven days	3 1 1	3 2 1	2 1 3	2 1 1	4 1 1	4 3 2	
TOTAL	100	100	100	100	100	100	
Number of respondents	1,673	1,852	592	372	419	469	

¹ Rural residents live in rural areas or in incorporated towns or villages having less than 2,500 people.

² Urban residents live in incorporated towns or cities having 2,500 population

or more.

Table 35. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

	D1	Urban	City	City size (urban residents)				
Replies	Replies Rural residents r		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
	Per cent	Per cent						
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	77 22 15 12 3 8	71 19 14 18 8 9	76 24 16 19 7 6	65 16 15 14 8 8	70 20 14 20 6 13	70 16 10 19 10		
Total ¹	100	100	100	100	100	100		
Number of respondents	887	996	308	195	224	269		

¹ Percentages total more than 100 because some respondents bought more than one type of candy.

TABLE 36. (In	F You Bought	ANY CAND	Y DURING THE	PAST WEEK	REPLIES TO
THE (QUESTION: "W	HERE DID Y	OU BUY CAND	y Most Ofti	en?"

	D I	TT.1	City	y size (urban residents)			
Replies	Rural Urban residents		2,500- 25,000	25,001 - 100,000	100,001- 500,000	Over 500,000	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Grocery store	62	45	53	45	45	35	
Drug store	14	19	14	22	23	20	
Candy store	4	17	13	14	13	28	
Movie, cafe	7	8	7	10	8	8	
Dime store	7	7	8	9	5	9	
At work, school	4	4	4	4	4	6	
Gen. store, dept. store	2	2	2	1	4	1	
Candy machine	1	2	2	2	1	3	
Miscellaneous places	2	2	3	2	2	1	
Not ascertained	8	4	6	1	4	3	
Total ¹	100	100	100	100	100	100	
Number of respondents	887	996	308	195	224	269	

 $^{^{\}rm 1}\!$ Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 37. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

	D1	Urban	City	City size (urban residents)				
Replies	Rural Urban residents		2,500- 25,000	25,001- 100,000	100,001 - 500,000	Over 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
None	30	32	34	38	29	27		
One day Two days Three days Four days Five days Six days Seven days	11 14 11 9 7 5	8 13 13 8 6 3	9 13 10 9 5 3	8 13 13 8 5 3	10 14 13 9 8 3 14	6 13 14 5 8 4 23		
TOTAL	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 38.	(IF YOU ATE	ANY CANDY DURING THE PAST WEEK) REPLIES TO THE	£
	QUESTION:	"What Type of Candy Did You Eat?"	

	n1	TT.1.	City size (urban residents)				
Replies	Rural Urban residents		2,500- 25,001- 25,000 100,000		100,001- 500,000	Over 500,000	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods	66	59	68	58	52	54	
Prepackaged bag	20	20	20	20	23	15	
Bulk bag	16	13	13	15	16	8	
Prepackaged box	14	25	23	19	24	32	
Bulk box	4	6	5	7	7	7	
Other types	8_	10	8	10	9	11	
Total ¹	100	100	100	100	100	100	
Number of respondents	1,169	1,261	389	229	299	344	

¹Percentages total more than 100 because some respondents ate more than one type of candy.

Table 39. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

	Rural	Urban	City size (urban residents)				
Replies ¹		residents	2,500- 25,000	25,001 - 100,000	100,001- 500,000	Over 500,000	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods Chocolates Hard candies Caramels Brittles Fudges Other kinds	68 13 8 3 2 1 5	63 18 9 3 1 1 5	70 15 6 3 1 0 5	62 19 8 1 3 1 6	58 17 15 5 0 0	60 24 7 3 2 1	
Total	100	100	100	100	100	100	
Number of respondents	887	996	308	195	224	269	

 $^{^1}$ Kind of candy refers to kind as classified by respondents. Therefore, some "bars" may be chocolate-bars; some "chocolates" may be chocolate-bars; et cetera. 2 Less than 1 per cent.

TABLE 40.	REPLIES TO THE	E QUESTION:	"How D	o You	Like This	CANDY	Сом-
		THE CANDIE					

	D1	TT	City size (urban residents)					
Replies	Rural residents	Urban residents	2,500- 25,000	25,001- 100,000	100,001- 500,000			
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Like sample better About the same Like sample less	13 33 51	12 26 59	14 26 57	14 26 58	9 29 60	10 25 62		
Not ascertained	3	3	3	2	2	3		
Total	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 41. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

	Rural	Urban	City size (urban residents)					
Replies	residents residen		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
,	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Too sweet About right Not sweet enough	7 59 22	13 51 25	12 52 24	13 50 24	16 50 23	11 52 28		
Not ascertained	12	11	12	13	11	. 9		
TOTAL	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 42. Replies to the Question: "How Do You Like the General Appearance of This Candy?"

	Rural	Urban	City size (urban residents)					
Replies	residents residents		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Like it Indifferent Do not like it	30 28 25	27 30 28	28 31 24	26 29 29	27 30 29	$\frac{24}{31}$		
Not ascertained	17	15	17	16	14	13		
TOTAL	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 43.	REPLIES	то	THE	QUESTIC	ON:	"How	Do	You	Like	THE	TEXTURE	OR
				JALITY (

	Rural	Urban	City size (urban residents)					
Replies	residents residents		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Like it Indifferent Do not like it	54 22 16	53 23 18	56 22 16	54 20 18	53 24 18	47 25 21		
Not ascertained	8	6	6	8	5	7		
Total	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 44. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

	Rural	Urban	City size (urban residents)					
Replies	residents residents		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Like it Indifferent Do not like it	54 13 28	47 17 32	51 14 30	51 14 32	45 16 35	39 26 31		
Not ascertained	5	4	5	3 .	4	4		
Total	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

Table 45. Replies to the Question: "Would You Buy This Candy If It Were Placed On the Market?"

	D 1	Urban	City size (urban residents)					
Replies	Rural Urban residents		2,500- 25,000	25,001- 100,000	100,001- 500,000	Over 500,000		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Would buy it Would not buy it	41 46	34 56	37 51	35 57	32 58	30 60		
Not ascertained	13	10	12	8	10	10		
Total	100	100	100	100	100	100		
Number of respondents	1,673	1,852	592	372	419	469		

CONSUMER REACTIONS TO "ALAYAM" CANDY By Sex, and by Age of Respondents

Table 46. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

	Sex of res	pondents	Age of respondents ¹					
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
None	54	41	46	39	50	, 54		
One day Two days Three days Four days Five days Six days Seven days	18 10 7 4 4 2 1	27 16 8 3 3 1	16 12 9 6 5 3	25 18 9 4 3 2	25 13 6 2 2 1 1	25 10 6 2 2 1		
TOTAL	100	100	100	100	100	100		
Number of respondents	1,583	1,942	855	987	1,088	595		

¹ Respondents whose age was reported as less than 5 years were omitted from this study.
² Less than 1 per cent.

Table 47. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

	Sex of res	pondents	Age of respondents					
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	78 12 7 11 3 8	72 24 18 18 6 10	85 9 6 3 1 15	80 21 14 13 5	67 23 18 20 7 7	59 25 19 24 9 7		
Total ¹	100	100	100	100	100	100		
Number of respondents	731	1,152	460	600	551	272		

¹ Percentages total more than 100 because some respondents bought more than one type of candy.

Table 48.	(IF	You	Bougi	IT ANY	CAN	DY I	DURING	THE	Past	Week)	REPLIES	то
THI	ε̈Qι	UESTIC	on: "V	VHERE	D_{ID}	You	Buy	Cand	y Mo	ST OFT	en?"	

	Sex of res	pondents	Age of respondents					
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Grocery store	41	61	48	54	57	51		
Drug store	18	16	14	18	17	18		
Candy store	9	12	10	9	10	16		
Movie, cafe	11	6	12	9	5	3		
Dime store	4	9	3	7	7	10		
At work, school	6	3	6	4	5	1		
Gen. store, dept. store	1	2	1	1	5	3		
Candy machine	$\overline{2}$	1	1	2	2	1		
Miscellaneous places	$\overline{2}$	$\overline{2}$	1	2	3	1		
Not ascertained	8	4	14	2	3	6		
Total ¹	100	100	100	100	100	100		
Number of respondents	731	1,152	460	600	551	272		

 $^{^{\}mbox{\tiny 1}}$ Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 49. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

	Sex of res	pondents	Age of respondents					
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
None	36	27	30	26	34	35		
One day Two days Three days Four days Five days Six days Seven days	8 11 10 7 7 6 15	10 16 14 9 6 2 16	7 13 12 9 8 5	12 17 12 9 7 4	10 14 13 7 6 2 14	6 7 11 8 5 5 23		
Total	100	100	100	100	100	100		
Number of respondents	1,583	1,942	855	987	1,088	595		

Table 50.	(IF YOU ATE	ANY CANDY DURING THE	PAST WEEK) REPLIES TO THE
	QUESTION:	"WHAT TYPE OF CANDY	DID YOU EAT?"

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods Prepackaged bag Bulk bag Prepackaged box Bulk box Other types	63 18 13 18 6 7	61 21 15 21 5 9	78 17 15 14 4 12	67 21 13 17 4 7	57 19 14 23 7 7	45 23 15 26 8 9	
Total ¹	100	100	100	100	100	100	
Number of respondents	1,009	1,421	601	729	716	384	

 $^{^{1}\}mathrm{Percentages}$ total more than 100 because some respondents at e more than one type of candy.

Table 51. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

	Sex of res	pondents	Age of respondents				
Replies ¹	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods Chocolates Hard candies Caramels Brittles Fudges Other kinds	72 13 6 2 2 1 4	61 18 10 4 1 1	75 8 7 3 1 1	70 15 7 3 1 1	59 20 10 3 1 1	50 26 12 3 2 1 6	
TOTAL	100	100	100	100	100	100	
Number of respondents	731	1,152	460	600	551	272	

¹Kinds of candy refer to kind as classified by respondents. Therefore, some "bars" may be *chocolate-bars*; some "chocolates" may be chocolate-bars; et cetera.

Table 52.	REPLIES TO	THE	QUESTION:	"How	Do Yo	u Like This	CANDY	Сом-
	PARED	TO	THE CANDIE	s You	USUALI	LY EAT?"		

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Like sample better About the same Like sample less	12 29 55	13 29 55	12 33 51	9 26 62	13 28 56	18 32 47	
Not ascertained	4	3	4	3	3	3	
Total	100	100	100	100	100	100	
Number of respondents	1,583	1,942	855	987	1,088	595	

Table 53. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Too sweet About right Not sweet enough	8 52 26	11 57 22	8 50 25	12 54 24	10 58 23	8 56 22	
Not ascertained	14	10	17	10	9	14	
Total	100	100	100	100	100	100	
Number of respondents	1,583	1,942	855	987	1,088	595	

Table 54. Replies to the Question: "How Do You Like the General Appearance of This Candy?"

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Like it Indifferent Do not like it	26 33 25	30 26 28	27 30 25	23 31 33	31 29 26	34 25 20	
Not ascertained	16	16	18	13	14	21	
Total	100	100	100	100	100	100	
Number of respondents	1,583	1,942	855	987	1,088	595	

Table 55. Replies to the Question: "How Do You Like the Texture or Quality of This Candy?"

	Sex of res	Sex of respondents		Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Like it Indifferent Do not like it	48 25 18	57 20 17	48 24 18	50 24 21	57 21 16	59 19 13		
Not ascertained	9	6	10	5	6	9		
Total	100	100	100	100	100	100		
Number of respondents	1,583	1,942	855	987	1,088	595		

Table 56. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Like it Indifferent Do not like it	47 16 31	52 15 29	50 13 30	42 17 37	53 16 28	58 15 21	
Not ascertained	- 6	4	7	4	3	6	
Total	100	100	100	100	100	100	
Number of respondents	1,583	1,942	855	987	1,088	595	

Table 57. Replies to the Question: "Would You Buy This Candy If It Were Placed On the Market?"

	Sex of res	pondents	Age of respondents				
Replies	Male	Female	5-19 yrs.	20-34 yrs.	35-54 yrs.	55 yrs. & over	
'	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Would buy it Would not buy it	34 51	40 52	37 45	32 59	39 53	45 43	
Not ascertained	15	8	18	9	8	12	
Total	100	100	100	100	100	100	
Number of respondents	1,583	1,942	855	987	1,088	595	

Consumer Reactions To "Alayam" Candy By Educational Status of Family Heads

Table 58. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

	Educational status of family head ^{1, 2}							
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
None	46	47	43	47	51	45		
One day	21	25	21	23	21	24		
Two days	16	12	15	14	10	14		
Three days	7	8	10	6	7	8 2 3		
Four days	4	3	4	4	4	2		
Five days	2	2	4	3	3	3		
Six days	2	1	2	1	2	1		
Seven days	2	2	1	2	2	-3		
Total	100	100	100	100	100	100		
Number of respondents	212	384	743	900	579	707		

¹ Educational status was reported as the amount of formal education completed. The 1947 Census of population estimates indicate that about 11 per cent of the nation's total population has attended college. Normally, family heads constitute about a third of the nation's total population (exclusive of persons under 5 years of age). In this study, therefore, the expected percentage of individual respondents who were from families where the family head had attended college was about three times as great as the 1947 Census estimates for the nation's total population. The actual percentage as indicated by returned usable questionnaires was 36.5 per cent.

²In cases where no family head was reported, the educational status of the homemaker was used.

Table 59. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

	Educational status of family head						
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods	75	76	78	73	73	72	
Prepackaged bag	30	20	21	17	18	17	
Bulk bag	16	19	12	16	10	13	
Prepackaged box	11	11	12	15	16	19	
Bulk box	4	3	5	4	6	7	
Other types	4	6	11	9	9	9	
Total ¹	100	100	100	100	100	100	
Number of respondents	114	202	421	481	282	383	

¹Percentages total more than 100 because some respondents bought more than one type of candy.

Table 60. (If You Boucht Any Candy During the Past Week) Replies to the Question: "Where Did You Buy Candy Most Often?"

		Educat	ional statu	ıs of fami	ly head	
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college
	Per cent	Per cent	$Per\ cent$	Per cent	Per cent	Per cent
Grocery store Drug store Candy store Movie, cafe Dime store At work, school Gen. store, dept. store Candy machine Miscellaneous places	64 9 5 4 6 3 0 4	63 11 9 6 10 3 1 1	57 15 9 4 10 6 1 1	53 15 11 10 5 5 2 3	47 15 12 13 5 3 1	43 27 14 7 5 3 2 1
Not ascertained	13	9	6	3	6	4
Total ¹	100	100	100	100	100	100
Number of respondents	114	202	421	481	282	383

 $^{^{\}rm 1}$ Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 61. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

	Educational status of family head							
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
None	26	29	32	27	38	32		
One day	11	8	8	10	9	11		
Two days	19	16	11	16	11	13		
Three days	7	12	12	13	10	12		
Four days	11	10	8	9	7	7		
Five days	9	6	7	6	7	6		
Six days	2	2	7 5	4	3	4		
Seven days	15	17	17	15	15	15		
Total	100	100	100	100	100	100		
Number of respondents	212	384	743	900	579	707		

TABLE 62. (IF YOU ATE	ANY CANDY DURING THE	PAST WEEK) REPLIES TO THE
Question:	"WHAT TYPE OF CANDY	DID YOU EAT?"

		Educational status of family head							
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college			
	Per cent	$Per\ cent$	$Per\ cent$	Per cent	$Per\ cent$	Per cent			
Bar goods	75	65	60	60	60	56			
Prepackaged bag	21	18	20	22	22	16			
Bulk bag	30	17	13	14	13	13			
Prepackaged box	13	14	17	21	23	26			
Bulk box	6	5	6	3	6	7			
Other types	6	6	10	8	8	12			
TOTAL ¹	100	100	100	100	100	100			
Number of respondents	157	274	507	654	359	479			

 $^{^{1}\}mathrm{Percentages}$ total more than 100 because some respondents are more than one type of candy.

Table 63. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

	Educational status of family head						
Replies ¹	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Bar goods	75	67	70	65	64	58	
Chocolates	9	13	14	16	15	23	
Hard candies	5	8	8	. 8	12	8	
Caramels	4	-6	. 1	3	3	4	
Brittles	1	1	. 1	1	1	4 2	
Fudges	4	2	1	1	1	2	
Other kinds	2	5	5	6	4	5	
Total	100	100	100	100	100	100	
Number of respondents	114	202	421	481	282	383	

¹Kind of candy refers to kind as classified by respondents. Therefore, some "bars" may be *chocolate-bars*; some "chocolates" may be chocolate-bars; et cetera.

²Less than 1 per cent.

TABLE 64.	REPLIES TO THE	QUESTION:	"How	Do You	LIKE THIS	CANDY	Сом-
		THE CANDIE					

		Educational status of family head							
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college			
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent			
Like sample better About the same Like sample less	14 36 44	16 33 46	13 30 54	9 31 56	14 26 58	13 25 61			
Not ascertained	6	5	3	4	2	1			
Total	100	100	100	100	100	100			
Number of respondents	212	384	743	900	579	707			

Table 65. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

		Educat	ional statı	ıs of fami	ly head	
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Too sweet About right Not sweet enough	6 59 18	8 54 23	12 51 23	10 57 22	10 57 24	10 54 28
Not ascertained	17	15	14	11	9	8
TOTAL	100	100	100	100	100	100
Number of respondents	212	384	743	900	579	707

Table 66. Replies to the Question: "How Do You Like the General Appearance of This Candy?"

	Educational status of family head						
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Completed high school	Less than college	Com- pleted college	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Like it Indifferent Do not like it	34 23 21	33 25 23	30 29 22	27 32 26	28 33 28	25 26 34	
Not ascertained	22	19	19	15	11	15	
Total	100	100	100	100	100	100	
Number of respondents	212	384	743	900	579	707	

TABLE 67.	REPLIES	то	THE	QUESTION:	"How	Do	You	Like	THE	TEXTURE	OR
			Q	UALITY OF T	THIS CA	NDY	?"				

		Educat	ional statı	ıs of fami	ly head	
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	than pleted high high		Com- pleted college
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Like it Indifferent Do not like it	62 13 16	53 20 17	51 23 16	53 23 19	54 25 16	53 23 19
Not ascertained	9	10	10	5	5	5
TOTAL	100	100	100	100	100	100
Number of respondents	212	384	743	900	579	707

Table 68. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

	Educational status of family head						
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Like it Indifferent Do not like it	59 10 23	53 14 27	48 13 32	51 14 31	48 20 29	48 17 31	
Not ascertained	8	6	7	4	3	4	
Total	100	100	100	100	100	100	
Number of respondents	212	384	743	900	579	707	

Table 69. Replies to the Question: "Would You Buy This Candy If It Were Placed On the Market?"

	Educational status of family head							
Replies	Less than 8th grade	Com- pleted 8th grade	Less than high school	Com- pleted high school	Less than college	Com- pleted college		
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent		
Would buy it Would not buy it	45 40	40 43	41 46	35 53	35 57	35 57		
Not ascertained	15	17	13	12	8	8		
TOTAL	100	100	100	100	100	100		
Number of respondents	212	384	743	900	579	707		

Consumer Reactions To "Alayam" Candy By Occupational Status of Family Heads

Table 70. Replies to the Question: "On How Many Days Did You Buy Candy During the Past Week?" (April 24-30, 1949)

		Occupa	tional stat	us of fami	ily head¹	
Replies	Un- skilled, semi- skilled, service workers	Agricultural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	partners,	Clerical, sales workers, students
	Per cent	Per cent	$Per\ cent$	$Per\ cent$	Per cent	Per cent
None	46	46	50	47	48	43
One day	22	24	23	23	18	25
Two days	13	14	13	14	14	13
Three days	8	8	7	6	8	9
Four days	4	4	2	3	4	5
Five days	3	$\overline{2}$	2 2 2	2 2	6	3
Six days	1	1	2	2	1	1
Seven days	3	1	1	3	1	1
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

¹ In cases where no family head was reported, the occupatioanl status (if any) of the homemaker was used.

Table 71. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Buy?"

		Occupat	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Bar goods	81	78	70	69	71	77
Prepackaged bag	25	18	16	18	28	18
Bulk bag	16	17	10	12	11	13
Prepackaged box	15	10	23	19	25	14
Bulk box	5	.5 9	7	6	7	5
Other types	10	9	10	10	9	66
Total ¹	100	100	100	100	100	100
Number of respondents	422	453	234	348	109	317

¹Percentages total more than 100 because some respondents bought more than one type of candy.

TABLE 7	2. (IF You	J Bot	GHT ANY	CAN	DY I	URING	THE	PAST	Week)	REPLIES	то
	THE	QUEST	: NOIT	"Where	D_{ID}	You	Buy (CANDS	Mos	T OFTEI	v?"	

		Occupa	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	partners,	Clerical, sales workers, students
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Grocery store Drug Store Candy store Movie, cafe Dime store At work, school Gen. store, dept. store Candy machine Miscellaneous places	54 14 13 7 8 4 1 2	53 10 6 4 10 3 1 1	54 17 12 3 7 7 1 3 0	43 22 13 8 6 5 3 2	52 18 11 14 4 3 3 0 5	44 24 15 9 6 4 2 1
Not ascertained	8	11	5	2	9	3
Total ¹	100	100	100	100	100	100
Number of respondents	422	453	234	348	109	317

 $^{^{\}rm 1}$ Percentages total more than 100 because some respondents reported more than one source of purchase.

Table 73. Replies to the Question: "On How Many Days Did You Eat Candy During the Past Week?" (April 24-30, 1949)

		Occupat	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricultural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	partners,	Clerical, sales workers, students
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
None	33	29	31	33	31	30
One day Two days Three days Four days Five days Six days Seven days	9 12 9 10 5 4 18	10 17 10 9 7 4 14	9 15 13 7 7 5 13	9 12 12 7 6 4 17	7 9 13 8 7 4 21	11 14 15 7 8 3 12
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 74. (If You Ate Any Candy During the Past Week) Replies to the Question: "What Type of Candy Did You Eat?"

		Occupa	tional stat	us of fam	ily head	
Replics	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Bar goods	66	68	59	54	61	61
Prepackaged bag	21	18	19	20	31	21
Bulk bag	16	16	14	11	14	15
Prepackaged box	20	12	25	29	20	20
Bulk box	2	6	5	6	4	6 8
Other types	7	7	10	10	15	8
Total ¹	100	100	100	100	100	100
Number of respondents	529	599	323	444	144	391

 $^{^{1}\!}$ Percentages total more than 100 because some respondents at e more than one type of candy.

Table 75. (If You Bought Any Candy During the Past Week) Replies to the Question: "What Kind of Candy Did You Buy Most Often?"

		Occupa	tional stat	us of fam	ily head	
Replies ¹	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	partners,	Clerical, sales workers, students
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Bar goods	65	72	65	56	62	64
Chocolates	16	12	18	23	16	- 15
Hard candies	6	8	8	10	11	9
Caramels	4	2	2	4	2	4
Brittles	1	2	1	1	1	4 3
Fudges	2	1	1	2	0	1
Other kinds	6	3	5	6	8	4
Total	100	100	100	100	100	100
Number of respondents	422	45 3	234	348	109	317

¹Kind of candy refers to kind as classified by respondents. Therefore, some "bars" may be *chocolate*-bars; some "chocolates" may be chocolate-bars, et cetera. ²Less than 1 per cent.

Table 76. Replies to the Question: "How Do You Like This Candy Compared to the Candies You Usually Eat?"

		Occupa	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	partners,	Clerical, sales workers, students
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Like sample better	14	13	10	16	12	10
About the same	31	33	32	23	25	26
Like sample less	50	51	56	58	60	62
Not ascertained	5_	3	2	3	3	2
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 77. Replies to the Question: "How Does the Sweetness of This Candy Suit Your Taste?"

		Occupa	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricultural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Too sweet About right	11 56	9 56	8 54	10 56	$\begin{array}{c} 11 \\ 48 \end{array}$	11 52
Not sweet enough	19	23	2 5	26	27	25
Not ascertained	14	12	13	8	14	12
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 78. Replies to the Question: "How Do You Like the General Appearance of This Candy?"

<i>y</i>		Occupa	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Like it	3 2	30	25	27	30	25
Indifferent	28	29	29	28	22	32
Do not like it	20	23	31	30	30	33
Not ascertained	20	18	15	15	18	10
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 79. Replies to the Question: "How Do You Like the Texture or Quality of This Candy?"

		Occupa	tional stat	us of fam	ily head	
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Like it	56	55	52	52	48	49
Indifferent	19	21	24	25	24	24
Do not like it	16	16	17	18	20	21
Not ascertained	9	8	7	5	8	66
TOTAL	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 80. Replies to the Question: "How Do You Like the Flavor or Taste of This Candy?"

	us of fam	ily head				
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent
Like it	55	54	48	49	4 3	43
Indifferent	11	14	14	20	19	18
Do not like it	28	27	33	28	34	35
Not ascertained	6	5	5	3	4	4
Total	100	100	100	100	100	100
Number of respondents	784	845	471	661	208	556

Table 81. Replies to the Question: "Would You Buy This Candy If It Were Placed On the Market?"

	Occupational status of family head								
Replies	Un- skilled, semi- skilled, service workers	Agricul- tural, fishery, forestry workers	Skilled workers	Mana- gerial, profes- sional workers	Owners, partners, proprie- tors	Clerical, sales workers, students			
	Per cent	Per cent	$Per\ cent$	$Per\ cent$	Per cent	Per cent			
Would buy it Would not buy it	42 44	40 48	37 5 3	37 55	31 56	29 6 0			
Not ascertained	14	12	10	8	13	11			
Total	100	100	100	100	100	100			
Number of respondents	784	845	471	661	208	556			

CHARACTERISTICS OF THE SAMPLE

Table 82. Distribution of the Sample by Geographic Areas Studied and by Census Geographic Areas

Census	Per- centage	Geo	ographic a	United States		
geographic area	return of question- naires	North	South	West	Total	Weighted total ¹
	Per cent	Number	Number	Number	Number	Number
New England North Atlantic East North Central		201 530 545			201 530 545	203 535 551
Total	(83.9)	1,276			1,276	1,289
South Atlantic East South Central West South Central			508 292 326		508 292 326	543 312 349
Total	(79.4)		1,126		1,126	1,204
West North Central Mountain Pacific				497 169 457	497 169 457	494 168 455
Total	(85.3)			1,123	1,123	1,117
Total	(82.9)	1,276	1,126	1,123	3,525	3,610

¹ Differential weighting to bring the three areas into their proper relation with the United States as a whole was necessary. Weights applied to geographic area totals were 101.0 in the northeastern area, 106.9 in the southern area, and 99.5 in the western area. These weights represent the difference between expected returns and actual returns of usable questionnaires from consultant families in each of the three areas.

Table 83. Distribution of the Sample by Family Income Groups for Major Geographic Areas

Family income	Per- centage	Geo	graphic a	United States		
group	return of question- naires	North	South	West	Total	Weighted total
	Per cent	Number	Number	Number	Number	Number
\$2,000 and under \$2,001—\$3,000 \$3,001—\$5,000 Over \$5,000	(81.6) (84.4) (83.3) (82.3)	186 319 471 300	297 263 344 222	328 217 332 246	811 799 1,147 768	831 819 1,175 785
Total	(82.9)	1,276	1,126	1,123	3,525	3,610

TABLE 84.	DISTRIBUTION OF	THE SAMPL	E BY PLAC	E OF	RESIDENCE	AND	BY	CITY	
SIZE FOR MATOR GEOGRAPHIC AREAS									

Place of residence and city size	Per- centage	Geo	ographic a	United States		
	return of question- naires	North	South	West	Total	Weighted total
	Per cent	Number	Number	Number	Number	Number
Place of residence: Rural ¹ Urban ²	(83.8) (82.2)	354 922	745 381	574 549	1,673 1,852	1,726 1,884
City size: 2,500- 25,000 25,001-100,000 100,001-500,000 Over 500,000	(83.5) (83.7) (84.1) (78.0)	257 190 155 320	150 74 114 43	185 108 150 106	592 372 419 469	604 378 428 474
Total	(82.9)	1,276	1,126	1,123	3,525	3,610

¹ Rural residents live in rural areas or in incorporated towns or villages having

less than 2,500 people.

² Urban residents live in incorporated towns or cities having 2,500 population or more.

TABLE 85. DISTRIBUTION OF THE SAMPLE BY EDUCATIONAL STATUS OF THE FAMILY HEAD FOR MAJOR GEOGRAPHIC AREAS

Educational status	Per- centage	Lieograph			United States		
of family head ^{1, 2}	return of question- naires	North	South	West	Total	Weighted total	
	Per cent	Number	Number	Number	Number	Number	
Less than 8th grade	(86.2)	37	95	80	212	219	
Completed 8th grade	(87.0)	130	68	186	384	389	
Less than high school	(85.2)	281	255	207	74 3	76 3	
Completed high school	(77.1)	368	250	282	900	919	
Less than college	(82.2)	207	202	170	579	594	
Completed college	(86.8)	253	256	198	707	726	
TOTAL	(82.9)	1,276	1,126	1,123	3,525	3,610	

¹ Educational status of family heads was reported as the amount of formal education completed. The 1947 Census of population estimates indicate that about 11 per cent of the nation's total population has attended college. Normally, family heads constitute about a third of the nation's total population (exclusive of persons under 5 years of age). In this study, therefore, the expected percentage of individual respondents who were from families where the family head had attended college was about three times as great as the 1947 Census estimates for the nation's total population. The actual percentage as indicated by returned usable questionnaires was 36.5 per cent.

² In cases where no family head was reported, the educational status of the homemaker was used.

Table 86. Distribution of the Sample by Occupational Status of the Family Head for Major Geographic Areas

0 1	Per- centage Geographic area			United	United States		
Occupational status of family head ¹	return of question- naires	North	South	West	Total	Weighted total	
	Per cent	Number	Number	Number	Number	Number	
Unskilled, semi-skilled, service workers Agricultural, fishery,	(78.9)	265	208	311	784	800	
forestry workers Skilled workers	(86.0) (82.3)	182 229	349 107	314 135	845 471	870 479	
Managerial, professional workers Owners, partners,	(84.2)	300	193	168	661	676	
proprietors Clerical, sales workers,	(77.9)	67	80	61	208	215	
students	(83.9)	233	189	134	556	570	
TOTAL	(82.9)	1,276	1,126	1,123	3,525	3,610	

¹ In cases where no family head was reported, the occupational status (if any) of the homemaker was used.

Table 87. Distribution of the Sample by Sex and by Age of Respondents for Major Geographic Areas

0 1	Geo	graphic a	United States		
Sex and age of respondents ¹	North	South	West	Total	Weighted total
	Number	Number	Number	Number	Number
Sex of respondents: Male Female	574 702	506 620	503 620	1,583 1,942	1,621 1,989
Age of respondents: 5-19 years 20-34 years 35-54 years 55 years and over	301 369 401 205	274 329 363 160	280 289 324 230	855 987 1,088 595	876 1,013 1,114 607
TOTAL	1,276	1,126	1,123	3,525	3,610

 $^{^1}$ Children less than 5 years of age were disregarded in making tabulations of the data returned by respondents.