USE of DAIRY PRODUCTS in the ANNISTON MARKET AREA

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USE of DAIRY PRODUCTS in the ANNISTON MARKET AREA*

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INTRODUCTION

W ITH RECENT increases in urbanization and industrialization, both rural and urban families in Alabama have become more progressively dependent upon retail markets for the family food supply. Employment of women outside the home increases the family's dependence upon retail markets and has helped to change family buying practices. Advances in retail services have improved store offerings from which consumers can choose. The homemaker's problem of decision making in the household has been magnified by the large number of foods available. At the same time, greater industrial employment and higher family incomes have enabled many households to use more of the various forms and kinds of foods available in the market place.

An understanding of the ever-changing consumption pattern and process—the decision making and behavior involved—is needed in formulating policies bearing on consumption of dairy products and other foods.

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PURPOSE OF STUDY

Information is needed that will provide the basis for guidance of both production and marketing phases of the dairy industry. The general objective of this study was to determine the uses of milk and milk products and factors associated with their consumption in the study area.

Specific purposes of this study were:

1. To determine in the purchase of milk and its products (a) the family buying practices; (b) the influence of family characteristics, occupation, income, and related factors; and (c) the influence of store offerings and retail marketing services.

2. To determine the kinds and sources of information used by family food buyers and how such information was related to the

purchase and use of dairy products.

METHOD OF STUDY

The sample was drawn from the city of Anniston, Alabama, and surrounding urban areas, which included Blue Mountain, Oxford, Saks, Hobson City, and West Anniston. These surrounding areas are an integral part of the Anniston trade area. The 1950 census reported the population of the combined areas as 37,192.

A representative sample of families was selected by appropriate statistical procedure. The Anniston trade area was divided into 50 geographic strata. Two segments were randomly drawn from each stratum. Each segment was expected to contain 5 occupied dwelling units. Residences of transients were not included because the study was concerned only with purchase decisions made

within the household or consumption unit.

There were 502 usable records from the 577 families in the sample. Forty-seven of the families were ineligible because: (1) there were fewer than 2 members in the family; (2) there were 5 or more boarders with the family; or (3) there was less than 1 meal per day eaten in the home during the survey week. Eleven houses were vacant, and 5 records were incomplete. The remaining 12 families refused to answer questions, mainly because of illness in the household rather than reluctance to reply.

Pertinent information was recorded on a prepared schedule during a personal interview with the homemaker of the families studied. All interviews were made during the period of October 1 to December 15, 1954, with a 2-week lapse at Thanksgiving to avoid holiday food buying and consumption. Each homemaker answered questions in terms of the last 7 days immediately preceding the date of the interview. This period is later referred to as study week.

AVAILABILITY OF DAIRY PRODUCTS IN MARKET AREA

The failure to have a given product available in the food stores of a given town would in itself restrict or even prohibit its use by many households. Such was not the case with most dairy products in the Anniston market area. The area was served by local dairies and plants from nearby cities. These plants made deliveries to homes, food stores, cafes, schools, and other institutions.

The market area had a large number of food stores, drug stores, and service stations that were retailing some dairy products. In order to obtain a cross section of dairy products availability in food stores, the owners or managers of 31 retail food stores within the sample area were interviewed. Most of the stores (94 per cent) were independently owned. Seventy-seven per cent had gross yearly sales of less than \$100,000, and 10 per cent had gross yearly sales of \$300,000 and over. Store locations were scattered throughout the sample area.

Fluid milk and a variety of other dairy products were found to be readily available to consumers. Dairy products carried by more than 50 per cent of the stores surveyed were:

Products Carried	Percentage of food stores handling
Homogenized sweet milk	100
Buttermilk	100
Evaporated whole milk	97
Dried milk	97
Yellow cheese	97
Ice cream	94
Ice milk	87
Pasteurized sweet milk	84
Sweetened condensed milk	77
Butter	77
Chocolate drink	74
Cream	65

The Anniston market area operated under the Alabama Milk Control Board with retail prices for fluid products set by the Board. Other than for fluid products, prices varied from store to store. Variations in price were related to the policy of a particular store, or to brand or quality of products. For example, the price of a $13\frac{1}{2}$ -ounce can of evaporated whole milk was found to vary 9 cents among the retail food stores.

Not only were stores competitive in prices, but they were also competitive in non-price operations. These applied less to dairy products, however, than to many other foods. Only 42 per cent of all stores used promotion or advertising to increase the sale of dairy products. Most emphasis was placed on promoting the sale of ice cream and ice cream products. Ninety-two per cent of the ice cream promotion was distributor originated; the remaining 8 per cent was jointly instigated by distributor and retailer.

Managers in 81 per cent of the stores reported that credit was available to selected customers, and 55 per cent of the stores delivered food purchases to the home. Fifty-five per cent also had special parking space for customers. Nineteen per cent of the stores offered complete self-service, 78 per cent part self-service, and 3 per cent had all clerk service. The average number of hours open per day for all stores was 11.1. Hours open on Saturday varied only slightly. None of the stores was open on Sunday. Forty-eight per cent of the stores were closed one-half day every Wednesday. Only two stores were open extra hours at Christmas and only one at Thanksgiving.

Consumers had a wide variety of dairy products from which to choose, and these could be obtained from a number of sources with varying amounts of services. The variety of products available permitted consumers to choose dairy products that could supply family needs from a cost of a few cents to more than a dollar per quart of whole milk equivalent.

DESCRIPTION OF FAMILIES STUDIED

Of the 502 usable records taken in the survey, 378 were from white and 124 from colored families. There were 2,059 people reported in all households involved in the survey. These included regular members of the family plus relatives or others living with the family for the week covered by the study. These persons, however, did not have all meals in the home. Eight per cent of all meals of the whites were eaten away from home either as purchased or gift meals. Colored families ate 5 per cent of their meals away from home. Lunches prepared from the home food supply were considered as home meals. Lunches eaten by children at the school lunch room were considered as purchased meals eaten away from home.

White families had an average annual income before taxes of \$3,818. Dividing total family income among the 1,511 people in

the families at the time of the study gave a per capita income of \$955 for whites. The 124 colored families consisted of 548 people. Their average annual income per family was \$2,028, or a per capita income of \$459. For the 502 families, yearly income averaged \$3,376 per family and \$823 per capita.

In order to better express the family level of living, a socioeconomic scale was developed. This quantitative measure was based on family ownership of certain material possessions and family participation in selected activities. Each of the nine items used in the scale was given a weight of 2 for a "yes" answer and 0 for a "no" answer. Possible family scores ranged from 0 to 18. White families had an average score of 12. Twenty-eight per cent of them had a score of 10 or less, while 72 per cent scored 11 or more. The average score of all colored families was 8: 75 per cent had a score of 10 or less and 25 per cent scored 11 or more. Family income and socio-economic score tended to increase or decrease together. Yearly income of colored families was equal to 53 per cent of that of the whites; their average socio-economic score was equal to 67 per cent of that of the whites. Appendix Table 1 lists the items used in the scale and the percentage of families with the various items by race.

Family income was sufficient to supply both the amount and kind of foods preferred by most households. In a hypothetical situation in which families could spend as much as they wanted for food, homemakers were asked if they would spend more than they were then spending. In 62 per cent of the cases, homemakers would not spend more; 2 per cent were undecided as to how they would react; and 36 per cent stated that they would spend more money for food. Of those who would spend more, approximately 50 per cent indicated they would spend the extra money for meat. About 10 per cent indicated they would allot extra money first to dairy products. The remaining replies varied.

Homemakers were queried on kinds of foods they thought their families should have every day. Green vegetables, meat, and milk accounted for 72 per cent of foods named first or second. Bread and cereal products, eggs, starchy vegetables, and fruits usually followed in that order. White homemakers most often named meat first, whereas colored homemakers most often named green vegetables first.

Of the 502 homemakers, 67 per cent named milk as a food needed daily. However, only 21 per cent of this group named

milk first in their listing of foods. Of the 168 homemakers who did not mention milk as a food needed daily, 79 per cent named it as a beverage needed daily. Only 7 per cent of all homemakers failed to mention milk as being needed either as a food or a beverage. Practically all homemakers recognized the food value of milk and other dairy products. The big difference was in the position homemakers ranked milk as a food or as a beverage.

A total of 499 homemakers responded to a question about the use of a grocery list. About 60 per cent used such a shopping list. Of the 301 homemakers using a list, 31 per cent always used it, 26 per cent generally used it, and 43 per cent used a list sometimes. Only 52 per cent of the colored families used a shopping list with any degree of frequency as compared with 63 per cent for white families. In 91 per cent of the households, the homemaker made out the grocery list.

Making the family grocery list was accepted as the home-maker's responsibility, and she purchased food supplies in 60 per cent of the cases. The husband assumed all or part of the responsibility for buying in 32 per cent of the cases. Seventeen per cent of the husbands did the shopping alone, whereas 15 per cent shopped with homemakers. Children, combinations of family members, and others (maids, family members other than parents and children) accounted for the remaining 8 per cent. Irrespective of who did the family buying, 97 per cent of all food purchases were made by personal shopping. Only 1 per cent of the households shopped by telephone, while 2 per cent combined the use of the telephone with personal shopping.

DAIRY PRODUCTS USED

The 23 kinds of dairy products about which homemakers were queried were available on the Anniston market. However, some of the lesser known items were available in less than 50 per cent of the food stores. Only four dairy items were used in the home by 50 per cent or more of the families the week prior to the interview, Table 1. These were homogenized sweet milk, buttermilk, evaporated whole milk, and yellow cheese. As a whole, white families tended to use a greater variety and larger amounts of dairy products than did colored families, Appendix Tables 2 and 3.

While only 59 per cent of the families interviewed had used homogenized sweet milk during the 7-day period prior to the

TABLE 1. NUMBER AND PERCENTAGE OF FAMILIES USING DAIRY PRODUCTS IN THE HOME, AND AVERAGE AMOUNT OF EACH PRODUCT CONSUMED PER FAMILY OVER A 7-Day Period, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

	Famil	log veing		Average quantity used per family		
Product	Families using each product		Unit	Consuming families	All families studied	
	No.	Pct.		No.	No.	
Homogenized sweet milk Pasteurized sweet milk Raw sweet milk Skimmed sweet milk Buttermilk Chocolate milk or drink Whipping cream Coffee cream Half and half cream Evaporated whole milk Condensed milk Dried milk Dried cream Yellow cheese Cottage cheese Cream cheese Other cheese Ice cream	295 166 15 28 375 49 51 19 18 398 5 61 111 	59 33 3 6 75 10 10 4 4 79 1 12 22 75 12 9 4 45	Qt. Qt. Qt. Qt. ½ Pt. ½ Pt. Oz. Oz. Oz. Oz. Lb. Lb. Oz. Oz. Pt.	9.3 8.0 17.9 4.1 3.5 2.1 1.6 1.9 1.9 41.8 56.3 16.9 13.4 	5.5 2.6 .5 .2 2.6 .2 .1 33.2 .6 2.1 3.0 7 .1 4 .3 1.2	
Sherbet Ice milk	19 11	4_2	Pt. Pt.	$1.5 \\ 1.3$	$\cdot 1_{_{2}}$	
Other frozen desserts	5	$\overset{\scriptscriptstyle{\mathcal{L}}}{1}$	Pt. Pt.	2.6	2	
Butter	204	41	Lb.	1.3	.5	

¹Each homemaker answered questions about the use of dairy products in her home for the 7-day period prior to visit. The interview period extended from October 1 to December 15. Consequently, the use of dairy products by the sample of families did not cover precisely the same 7-day period.

² Less than 0.05 pint.

interview, 81 per cent had used this product during the preceding 12 months, Appendix Table 4. A greater percentage of colored than white people used buttermilk during the study week. However, 93 per cent of all families had used buttermilk during the previous year. The percentage of families that reported using a product in the preceding 12 months was greater than the percentage of families using the product during the study week.

The seasonality of dairy products use followed the same general pattern for both white and colored families, Appendix Table 5. Such products as whipping cream, ice cream, and frozen desserts were used more frequently and in larger amounts during summer months. No product was a "winter product." With the exception of frozen products, most dairy products were used at about the

same rate throughout the year. Most families used the major fluid milk products; however, many of the other dairy products had been used by only a small percentage of the 502 families. For example, only 17 per cent of the families used skimmed sweet milk, 13 per cent used half and half cream, and 4 per cent used dry cream, Appendix Table 6.

In most instances where a product had not been used by a family within the past year, it had never been used. For example, 83 per cent of all families had not used skimmed sweet milk during the past year, and 70 per cent reported that they could not recall ever having used this product in their home. Sixty-eight per cent of the white and 73 per cent of the colored families reported never having used skimmed sweet milk, Appendix Table 6. Generally, a higher percentage of colored than white homemakers had never used the less familiar dairy products.

USE OF MILK AS A BEVERAGE

All of the dairy products used by a family, both at home and away from home, were converted to whole milk equivalent based on proteins and minerals. The average per capita consumption of whole milk equivalent for all families was 4.6 quarts for a 7-day period. Approximately 74 per cent of the whole milk equivalent used was consumed as a beverage. This consisted of fluid milk products, such as sweet milk, buttermilk, skimmed milk, or chocolate milk. Small amounts of reconstituted evaporated or dried milk were used by some families.

When the amount of whole milk equivalent consumed as a beverage was compared to a weekly minimum recommended whole milk equivalent allowance by age and sex, it was found that females consumed the smallest amount of fluid dairy products, and their total intake may have been deficient, Table 2. The comparison is of milk consumed as a beverage to the total dairy products recommended in terms of whole milk equivalent. In addition to the amount of milk consumed as a beverage, most people consume some other dairy products, such as cheese and ice cream, each week. However, it is not likely that people who are consuming less than 60 per cent of the recommended amount as beverages would use enough of the other products to bring their total use to the minimum recommendation. The minimum recommendation used is that amount designated for a low-cost

TABLE 2. AVERAGE PER CAPITA CONSUMPTION OF DAIRY PRODUCTS AS A BEVERAGE Over a 7-Day Period, Compared to the Minimum Recommended Whole Milk Equivalent, by Age and Sex, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

Person	Dairy products consumed as beverages in terms of whole milk equivalent ¹	Minimum recommended whole milk equivalent	Percentage of the recommended used as a beverage
	Quarts	Quarts	Per cent
Husbands	3.4	3.5	97
Homemakers	2.1	4.0^{2}	52
Females: ³			
1- 5 years of age	3.7	5.0	74
6-12 years of age		5.5	58
13-15 years of age		6.0	60
16-19 years of age	2.3	6.0	38
20 years of age			
and over	2.4	3.5	69
Males:			
1- 5 years of age	5.5	5.0	110
6-12 years of age		5.5	75
13-15 years of age		6.5	63
16-19 years of age	4.7	6.5	72
20 years of age	• .		20
and over	2.4	3.5	69

¹ Total milk equivalent is based on proteins and minerals. However, this does not account for all milk equivalent used by each person, since such items as cheese

and ice cream are omitted.

Based on homemakers in the study and using 10 quarts per week for nursing mothers and 3.5 quarts for all others.

Excluding homemakers.

* Excluding husbands.

food plan.1 Whites of both sexes and all age groups used more milk as a beverage than did colored, Appendix Table 7.

Frequency of Drinking Sweet Milk

Some family members drank sweet milk at every meal. This was true more frequently for children than for adults. Half of the adults drank sweet milk at least once every day, Table 3. Some family members drank sweet milk only sometimes and with no degree of frequency, and some never drank it.

White adults drank milk more frequently than did colored adults. More white males drank sweet milk at every meal than did colored males. The percentage of colored children drinking milk every day would have been much lower had it not been for the milk provided by the school lunch program.

¹ Requirements as designated by Home Economics Research Branch, Agricultural Research Service, USDA. See footnote 3.

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MARKET AREA, FALL, 1904								
n	Number of	Frequency of drinking sweet milk						
Person	persons ¹	Every meal	Every day	Sometimes	Never			
	Number	$Per\ cent$	Per cent	$Per\ cent$	Per cent			
Husband	432	12	52	28	8			
Homemaker	499	7	50	31	12			
Female:2								
1- 5 years of age	124	51	32	14	3			
6-12 years of age	169	37	50	11	2			
13-15 years of age	59	32	54	14				
16-19 years of age	49	19	57	20	4			
20 years of age								
and over	87	7	55	26	12			
Male: ³								
1- 5 years of age	147	57	36	6	1			
6-12 years of age	148	48	45	6	1			
13-15 years of age	47	49	34	17				
16-19 years of age	55	27	60	13				

TABLE 3. PERCENTAGE OF FAMILY MEMBERS DRINKING SWEET MILK AT GIVEN Frequencies, by Age Groups, 502 Families, Anniston, Alabama, Market Area. Fall. 1954

20 years of age

and over.....

REASONS FOR NOT DRINKING SWEET MILK

Dislike and cost were the two reasons most often given for family members failing to drink milk at greater frequency. Dislike was the most notable reason given in white families for those who seldom or never drank sweet milk. Among colored families, cost was listed as the primary cause and dislike the secondary factor. Other reasons given were: milk is fattening, preference for another beverage, medical reasons, and preference for other milk forms, Table 4. There were more reasons given by females than males for not drinking milk, and fewer females drank milk at least every day or every meal.

The reasons why family members drank sweet milk only sometimes or never were supplied by the homemakers. If the information obtained was sufficiently accurate, it could mean that the flavor of milk is an important factor in milk consumption. Experimental work on improving the flavor of fluid milk or adding artificial flavoring to increase consumption of milk is a possibility that should not be overlooked.

Some 535 people, or 28 per cent of those included in the survey, drank sweet milk only sometimes or never. Percentagewise, more

¹ The number of persons accounted for 92 per cent of the people included in the study.
² Excluding homemakers.

³ Excluding husbands.

TABLE 4.	REASONS FOR FAMILY MEMBERS DRINKING SWEET MILK ONLY SOMETIMES
	OR NEVER, BY AGE AND SEX, 502 FAMILIES, ANNISTON,
	ALABAMA, MARKET AREA, FALL, 1954

	Reasons for not drinking sweet milk								
Person	Num- ber of per- sons	Dis- like	Cost	Other pre- fer- ence	ten-	Medi- cal reason	not	Prefer other milk form	Misc. or no reason
	No.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Husband	156	34	16	13	9	8	12		8
Homemaker	214	45	20	5	10	6	10	1	3
Female:1									
1- 5 years of age	. 21	19	71	5					5 5
6-12 years of age		9	78	4			4		5
13-15 years of age		38	50					12	
16-19 years of age	. 12	42	25		8		25		
20 years of age									
and over	. 33	33	28	9	9	15	6		'
Male: ²									
1- 5 years of age		40	50					10	
6-12 years of age		40	60	_ ==					_==
13-15 years of age		25	38	12					25
16-19 years of age	. 7	28	43	29					
20 years of age					_				
and over	. 33	58	27	12	3				

¹ Excludes homemakers.

colored than white people were in this group. Thirty-eight per cent of the people who seldom or never drank milk indicated a dislike for the flavor. Some 27 per cent reported cost as the reason.

HOMEMAKERS' PRACTICES IN BUYING DAIRY PRODUCTS

PLACE OF PURCHASE

A standing order with regular delivery from a dairy was the method most used for purchasing fluid milk. The exception was whipping cream, which was more often purchased from a store, Appendix Table 8. A small percentage of families purchased milk from individuals; this source was used more for buttermilk than for sweet milk. Approximately 2 quarts of sweet milk were obtained by route delivery for every quart purchased at the store. Route deliveries of buttermilk were approximately 1.6 quarts for each quart of store sales. Approximately 4 quarts of sweet milk were sold for each quart of buttermilk. This was true for both route deliveries and store sales. Coffee cream was more often purchased from dairies, but less butter was purchased from

² Excludes husbands.

dairies than from other sources. Twenty-three per cent of the butter was bought from sources other than dairies or stores.

Per capita consumption of sweet milk varied by source of purchase. Families of both races that bought all of their sweet milk from dairy plants on regular delivery routes and those that purchased only from stores each consumed 2.5 quarts per capita over a 7-day period. Families that used regular delivery for sweet milk from plants and supplemented this with additional purchases at the store consumed an average of 3.8 quarts per capita. White families getting all milk by route delivery consumed 2.8 quarts of sweet milk per capita, those purchasing all of their milk from stores consumed 2.9 quarts, and those obtaining milk from both sources used 3.9 quarts. Colored families consumed 1.6 quarts of sweet milk per capita per week when all purchases were from route delivery, 1.5 quarts when all purchases were from stores, and 2.3 quarts when a combination of route and store purchases were made.

KIND OF CONTAINER

Fluid milk products were available from dairies in either glass or paper containers. At stores it was usually available only in paper containers. A small independent grocer might keep milk in glass for special customers. Cream in glass containers was frequently found in stores. Sweet milk was purchased in glass containers by 56 per cent of the consumers; 56 per cent also purchased buttermilk in paper containers.

USE OF CREDIT

Sixty-six per cent of the families that purchased sweet milk from dairies using regular delivery also used credit, Appendix Table 9. No ice cream was purchased from dairies by standing order or regular delivery, and only 2 per cent of the ice cream purchases were by credit. Only a very small percentage of store purchases of all dairy products were by credit.

CONTAINER PREFERENCES

Of the 500 homemakers who had purchased milk during the previous 12 months, 90 per cent had bought milk in both bottles and cartons. Cartons only were used by 7 per cent and bottles

only by 3 per cent. In households where both types of containers were used, 25 per cent expressed a preference for cartons, 61 per cent preferred bottles, and 14 per cent had no preference. The reasons most frequently given for preferring bottles were: milk tastes better from bottles, cartons leak, and bottles are more sanitary. General convenience accounted for most homemakers' preferences for cartons.

Sixty-three per cent of the 489 homemakers who had used cartons the previous year had no preference for particular colors. Only 35 per cent reported preferring colored cartons, and 59 per cent of these had no particular color preference. The few who expressed a color preference for different dairy products tended to name the colors used by distributors whose dairy products they used.

Twenty-nine per cent of the homemakers purchased milk in more than one size container. All 500 homemakers had purchased milk in quarts. Of the 143 homemakers who had purchased milk in more than one size container, 93 per cent had purchased in half-gallons. The gallon container was not available in dairies and stores. However, 7 per cent of those who purchased milk in more than one size container bought milk in gallon containers from other sources. Quart containers were preferred by 41 per cent of the homemakers because of ease in handling and adequacy for family needs. Half-gallons were preferred by 49 per cent because of their ease of storage. Of the remaining 10 per cent, 3 per cent preferred gallons and 7 per cent had no preference.

BEVERACES COMPETING WITH MILK PRODUCTS

Competing products were used by practically all families. Coffee, tea, soft drinks, and orange juice were used most frequently and in the largest quantities. On the average, coffee and orange juice were the greatest competitors, Appendix Table 10. There was more seasonal variation in the use of competing products than for dairy products. All products that were used seasonally were used increasingly in the summer, except coffee.

HOMEMAKERS' OPINIONS ABOUT NUTRITION

The homemaker was presented a hypothetical situation in which there was no meat for a meal, but eggs, dried peas or beans,

and cheese were available. She was asked which of these foods she would serve to please her family most. The percentage distribution of choices was as follows:

Food would substitute for meat	Per cent
Dried peas or beans	47
Eggs	21
Cheese	19
Combination of two foods (usually cheese and eggs)	13

Milk is a superior source of many nutrients. It is an excellent source of calcium, a good source of the B complex vitamins and protein, and cream in milk contains vitamin A. To evaluate the homemakers' knowledge of the nutritive value of milk, they were asked what they thought milk had in it. Many homemakers gave more than one reply; there was a total of 794 replies from the 502 homemakers. Vitamins accounted for more of the replies (29 per cent) than any other nutrient. Calcium was mentioned in 19 per cent of the replies. Fat (cream), water, and protein were the next most often mentioned constituents. Of all replies, 13 per cent indicated that the homemaker did not know or had no opinion as to what milk had in it. Thiamine and riboflavin were the only vitamins definitely named, and they were reported in less than 1 per cent of the replies.

The percentage of replies was as follows:

Milk constituent named	Per cent
Vitamins	29
Calcium	19
Fat	11
Water	10
Protein	9
Iron	$egin{smallmatrix} 2 \ 2 \end{bmatrix}$
Minerals	2
Phosphorus	1
Riboflavin	1
Thiamine	1
Other	4^2
Don't know	13

Homemakers reported that they thought adults should have 1.5 pints and children 1.8 pints of milk every day during the fall months. These amounts averaged 1.6 pints per capita for all people in the study. The average person in the study consumed only 1.3 pints of whole milk equivalent per day. The amounts

¹Less than 0.5 per cent. ²Included general statements, such as "nature's most nearly perfect food," and "everything," rather than definite nutrients.

suggested by colored homemakers averaged slightly less than those given by white homemakers. The average person was consuming only 81 per cent of the amount of milk homemakers believed to be needed.

Fifty-six per cent of the colored homemakers believed milk to be fattening, while only 48 per cent of the white homemakers thought so. Nine per cent more colored homemakers than white had no opinion or did not know. The percentage distribution of replies from all homemakers was as follows:

Is milk fattening?	Per cent
Yes No Don't know or no opinion	50 34 16

NEW USES MADE OF DAIRY PRODUCTS

There were few dairy products that were new to the home-makers. In preparation of new dishes, however, 200, or 40 per cent, of the homemakers had used one or more specified dairy products the previous year. New uses or preparation of new dishes containing a dairy product averaged 1.6 per homemaker who used them.

The most frequent new use of a dairy product was in desserts. Casseroles or main dishes were second. Forty-three per cent of the new dishes containing sweet milk were desserts; desserts accounted for 39 per cent of the new uses of evaporated milk and 63 per cent of the condensed milk. Sixty-five per cent of the new dishes containing cheese were casseroles.

About one-fourth of the ideas for the preparation of new dishes containing dairy products came from magazines. Friends and neighbors were the next best source of ideas. Although numerous sources of information were reported, Table 5, only 9 per cent of the ideas came from television and newspapers combined.

Table 5. Number of Replies and Source of Information for New Uses of Dairy Products, 200 Homemakers, Anniston, Alabama, Market Area, Fall, 1954

	Number Source of information for new uses of dairy products									
Item	a new use	Magazines	Friends or neighbors	Family and relatives	Labels on products	Own ideas	Cookbook	TV	News- paper	All other sources
Sweet milk	60	20	8	8	6	5	3	3	3	4
Buttermilk	37	6	8	6		5	5	_	2	$\tilde{5}$
Evaporated milk	51	17	9	3	7	6	6	3	_	_
Dried milk	30	3	5	4	4	2		3	3	6
Condensed milk	35	11	7	2	9	1	5			
Cheese	86	22	18	8	2	10	3	7	6	10
Other dairy products Actual number of	17	2	4	3	5	1	1	1		
replies by source Percentage of all	316	81	59	34	33	30	23	17	14	25
replies by source		26	19	11	11	10	7	5	4	7

SOURCES OF INFORMATION ABOUT DAIRY PRODUCTS

ADVERTISING

Almost one-half (242) of the homemakers remembered some advertisement about dairy products. More homemakers obtained information concerning dairy products in the form of advertising than by any other means. The three forms of advertising most mentioned were television programs sponsored by milk and dairy product manufacturers, radio advertisements, and labels on products purchased or seen in stores. Thirty-one per cent of the homemakers who saw or heard advertising said that it influenced them to buy or to use more of a particular dairy product. The percentage of homemakers who reported receiving information through a particular advertising medium is shown below:

Advertising medium	Per cent
TV programs with milk sponsors	59
Milk advertisements on radio	13
Labels on products	7
Advertisements in magazines	4
Advertisements in newspapers	4
Billboards	2
Store signs	2
Miscellaneous (4-H clubs, cooking schools, and	
sources not remembered)	9

Homemakers reported reading magazines with a food section more often than newspapers. Magazines from grocery chain stores were mentioned more than any other magazine.

DEMONSTRATIONS AND DISCUSSIONS AT GROUP MEETINGS

Only 32 homemakers reported receiving information concerning dairy products from group demonstrations or discussions. Of these, 38 per cent had received information from an "open house" sponsored by a local dairy several weeks preceding the survey. School organizations were the second best source of group information. Information received from group meetings was used later by 50 per cent of the homemakers. The percentage of the 32 homemakers receiving information from specific types of group demonstrations was as follows:

Source of information	Per cent
Local dairy "open house"	38
School organizations	22
Other clubs	16
Store demonstrations	• 9
Cooking schools	9
Child care conference	3
Source not remembered	3

Information from Doctors and Clinics

Doctors and health clinics were good sources of information on dairy products. One or more members of the family in 20 per cent of all homes studied had received information from doctors or health clinics. Ninety per cent of the information advocated increased use of dairy products or a specific product in the diet, particularly for adults.

NEW FOODS DESIRED BY SCHOOL CHILDREN

Seventeen per cent of the homemakers with school age children reported that they had been asked by the children to serve a new food containing dairy products. The foods most frequently requested were desserts, cheese, milkshakes, and chocolate milk. The children had seen or had eaten these foods away from home.

SUBSTITUTION FOR DAIRY PRODUCTS

In a hypothetical situation in which selected dairy products were not available, substitution by homemakers tended to follow three lines of reasoning. The first was to substitute a product as nearly like the selected product as possible. Examples of this would be fresh whole milk for evaporated whole milk, evaporated whole milk for whipping cream, or sherbet for purchased ice cream. The second was to substitute a product that would most nearly serve the same purpose in its major use. The use of meat and eggs instead of cheese, and homemade ice cream or other milk desserts to replace purchased ice cream are examples. The third was to substitute a completely unrelated product that would eliminate the use of a dairy product altogether, as in the use of tea instead of coffee with cream.

FACTORS RELATED TO MILK CONSUMPTION

It has long been known that per capita consumption of sweet milk is low in the South, including Alabama. Also, there have been many different opinions as to why this is true. The price of sweet milk is often quoted as being a factor that affects consumption.

This study was not designed to determine effects of price on milk consumption. The market area studied was a "controlled

market"; that is, it was a market area under the supervision of the Alabama Milk Control Board, with the price of sweet milk and other fluid milk products set by that Board. The price of fluid milk products was constant throughout the period of the study, except for a few families who made trips to rural areas to buy milk. There were no differences in the price of fluid milk products among families, nor in price of home delivered and store purchased milk. The only choice from the price standpoint that consumers had was that of purchasing milk in glass bottles or in paper cartons. One cent was added to the cost per quart of fluid milk purchased in paper cartons.

Since there was no variation in the price of fluid milk, it is not known how much milk would have been consumed at some other price. However, since price was held constant, other factors affecting consumption could be measured without the results being interwoven with a wide range of prices. For those families that seldom or never drank sweet milk because of its cost, price had a restricting effect.

In addition to price, such factors as race, income, family expenditure for food, family age distribution, sex, habits, customs, likes, dislike, frequency of drinking milk by husband or homemaker, climate, changes in temperature, promotion, and many others are often expressed as factors affecting per capita milk consumption. Some of these factors could be studied while others could not. In analyzing such individual characteristics as race, income, or education, it was not possible to relate these factors to cause or to effect. However, the data indicate that these factors are related to milk consumption. Better nutrition and higher milk consumption could result from educational programs based on a knowledge of factors related to milk consumption.

Data in Table 2 indicate that the quantity of milk consumed was related to age and sex factors. Adult males used more milk as a beverage than did females. Boys used more than girls. Teen-age girls and homemakers had very low intakes of milk as a beverage. Sex and age affected milk consumption with females and older persons consuming less milk. Eleven per cent of the people reporting disliked the flavor of sweet milk, and almost half of these were homemakers. The like or dislike of mothers for milk was associated with the total family use of dairy products.

RACE

A comparison was made of the per capita consumption of all dairy products by race for a 7-day period. Each product was measured in terms of whole milk equivalent.²

The whole milk equivalent of each product used per person was added to get "total milk equivalent used." The total amount used was compared to a recommended equivalent. The recommended equivalent is a minimum recommendation for a low-cost adequate diet. This recommendation is for the smallest amount of whole milk equivalent that should be used and is not that amount that would always be best for many people to use.

Per capita consumption of whole milk equivalent amounted to 5.0 quarts in a 7-day period for white people and 3.5 quarts for colored people, Table 6. This amount slightly exceeded the minimum recommended amount for the whites. However, in case of

Table 6. Average Per Capita Use of Dairy Products (Standardized to Whole Milk Equivalent), Over a 7-Day Period, by Race, Anniston, Alabama, Market Area, Fall, 1954

, , ,					
Item	Average per o	Average per capita use of dairy products by race			
item	White	Colored	average		
People, number	1,511	548	2,059		
Average family income, dollars	_ 3,818	2,028	3,376		
Average per capita income, dollars		459	823		
Use of dairy products, quarts:	- 000				
Sweet milk	2.8	1.5	2.5		
Buttermilk		.8	.7		
Cream		i	1		
Canned milk	.6	.4	.5		
Dried milk		i	.2		
Cheese		.6	.6		
		.0	.,		
Ice cream	. <u> </u>	•т			
Total milk equivalent used, quarts	5.0	3.5	4.6		
Recommended milk equivalent, quarts		4.4	4.3		
Percentage of recommended amount used		80	107		
2 or contage of recommended amount asca					

¹ Less than 0.05 quart.

² "Family Food Consumption in Three Types of Farming Areas of the South, II, An Analysis of Weekly Food Records, Late Winter and Early Spring, 1948." Southern Cooperative Series Bulletin 20. Page 205. November 1951.

³ "Rural Family Living." Home Economics Research Branch, Agricultural Research Service, USDA. Page 10. March 1955. Recommended amounts were as follows: Children, 1-9 years, 5 quarts per week; boys, 10-12 years, 6 quarts; boys, 13-20 years, 6.5 quarts; girls, 10-20 years, 6 quarts; adult women, 3.5 quarts; nursing mothers, 10 quarts; and adult men, 3.5 quarts per week.

colored the amount was only 80 per cent of that recommended. The white people used 56 per cent of the whole milk equivalent as sweet milk, whereas the colored used only 43 per cent.

In Table 6, such products as half and half cream, coffee cream, and whipping cream are all classed as cream. Also, such items as evaporated milk, condensed milk, and other canned fluid products are listed as canned milk. Each item used by the families was included in the table. A conversion factor was used separately for each individual item. However, all were shown in the 7 groups in Table 6 to simplify presentation of the data. For example, a long list of many different kinds of cheese has been converted to its whole milk equivalent and listed as cheese.

The wide difference in the amount of whole milk equivalent used by white and colored people suggests that each group may be influenced by different factors. Certainly, differences in the per family and per capita income would lead to differences in milk consumption. In addition, custom, habit, desire, and other factors would be different for the two groups. Of 18 factors studied as possible items having some bearing on sweet milk consumption, 11 seemed related to consumption of sweet milk by white people, whereas only 7 seemed to be associated with colored people.

INCOME GROUPS

As income of white families increased, their consumption of sweet milk generally increased, Appendix Table 11. Sweet milk consumption per capita almost doubled when moving from the lowest to the highest income group among white families. The difference in per capita consumption of total whole milk equivalent, however, was rather small between the lowest and highest income groups. The major difference was in buttermilk consumption. The higher income groups were drinking more sweet milk and less buttermilk than were the lower income groups.

Among colored families, there was no great increase in the consumption of sweet milk or of total milk equivalent as income increased, Appendix Table 12. No one income group used as much milk as the minimum recommendation. On the basis of their present nutritional knowledge, colored families with increased income would buy but little additional sweet milk.

SOCIO-ECONOMIC SCORE

Each family was scored as to its ownership of certain property items and its participation in certain activities or events. The total score made by each family is referred to as its socio-economic score. The number and percentage of families having the various items of the socio-economic scale are given for white families in Appendix Table 13 and for colored families in Appendix Table 14. The percentage possessing the various items of the scale are given by score groups in Appendix Table 15. Families with a low score used very little in the way of dairy products. In both white and colored families where low dairy product consumption prevailed, scores on certain items of the scale were consistently low. Ownership of television, telephone, home freezers, and magazines, and family participation in organized activities were items on which these families scored lowest.

As the socio-economic score of white families increased from an average of 6 to 16, the per capita consumption of sweet milk increased from 2.1 to 3.1 quarts per week, Appendix Table 16. The increase in whole milk equivalent for these same family

groups was from 4.1 to 5.2 quarts per week.

Colored families with an average socio-economic score of 2 used only 0.7 quart of sweet milk per capita per week, Appendix Table 17. Colored families with an average score of 12 used an average of 1.9 quarts of sweet milk per capita per week. Colored families with a score of 2 used only 52 per cent of the recommended whole milk equivalent, while those averaging 12 points used 93 per cent of the recommended amount.

CASH EXPENDITURE PER INDIVIDUAL PER MEAL

With an increase in cash expenditure per individual per meal among white families, the consumption of sweet milk also increased. It was almost twice as great in the highest expenditure group as in the group with the lowest expenditure, Appendix Table 18. There was less increase in per capita consumption of total whole milk equivalent from lowest to highest expenditure group than was true for sweet milk alone. However, there tended to be some increase in the use of all items except buttermilk.

Negro families with the highest cash expenditure per individual per meal consumed more than three times as much sweet milk per person as those in the lowest expenditure group, Appendix Table 19. Sweet milk consumption increased from 0.6 to 2.2 quarts per person per week between the lowest and highest groups. The percentage of the recommended quantity of whole milk equivalent increased from 40 to 122 per cent between the lowest and the highest expenditure groups. Although there was some variation in the use of all dairy products, the largest variation occurred with sweet milk. In many respects the amount of cash that families were spending per individual per meal for all food was one of the better measures of the use of dairy products. When food expenditures were large enough to provide both an adequate and a nutritious diet, dairy products played an important part in the family food supply.

OTHER FACTORS

Per capita milk consumption was compared by levels to 12 other factors,⁴ in addition to the ones enumerated. Each of the factors were examined independently for white and colored families. Some of these factors were related to milk consumption by white but not by colored families, some to consumption by colored but not by white, while others showed a relationship to both groups. The detailed findings of each of these tests are given in Appendix Tables 20 through 45.

Numerous items were examined as to their effect upon consumption. Many were not found to be significant, but some showed definite relationships. More factors significantly affecting consumption were found for white families than for colored families, but all factors affecting consumption by colored families also affected consumption by white families.

The frequency with which husbands and homemakers drank milk significantly affected per capita consumption by other family members, both white and colored, as did cash expenditure per individual per meal. Income and age of homemaker more significantly affected consumption by white than by colored families. Education of husband and homemaker and age of husband were factors that showed significance for white families but little or none for colored.

These facts seem to indicate that consumption among white families is more predictable than that among colored. Therefore,

⁴ Other factors on which relationships to per capita milk consumption were tested were: Family type, size of household, age of homemaker, education of homemaker, homemaker's frequency of drinking milk, homemaker's employment, sex of head of house, number of wage earners, source of principal income, age of husband, education of husband, and husband's frequency of drinking sweet milk.

the colored segment of the population is the better field for expanded educational work in nutrition. On the other hand, there are indications that both the types of promotional media and kind of advertising material would need revising in order to better attract the interest of colored people and to encourage an increased consumption of dairy products on their part. While this analysis did not distinguish between cause and effect, it did indicate that different factors are involved in determining the amount of dairy products to be used in the home. While income is important, it was not the only basis for making decisions. Basically, the variation in consumption of dairy products seems to be one of values. To some homemakers the use of dairy products was a major step toward good health; to others dairy products were only one of many types of foods on the market.

BEVERAGE HABITS OF ADULTS AND CHILDREN

To determine the usual pattern of drinking milk, homemakers were asked to state the most common beverages drunk by adults and children by meals and seasons. The results were tabulated to show the preference for milk and non-milk beverages.

In winter, 88 per cent of the adults preferred non-milk beverages for breakfast. Milk was preferred by 41 per cent of the adults for noon and evening meals. Adults preferred milk less in the summer months. A larger percentage of adults preferred a non-milk beverage at every meal and between meals. A very

Table 7. Percentage of Adults Using Milk and Non-Milk Beverages, by Meals and Seasons, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

Meal	Milk only	Non-milk only
	Per cent ¹	Per cent ¹
Winter		
Breakfast Noon meal Evening meal Between meals	2 41 41 18	88 36 39 32
Summer		
Breakfast Noon meal Evening meal Between meals	6 19 3 4 11	82 66 51 51

¹ The two percentages shown will not total 100 because some adults drank both a milk and a non-milk beverage and a few drank no beverage.

small percentage preferred a combination of milk and a non-milk beverage, whereas some wanted no beverage. Table 7.

A higher percentage of white adults than colored adults used non-milk beverages in winter at all meals. Colored adults used a greater percentage of non-milk drinks at the noon and evening meal in summer. Also, a greater proportion used milk for breakfast than did white adults, but this was the only meal at which this was true. A large percentage of the colored adults used water or nothing, and only a small percentage used a combination of milk and non-milk beverages.

In the winter, milk was the main beverage for all children at mealtime. Milk plus another beverage was used by 19 per cent. Children who used beverages between meals more often used non-milk drinks. Thirty-six per cent did not drink beverages between meals, Table 8.

Children used more non-milk beverages in summer than in winter. Milk was the main beverage for the three meals of the day. The increase in the use of non-milk beverages occurred between meals for most children; this use occurred more in summer than in winter. The beverages drunk by children are given in Table 8.

Table 8. Percentage of Children Using Milk and Non-Milk Beverages, by Meals and Seasons, 502 Families, Anniston, Alabama,
Market Area, Fall, 1954

34 1) (211- o1	Non-milk only
Meal	Milk only	Non-mik omy
	$Per\ cent^{\scriptscriptstyle 1}$	$Per\ cent^{\scriptscriptstyle 1}$
Winter		
Breakfast	63	14
Noon meal	87	6
Evening meal	84	7
Between meals	25	33
Summer	*	
Breakfast	65	18
Noon meal	53	35
Evening meal	70	21
Between meals	18	54

¹Two percentages shown will not total 100 because some children drank both a milk and a non-milk beverage and a few drank no beverage.

Both in summer and winter, a greater percentage of white children consistently drank milk more frequently for all meals and between meals than did colored children, Table 9. A higher percentage of white children drank milk plus a non-milk beverage, while a larger percentage of colored children drank no beverage. The use of non-milk beverages increased in summer for both white and colored children. The increase in use of non-milk beverages in summer was greatest for colored children.

Table 9. Percentage of White and Colored Children Drinking Milk Only, by Meals and Seasons, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

Meal	White children	Colored children
	Per cent	Per cent
Winter		
Breakfast	66	55
Noon meal	91	74
Evening meal	88	70
Between meals	28	19
Summer		
Breakfast	67	62
Noon meal	58	$3\overline{7}$
Evening meal	76	52
Between meals	19	15

MOST COMMON BEVERAGE USED BY HOMEMAKERS

To determine the use and preference of sweet milk, home-makers were asked questions in which they were given a choice between sweet milk and another beverage in each of a series of paired choices. The competing beverages were coffee, chocolate drink or cocoa, powdered drinks, tea, buttermilk, and bottled soft drinks. Freferences were determined separately for each meal and between meals for both winter and summer. In this type of comparison, specific beverages that outranked sweet milk in preference could be determined.

For breakfast, homemakers expressed a preference for beverages that are ordinarily served hot. Coffee was usually preferred in both winter and summer, but the number of homemakers preferring coffee decreased in summer, Table 10. The number of white homemakers preferring coffee over milk was 5 times greater in summer and 7 times greater in winter as those preferring milk over coffee. Preference for chocolate at breakfast was not as great as for coffee, but it showed a similar seasonal variation. Sweet milk was preferred over powdered drinks, buttermilk, and bottled drinks by both white and colored homemakers. These preferences showed little seasonal variation. Sweet milk was preferred over tea by white homemakers, but colored homemakers

⁵ Chocolate milk and tea were drunk either hot or cold.

Anniston, Alabama, Market Area, Fall, 1954							
Product	White		Colored		All		
rioduct	Winter	Summer	Winter	Summer	Winter	Summer	
Sweet milk	1.0	1.0	1.0	1.0	1.0	1.0	
Coffee	7.2	5.1	2.9	1.9	5.5	3.9	
Chocolate	3.4	2.1	2.7	2.0	3.2	2.0	
Powdered drinks	.1	.1	.4	.3	.1	.2	
Tea	.8	.7	1.0	1.0	.8	.8	
Buttermilk		.1	.3	.4	.1	.2	
Bottled drinks	.1	.2	.3	.4	.2	2	

Table 10. Ratio of Homemakers Preferring Other Beverages to Sweet MILK FOR BREAKFAST BEVERAGE BY BACE AND SEASON 502 HOMEMAKERS

gave the same preference to tea as to sweet milk in both seasons, Table 10.

For the noon meal, beverages that are usually served cold were more popular with homemakers. Tea, buttermilk, and bottled drinks were most often preferred in summer, Table 11. This was especially true of tea, which was preferred over sweet milk more than 2 to 1 by all homemakers. Buttermilk and bottled drinks were preferred by colored homemakers in both winter and summer. White homemakers preferred bottled drinks in summer only. Sweet milk was the preferred noon meal beverage over coffee, chocolate, and powdered drinks by all homemakers in both seasons.

Table 11. Ratio of Homemakers Preferring Other Beverages to Sweet Milk FOR THE NOON MEAL BEVERAGE, BY RACE AND SEASON, 502 HOMEMAKERS, Anniston, Alabama, Market Area, Fall, 1954

Product -	White		$\mathbf{Colored}$		All	
Product	Winter	Summer	Winter	Summer	Winter	Summer
Sweet milk	1.0	1.0	1.0	1.0	1.0	1.0
Coffee	.6	.2	.2	.1	.5	.2
Chocolate	.4	.3	.8	.6	.5	.3
Powdered drinks	.2	.4	.6	.9	.3	.4
Tea	.6	2.3	.9	2.1	.7	2.3
Buttermilk	.7	.7	1.9	2.7	.9	1.0
Bottled drinks	.6	1.6	1.3	2.8	.7	1.8

There were few instances in which sweet milk was not the preferred beverage for the evening meal, Table 12. Tea was preferred by more homemakers in summer. Colored homemakers preferred buttermilk in both winter and summer and bottled drinks in summer.

Between meals the beverage preferred over sweet milk by homemakers was bottled drinks. They were preferred almost 2

HOMEMAKERS, ANNISTON, ALABAMA, WARKET AREA, FALL, 1904							
72 1 .	White		Col	ored	All		
Product	Winter	Summer	Winter	Summer	Winter	Summer	
Sweet milk	1.0	1.0	1.0	1.0	1.0	1.0	
Coffee	.9	.4	.7	.2	.8	.4	
Chocolate	.7	.3	1.0	.6	.7	.4	
Powdered drinks	.2	.3	.6	.9	.2	.4	
Tea	.4	1.3	.6	1.3	.5	1.3	
Buttermilk	.5	.6	1.9	2.5	.8	.9	
Dattled Lateles	0		0	1.0	1	7	

Table 12. Ratio of Homemakers Preferring Other Beverages to Sweet Milk for the Evening Meal Beverage, by Race and Season, 502 Homemakers, Anniston, Alabama, Market Area, Fall, 1954

to 1 in winter and 3 to 1 in summer. Tea was the only other beverage that was preferred more than sweet milk, but this was true only in summer for white homemakers. In every other case sweet milk was preferred, Table 13.

It is noted that for every meal and particularly between meals there were some homemakers who did not or would not choose between sweet milk and competing beverages. This could indicate that those homemakers preferred a different beverage to the choices offered or that they preferred no beverage.

Table 13. Ratio of Homemakers Preferring Other Beverages to Sweet Milk Between Meals, by Race and Season, 502 Homemakers, Anniston, Alabama, Market Area, Fall, 1954

n . 1	White		Col	ored	All	
Product	Winter	Summer	Winter	Summer	Winter	Summer
Sweet milk	1.0	1.0	1.0	1.0	1.0	1.0
Coffee	.5	.3	.3	.1	.5	.3
Chocolate	.6	.6	1.3	.6	.7	.6
Powdered drinks	.3	.6	.8	.9	.4	.7
Tea	.4	1.4	.4	1.0	.4	1.3
Buttermilk	.5	.5	1.5	1.7	.6	.7
Bottled drinks	1.6	2.8	2.1	4.2	1.8	3.0

SUMMARY AND CONCLUSIONS

The purposes of this study were to determine (1) factors affecting the purchase of dairy products, and (2) the kinds and sources of information used by family food buyers and how such information was related to the purchase and use of dairy products.

The sample, randomly selected, included 378 white and 124 colored households in Anniston, Alabama. Most of the data obtained from the homemakers were based on the 7-day period

previous to the interview. Supplementary and related data were obtained from 31 retail stores within the market area in order to determine availability of dairy products.

Fluid milk and a variety of dairy products were readily available to consumers in the Anniston area. Fluid milk prices were uniform in all stores, but there was a wide price range for other dairy products in the stores handling these items. Retail stores did very little promotional work in an effort to increase the sale of dairy products. A greater part of the promotional work was done by the distributor.

The total consumption of dairy products of all families equalled the recommended minimum amount of whole milk equivalent. However, if the consumption of milk equivalent were based on the consumption of fluid milk alone, it would mean that Anniston families consumed only 74 per cent of the minimum recommended allowance. This is an indication that even though Anniston people fall short of the national average in consumption of fluid milk, this deficit is supplemented to a certain extent by the consumption of dairy products other than fluid milk. While this was true of the Anniston families as a group, it was not true of the colored population alone. The per capita consumption by white people averaged 5.0 quarts of whole milk equivalent in 7 days. During the same period, colored people consumed only 3.5 quarts, which was only 80 per cent of the minimum recommended.

Members of white families consumed more sweet milk per capita at all ages than did colored persons. White adults drank milk more frequently than did colored adults, and both drank less with increasing age. Males of all ages drank more sweet milk than did females. Per capita consumption of buttermilk was highest among colored people. For persons who did not drink milk, the reasons most given were that flavor was objectionable or cost was prohibitive.

Eighty per cent of the homemakers believed that milk was a food or beverage their families should have every day. They reported that adults should have 1.5 pints and children 1.8 pints of milk per day. However, actual consumption was less than this in both cases. Fifty per cent of the homemakers believed milk to be fattening. Homemakers also tended to select from a wide range of dairy products only a few that they used with regularity.

A number of factors were found to significantly affect milk consumption by white and colored families. There were also factors that appeared significant for only one of the two races. Of the many factors studied in relation to per capita consumption of milk, age, sex, income, family socio-economic status, and cash expenditure per individual per meal showed more association.

Fluid milk products had the least seasonal use variation of all dairy products. Standing order, or regular delivery, was the most popular way of purchasing fluid milk. Store sales of buttermilk and sweet milk were about one-half the total sales of route deliveries. Twenty-three per cent of the butter used was purchased from sources other than dairies or stores. In practically all cases, sweet milk and buttermilk bought in stores were in paper containers. Sweet milk purchased on regular delivery was more often in glass. The use of credit with home delivery was an added convenience that consumers used.

Ninety per cent of the homemakers had used milk in both bottles and cartons; of these, 61 per cent preferred bottles. All 500 homemakers who purchased milk the past year had used milk in quart containers. Milk was purchased in half-gallons by 27 per cent of all homemakers. Of the homemakers who had used both quart and half-gallon containers, 41 per cent preferred the quart size, 49 per cent preferred the half-gallon size, and 10 per cent either had no preference or preferred a different size.

Sixty per cent of the homemakers reported using a grocery list, but the frequency of use varied. In 90 per cent of the cases, the homemaker made out the grocery list. Homemakers in 60 per cent of the cases did the buying of the family food supply. Thirty-two per cent of the husbands, either alone or with the homemaker, shopped for groceries. Ninety-seven per cent of all food purchasing was done by personal shopping.

Sixty-two per cent of the homemakers reported they would not increase expenditures for food, even if additional money were available. Two per cent were undecided as to what they would do. Of the 36 per cent who would have spent more, half would have spent the additional money first for meat. About 10 per cent indicated they would allot extra money first for dairy products.

Coffee, tea, soft drinks, and orange juice were beverages that most often competed with milk for a place in the diet.

Television, radio, and product labels were the most often reported forms of advertising seen or heard about dairy products. Thirty-one per cent of the homemakers who recalled specific advertising reported that this advertising influenced them to use, for the first time, a dairy product new to them or to use more dairy products.

RECOMMENDATIONS

1. The low consumption of dairy products by colored families suggests that any extensive educational program aimed at increasing milk consumption should direct special attention to this segment of the population.

2. Emphasis should be directed toward certain segments of the population that are low consumers of dairy products. Homemakers, teen-age girls, and older persons should receive special

attention.

- 3. The use of milk as a beverage is often neglected in certain seasons and at certain meals, particularly by adults. Milk should be promoted as a year-round beverage for both company meals and family meals, as well as for those who eat out. Homemakers, as well as the labor force, should be encouraged to take "milk breaks."
- 4. In general, promotional work on milk needs to vary considerably in form. Some "set slogans" need repeating, while other methods of advertising should not remain fixed over a long period of time. Instead of a few factors explaining milk consumption, many are needed. This indicates that the types of promotional material that would motivate some consumers would not appeal to others. Things that indicate something new or different in the way of dairy products would be appealing as promotional material to many homemakers.
- 5. Product labels are a means of advertising that could be used to better advantage. Since homemakers have little preference for colored milk cartons, the possibility of using a part of the milk carton for recipes or other advertising should not be overlooked.
- 6. There is a probability that the gallon jug would be a popular sized container for those who purchase milk from stores, especially with a quantity discount. Also, milk priced so that buying from stores is more economical than home delivery should encourage consumer milk purchases.

APPENDIX

Appendix Table 1. Percentage of Families With Various Items Used to Develop Socio-Economic Scale, by Race, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

Item	378 white families	124 colored families	
	Per cent	Per cent	Per cent
Family owned a television	67	31	58
Family owned a radio	- 96	81	92
Family had a telephone	. 76	44	68
Family owned a home freezer	. 8	3	7
Family owned an electric, gas, or			•
kerosene refrigerator Family owned an ice refrigerator only	. 98	79	93
Family owned an ice refrigerator only	. 2	19	6
Family owned an auto or truck	. 77	31	66
Family received a daily newspaper	. 89	58	81
Family received a weekly newspaper	. 1	3	2
Homemaker regularly reads 3 or more newspapers		_	
or magazines with a food section	. 22	7	19
Homemaker regularly reads 1 or 2 newspapers or		•	
magazines with a food section	. 57	51	56
All members of family over 6 years of age	. 01	01	00
participated in an organization	. 15	12	15
Part of family members over 6 years of age	. 10	14	10
	. 36	31	35
participated in an organization	. 00	OI.	

Appendix Table 2. Number and Percentage of Families Using Dairy Products in the Home, and Average Amount Consumed Per Family Over a 7-Day Period, by Kinds, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Families 1	using each		Average quantity used per family			
Product	product over a 7-day period				Unit	Con- suming families	All families studied
	Number	Per cent		Number	Number		
Homogenized sweet milk	243	64	Qt.	10.2	6.5		
Pasteurized sweet milk	122	$3\overline{2}$	Qt.	9.2	3.0		
Raw sweet milk	5	1	Qt.	19.8	.3		
Skimmed sweet milk	22	6	Ŏt.	4.3	.3 .2		
Buttermilk	265	70	Õt.	3.4	2.4		
Chocolate milk or drink	38	10	Õt.	2.2	.2		
Whipping cream	46	12	½ Pt.	1.6	.2 .2 .1		
Coffee cream	16	4	½ Pt.	1.7	.1		
Half and half cream	17	4	Pt.	2.0	.9		
Evaporated whole milk	301	80	Oz.	43.1	34.3		
Evaporated skim milk	3	1	Oz.	81.1	.6		
Condensed milk	48	13	Oz.	16.3	2.1		
Dried milk	87	2 3	Oz.	13.7	3.1		
Dried cream	=	_=	Oz.				
Yellow cheese	292	77	Ľb.	9	.7		
Cottage cheese	50	13	Pt.	1.1	.7 .2 .5 .4		
Cream cheese	38	10	Oz.	4.7	.5		
Other cheese	$\frac{19}{119}$.5	Oz.	8.2	.4		
Ice cream	175	46	Pt.	2.9	1.4		
Sherbet	15	4	Pt.	1.5	$.1_{_{1}}$		
Ice milk Other frozen desserts	5 5	1	Pt.	1.2	1		
Butter		1	Pt.	2.6	_		
Dutter	147	39	Lb.	1.0	.4		

¹ Less than 0.05 pint.

Appendix Table 3. Number and Percentage of Families Using Dairy Products in the Home, and Average Amount Consumed Per Family Over a 7-Day Period, by Kinds, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

_	Families using each product over a 7-day period			Average quantity used per family		
Product					Unit	Con- suming families
	Number	$Per\ cent$		Number	Number	
Homogenized sweet milk	52	42	Qt.	5.1	2.2	
Pasteurized sweet milk	44	35	Õt.	4.7	$\overline{1.7}$	
Raw sweet milk	10	8	Ŏt.	16.9	1.4	
Skimmed sweet milk	6	5	Qt.	3.3	.2	
Buttermilk	110	89	Õt.	3.8	3. 4	
Chocolate milk or drink	11	9	Qt.	1.7	.2 .1 .1	
Whipping cream	5	$oldsymbol{4}$	½ Pt.	1.6	.1	
Coffee cream	3	$rac{4}{2}$	½ Pt.	3.0	.1	
Half and half cream		1	Pt.	.5	1	
Evaporated whole milk	97	78	Oz.	37.9	29.6	
Evaporated skim milk	2	2	Oz.	19.2	.3	
Condensed milk	13	10	Oz.	19.0	2.0	
Dried milk		19	Oz.	12.5	2.4	
Dried cream			Oz.			
Yellow cheese	83	67	Lb.	1.2	.8	
Cottage cheese	10	8	Pt.	1.3	.1	
Cream cheese	5	4	Oz.	4.2	.2	
Other cheese	=	.==	Qz.	= 1		
Ice cream		40	Pt.	1.9	.8	
Sherbet		3 5	Pt.	1.8	.1	
Ice milk		5	Pt.	1.3	.1	
Other frozen desserts		40	Pt.		7.0	
Butter	57	46	Lb.	2.3	1.0	

¹ Less than 0.05 pint.

Appendix Table 4. Number and Percentage of Families Using Specific Dairy Products During Previous Year, by Race, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

	171		XX71. ·	C:1:	C-11	C:1:	
		es using product		families each	Colored families using each		
Product		previous		product during		during	
		ear		us year	previo		
	No.	Pct.	No.	Pct.	No.	Pct.	
Homogenized sweet milk	409	81	328	87	81	65	
Pasteurized sweet milk	328	65	253	67	75	60	
Raw sweet milk	77	15	47	12	30	24	
Skimmed sweet milk	84	17	65	17	19	15	
Buttermilk	465	93	343	91	122	98	
Chocolate milk or drink	221	44	176	47	45	3 6	
Whipping cream	287	57	248	66	39	31	
Coffee cream	80	16	70	19	10	8	
Half and half cream	62	12	52	14	10	8	
Evaporated whole milk	464	92	349	92	115	93	
Evaporated skim milk	. 28	6	18	5	10	8	
Condensed milk		59	236	62	59	48	
Dried milk		51	196	52	58	47	
Dried cream		4	18	5	1	1	
Yellow cheese	493	98	371	98	122	98	
Cottage cheese	263	52	215	57	48	39	
Cream cheese	, 244	49	216	57	28	23	
Other cheese		12	58	15	4	3	
Ice cream		95	366	97	113	91	
Sherbet		63	254	67	63	51	
Ice milk		31	102	27	52	42	
Other frozen desserts		12	47	12	11	9	
Butter	. 336	67	252	67	84	68	

Appendix Table 5. Percentage of All Families Using Specific Dairy Products During Previous Year, by Seasons and by Race, 502 Families, Anniston, Alabama, Market Area, Fall, 1954¹

Product	fami	ntage llies us ger am		whi usir	ntage te fam ng a la amoun	rger	Percentage of 124 colored families using a larger amount			
	Win- ter	Sum- mer	No differ- ence	Win- ter	Sum- mer	No differ- ence	Win- ter	Sum- mer	No diffe r- ence	
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Homogenized sweet milk	- 5	7	88	6	7	87	3	6	91	
Pasteurized sweet milk		5	92	4	5	91	3	4	93	
Raw sweet milk	. 3	6	91	4	6	90		6	94	
Skimmed sweet milk	. 2	5	93	2 6	6	92	5		95	
Buttermilk	. 6	6	88	6	7	87	5	4	91	
Chocolate milk or drink	. 5	17	7 8	5	16	79	4	20	76	
Whipping cream	. 4	60	36	4	57	39	5	80	15	
Coffee cream	- 10	5	85	11	6	83			100	
Half and half cream		10	88	2	10	88		10	90	
Evaporated whole milk	3	2	95	3	3	94	3		97	
Evaporated skim milk	. 4		96	6		94		_=	100	
Condensed milk		13	81	7	14	79	2	12	86	
Dried milk		6	92	2	5	93	2	. 9	89	
Dried cream			100	10		100	~		100	
Yellow cheese	. 10	1	89	10	1	89	9	1	90	
Cottage cheese	_ 2	28	70	2	28	70		27	73	
Cream cheese		22	75 70	3 3	23	74		14	86 75	
Other cheese		18	79	3	17 73	80 27		25 75	25	
Ice creamSherbet		73 81	$\frac{27}{19}$		82	18		76	$\frac{25}{24}$	
Sherbet		72	19 28		62 74	26		69	$\frac{24}{31}$	
Other frozen desserts		60	40		55	45		82	18	
Butter	3	1	96	$\overline{4}$	33 1	95		1	99	

¹The percentages used in this table are a breakdown of the products used by all families and by race in Appendix Table 4. For example, the seasonal use of homogenized sweet milk is based on the use made by the 409 families that had used this product during the previous year.

Appendix Table 6. Percentage of Families Not Using Specific Dairy Products During Previous Year and Never Using Specific Dairy Products, by Families and by Race, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

Pct. Pct. Pct. Pct. Homogenized sweet milk 19 10 7 19 Pasteurized sweet milk 35 11 9 15 Raw sweet milk 85 48 51 40 Skimmed sweet milk 83 70 68 73 Buttermilk 7 4 5 2 Chocolate milk or drink 55 34 31 44 Whipping cream 43 28 20 52 Coffee cream 84 71 66 89 Half and half cream 87 78 75 88 Evaporated whole milk 8 3 3 6 Evaporated skim milk 94 90 91 89 Condensed milk 41 28 26 33 Dried milk 49 39 39 40 Dried cream 96 94 93 98 Yellow cheese 2	Product	of 502 fami-	of 502 fami- lies having never used		Percentage of 124 col- ored fami- lies having never used product
Pasteurized sweet milk 35 11 9 15 Raw sweet milk 85 48 51 40 Skimmed sweet milk 83 70 68 73 Buttermilk 7 4 5 2 Chocolate milk or drink 55 34 31 44 Whipping cream 43 28 20 52 Coffee cream 84 71 66 89 Half and half cream 87 78 75 88 Evaporated whole milk 8 3 6 6 Evaporated skim milk 94 90 91 89 Condensed milk 41 28 26 33 Dried milk 49 39 39 40 Dried cream 96 94 93 98 Yellow cheese 2 1 1 2 Cottage cheese 48 28 23 44 Cream cheese 51		Pct.	Pct.	Pct.	Pct.
	Pasteurized sweet milk Raw sweet milk Skimmed sweet milk Buttermilk Chocolate milk or drink Whipping cream Coffee cream Half and half cream Evaporated whole milk Evaporated skim milk Condensed milk Dried milk Dried cream Yellow cheese Cottage cheese Cream cheese Other cheese Ice cream Sherbet	35 - 85 - 85 - 87 - 55 - 43 - 84 - 87 - 8 - 94 - 41 - 49 - 96 - 2 - 48 - 51 - 88 - 37 - 69	11 48 70 4 34 28 71 78 3 90 28 39 91 1 28 38 34 21 62	51 68 5 31 20 66 75 3 91 26 39 93 1 23 30 34 2 19 66	15 40 73 2 44 52 89 88 6 89 33 40 98 2 44 62 32 32 50

Appendix Table 7. Average Per Capita Consumption of Dairy Products Used As a Beverage Over a 7-Day Period, Compared to the Minimum Recommended Whole Milk Equivalent, by Color, Age, and Sex, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

		378 white	families	124 colore	d families	
Person	Minimum recom- mended whole milk equivalent	Dairy products consumed as a beverage in terms of whole milk equivalent	ommended	Dairy products consumed as a beverage in terms of whole milk equivalent	Percentage of the rec- ommended used as a beverage	
	Quarts	Quarts	Per cent	Quarts	Per cent	
Husbands Homemakers Females: ¹	$\frac{3.5}{4.0}$	3.8 2.3	109 58	1.8 1.5	51 38	
1- 5 years of age 6-12 years of age	5.0 5.5	4.3 3.7	86 67	2.2 2.0	44 3 6	
13-15 years of age 16-19 years of age 20 years of age	6.0 6.0	4.0 2.5	67 42	3.0 2.4	50 40	
and over	3.5	2.5	71	1.7	49	
Males: ² 1- 5 years of age 6-12 years of age		6.0 4.6	120 84	$\frac{4.1}{3.1}$	82 56	
13-15 years of age 16-19 years of age	6.5 6.5	5.0 5.1	77 78	2.1 3.0	32 46	
20 years of age and over	3.5	2.8	80	1.4	40	

¹ Excluding homemakers. ² Excluding husbands.

Appendix Table 8. Percentage of Dairy Products Purchased Over a 7-Day Period, by Kind of Container and by Source, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

	TATABION, TAMBINAN,											
			Milk purchases by kind of container and source									
Product	Unit	No. of units	Cont	ainer		Source						
		purchased	Glass	Paper	Paper Dairy		Other source					
		No.	Per cent	Per cent	Per cent	Per cent	Per cent					
Sweet milk	Qt	. 4,347	56	44	66	32	2					
Buttermilk	Õt	. 1,150	44	56	54	33	13					
Whipping cream	½ Pt.	. 64	22	78	42	58						
Other cream	Pt	. 45	68	3 2	71	29						
Ice cream	Pt	. 593			3	97						
Butter	Lb	. 188			9	68	23					

Appendix Table 9. Percentage of Dairy Products Purchased Over a 7-Day Period, by Principal Purchaser and Method of Buying, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

		No.		Milk purchases made by							Method of buying			
Product	Unit	of units pur- chased	Stand- ing order	Wife	Hus- band	Wife and hus- band	Other family	Other ¹	Credit	Cash	Delivery	Carry		
		No.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.		
Sweet milk Buttermilk Whipping cream Other cream Ice cream Butter	Qt. Qt. ½ Pt. Pt. Pt. Lb.	4,347 1,150 64 45 593 188	66 54 28 66 12	17 28 47 19 69 58	8 7 11 11 9 10	5 5 14 4 11 8	3 4 9 8	1 2 2 4	66 50 31 52 2 11	34 50 69 48 98 89	68 55 36 54 17	32 45 64 46 100 83		

¹ Denotes maids and other household help.

Appendix Table 10. Average and Seasonal Use of Competing Products, 502 Families, Anniston, Alabama, Market Area, Fall, 1954

		Av	erage a	nd seaso	nal use	of comp	eting pro	oducts
		Total	Aver-	Aver-	Percen	tage rep	orting se	asonal use
Item	Unit	units used	age per	age per	Total	Used more		No difference
		past	person	family	re-	in	in	in seasonal
		7 days	use1	use^{2}	plies		summer	
		No.	No.	No.	No.	Pct.	Pct.	Pct.
Coffee, regular	Lb.	413	$.2^{3}$.8	411	36	1	63
Coffee, instant	Oz.	205	.1	.4	65	31	7	62
Coffee substitutes	Oz.	72	4	.1	31	26	13	61
Tea	Oz.	689	.3	1.4	332	$rac{2}{1}$	79	19
Soft drinksI		2,937	1.4	5.9	413		65	34
Powdered drinks		114	.1	.2	182	1	81	18
Whipped topping		9	5	4	119	1	79	20
Other beverages1	Bottle	189	.1	.4	82		88	12
Orange juice		20,723	10.1	41.3	281	$\bar{5}$	12	83
Grapefruit juice	Oz.	2,337	1.1	4.7	52	10	13	77
Tomato juice	Oz.	2,948	1.4	5.9	55	5	4	91
Grape juice	Oz.	1,913	.9	3.8	46	4	15	81
Apple juice		412	.2	.8	15		13	87
		350	.2	.7	16			100
Lemon juice	Oz.	288		.6	8		12	88
Pineapple juice	Oz.	1,247	.6	2.5	30	7	3	90
Mixed vegetable								
juice		138	.1	.3	$oldsymbol{4}$			100
		57	4	.1	1			100
Orangeade	Oz.	192	.1	.4	4			100

¹ Based on 2,059 people.
² Based on 502 families.
³ Equivalent to 14 cups (5.5 fluid ounces). Based upon 1 pound of regular coffee being equivalent to 48 cups.
⁴ Less than 0.05 ounce.
⁵ Less than 0.05 can.

Appendix Table 11. Average Per Person Use of Dairy Products Over a 7-Day Period, by Income, 878 White Families, Anniston, Alabama, Market Area, Fall, 1954

						ption by						Total or
Item	Under \$500	\$500- \$999	\$1,000- \$1,499	\$1,500- \$1,999	\$2,000- \$2,499	\$2,500- \$2,999	\$3,000- \$3,499	\$3,500- \$3,999	\$4,000- \$4,999	\$5,000- \$7,499	\$7,500 & over	average
Families, numberAverage income per family, dolAverage income per capita, dol	10 284 98	7 714 161	24 1,275 3 6 4	23 1,752 504	29 2,258 580	50 2,741 615	40 3,257 863	50 3,730 910	58 4,459 1,073	54 6,027 1,535	33 7,915 1,839	378 3,818 955
Use of dairy products, qt. Sweet milk Buttermilk Cream Canned milk Dried milk Cheese Ice cream	1.8 1.7 .5 .3 .6	1.5 .5 .7 .3 .6	2.0 .9 .5 .4 .5	2.2 .9 .7 .3 .5	2.5 .8 .5 .4 .6	2.8 .5 .5 .2 .5	2.6 .5 .7 .2 .6	2.8 .7 .6 .2 .7	3.2 .4 .1 .6 .2 .7	3.3 .6 .7 .2 .6	3.4 .5, .4 .2 .8	2.8 .6 .6 .2 .7
Total milk equivalent used, qt	4.9	3.6	4.4	4.6	4.9	4.6	4.7	5.1	5.3	5.6	5.7	5.0
Recommended milk equivalent, qt.	4.0	4.3	4.3	4.2	4.2	4.3	4.1	4.0	4.1	4.1	4.2	4.2
Percentage of recommended amount used	123	84	102	110	117	107	115	128	129	137	136	119

¹ Less than 0.05 quart.

Appendix Table 12. Average Per Person Use of Dairy Products Over a 7-Day Period by Income, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

_		Range i	n income		Total or
Item	Under \$1,000	\$1,000- \$1,999		\$3,000- \$7,499	average
Families, numberAverage income per family, dolAverage income per capita, dol Use of dairy products, qt.		26 1,655 463	35 2,490 461	27 3,668 693	124 2,028 459
Sweet milk Buttermilk Cream	0.9 .7	1.8 .6	1.7 .8 ₁	1.4 .8 ₁	1.5 .8 ₁
Canned milk Dried milk Cheese	.4 .2 .7	.4 .2 .5	.4 .2 .5	.5 .1 .6	.4 .1 .6
Ice cream	2.9 4.5	$\begin{array}{c} .1 \\ 3.6 \\ 4.2 \end{array}$.1 3.7 4.5	.1 3.5 4.6	.1 3.5 4.4
equivalent used	64	86	82	76	80

¹ Less than 0.05 quart.

Appendix Table 13. Comparison of White Families and Socio-Economic Scale, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

Item	White	families	
Families, number Average income per family, dollars Average income per capita, dollars	378 3,818 955		
Families with:	Number	$Per\ cent$	
Television Radio Telephone Home freezer Refrigerator: Electric or gas Ice Auto or truck Newspapers: Daily Weekly Paper or magazine with food section: 3 or more 1 or 2	254 362 286 31 369 8 290 336 4 84 216	67 96 76 8 98 2 77 89 1 22 57	
Participation in organizations other than church: All members Part of members	58 135	15 36	
Average socio-economic score per family Average number of people per family Quarts sweet milk used per person in 7 days Quarts milk equivalent used per person in 7 days. Quarts recommended equivalent used per person in 7 days. Percentage of recommended amount used		1.9 4.0 2.8 5.0 4.2	

Appendix Table 14. Comparison of Colored Families and Socio-Economic Scale, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

Item	Colored	families
Families, number	2,0	124)28 159
Families with: Television Radio Telephone Home freezer Refrigerator: Electric or gas Ice Auto or truck Newspapers: Daily Weekly Paper or magazine with food section: 3 or more	Number 39 101 55 4 98 23 39 72 4 9	Per cent 31 81 44 3 79 19 31 58 3 7
Participation in organizations other than church: All members Part of members. Average socio-economic score per family. Average number of people per family. Quarts sweet milk used per person in 7 days. Quarts recommended equivalent used per person in 7 days. Percentage of recommended amount used.		51 12 31 8.0 4.4 1.5 3.5 4.4

APPENDIX TABLE 15. PERCENTAGE OF FAMILIES WITH SPECIFIED ITEMS BY SOCIO-ECONOMIC SCORE, 502 FAMILIES, ANNISTON, ALABAMA, MARKET AREA, FALL, 1954

Items included in socio-	Ra	nge in s	ocio-eco	nomic sc	ore	A
economic scale	0-3	4-6	7-10	11-14	15-18	Average
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Television		13	30	76	96	58
Radio	26	80	92	99	100	92
Telephone		11	41	90	100	68
Home freezer			1	2	35	7
Refrigeration: Electric or gas	30	78	94	100	100	93
Ice	57	20	6			6
Auto or truck		20	41	83	100	66
Newspapers: Daily	4	24	78	96	100	82
Weekly		4	3	1		1
Paper or magazine with						
food section: 3 or more		2	6	19	50	18
1 or 2		33	63	67	44	56
Participation in organizations						
other than church:1						
All members			2	10	56	14
Part of members	4	15	30	42	40	35

¹ Family participation was grouped by (1) all members 6 years and over in 1 or more organizations other than church, (2) part of family members 6 years and over in 1 or more organizations other than church, and (3) all or part of members in church organizations or no organization.

Appendix Table 16. Average Per Person Use of Dairy Products Over a 7-Day Period, by Socio-Economic Score, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Rang	ge in socio	o-economi	c score	
Item	8 or less	9-11	12-14	15 or more	Total or average
Families, number	55	89	154	80	378
Average income per family, dol	2,160	3,013	4,071	5,368	3,818
Average income per capita, dol	508	818	1,028	1,267	955
Average socio-economic score				-	
per family	6	10	13	16	12
Use of dairy products, qt.					
Sweet milk		2.8	3.0	3.1	2.8
Buttermilk		.7	.6	.5	.6
Cream		1	1	1	1
Canned milk	.6	.6	.5	.5	.6
Dried milk	.2	.2	.3	.2	.2
Cheese	-	.6	.7	.7	.7
Ice cream		1	2	2	1
Total milk equivalent used, qt		5.0	5.3	5.2	5.0
Recommended milk equivalent, qt.	4.4	4.1	4.1	4.2	4.2
Percentage of recommended	00	100	100	104	110
amount used	93	122	129	124	119

¹ Less than 0.05 quart.

Appendix Table 17. Average Per Person Use of Dairy Products Over a 7-Day Period by Socio-Economic Score, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

Tr.	Range in	Range in socio-economic score					
Item.	4 or less	5-9	10 or more	average			
Families, number	23	56	45	124			
Average income per family, dol	1.031	1,991	2,584	2,028			
Average income per capita, dol	247	448	573	459			
Average socio-economic score							
per family	2	7	12	8			
Use of dairy products, qt .							
Sweet milk	0.7	1.4	1.9	1.5			
Buttermilk	.6	.6	.9	.8			
Cream		1	1	1			
Canned milk	.3	.5	.5	.4			
Dried milk	.2	.2	.1	.1			
Cheese	.5	.2 .5	.6	.6			
Ice cream	.1	.1	.1	.1			
Total milk equivalent used, qt	2.4	3.3	4.1	3.5			
Recommended milk equivalent, qt		4.4	4.4	4.4			
Percentage of recommended							
amount used	52	75	93	80			

¹ Less than 0.05 quart.

Appendix Table 18. Average Per Person Use of Dairy Products Over a 7-Day Period, by Cash Expenditure Per Person Meal, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Ra	ınge in ε	expendit	ure per j	person m	ieal	Total or
Item	Under 10¢	10 - 19¢	20- 29¢	30- 39¢	40- 49¢	50¢ or more	average
Families, number ¹	5	42	114	117	61	38	3771
Average income per family, dol.		2,758	3,435	4,031	4,032	5,125	3,824
Average income per capita, dol.	281	485	782	1,055	1,374	1,739	955
Use of dairy products, qt. Sweet milk	1.7	1.9				3.2	
Buttermilk Cream	1.7	.5	.5	.6	.6 2 .1	.8 .1	.6
Canned milk	.2	.6		.5 .3	.5	.6 .1	.6 .2
Dried milk Cheese	.8	.4 .4	.6	.s .6	.8	1.1	.6
Ice creamTotal milk equivalent		:	.1	.2	.2	.2	.1
used, at	4.4	3.8	5.0	5.2	5.4	6.1	5.0
Recommended milk equivalent, qt.	4.3	4.6	4.3	4.1	4.0	3.7	4.2
Percentage of recom- mended amount used	102	83	116	127	135	165	119

¹ No information on one family.

Appendix Table 19. Average Per Person Use of Dairy Products Over a 7-Day Period, by Cash Expenditure Per Person Meal, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Range in	Total or			
Item	$_{10^{\phi}}^{\mathrm{Under}}$	10-19¢	20-29¢	30¢ or more	average
Families, number Average income per family, dol.	10	$\frac{65}{2,072}$	29 2,065	$\frac{20}{2,278}$	124 2,028
Average income per capita, dol	190	404	611	799	459
Sweet milk		1.4	1.7	2.2	1.5
Buttermilk	•	.8,	.7	.8,	.8,
Cream Canned milk	3	.5	.4	.5	.4
Dried milk		.2 .5	1 	.3 .9	.1 .6
Cheese Ice cream	.3,	.5	.1	.9	.1
Total milk equivalent used, qt	2.0	3.4	3.6	4.9	3.5
Recommended milk equivalent, qt Percentage of recommended	5.0	4.5	4.1	4.0	4.4
amount used	_ 40	76	.88	122	80

¹ Less than 0.05 quart.

² Less than 0.05 quart.

Appendix Table 20. Average Per Person Use of Dairy Products Over a 7-Day Period, by Family Type, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

		Family type		
Item	All adults	Adults and children 12 years or less		Total or average
Families, number	109	164	105	378
Average income per family, dol.	3,464	3,904	4,053	3,818
Average income per capita, dol	1,373	890	823	955
Use of dairy products, qt.				
Sweet milk	2.7	2.9	2.8	2.8
Buttermilk	.9	.5	.6	.6
Cream	.1	1	1	. 1
Canned milk	.5	.6	.5 .2 .6	.6
Dried milk	.3	.2	.2	.2
Cheese	.9 .2	.6	.6	.6 .2 .7 .1
Ice cream	.2	.2	.1	
Total milk equivalent used, qt	5.6	5.0	4.8	5.0
Recommended milk equivalent, qt	3.4	4.2	4.6	4.2
Percentage of recommended				
amount used	165	119	104	119

¹ Less than 0.05 quart.

Appendix Table 21. Average Per Person Use of Dairy Products Over a 7-Day Period, by Family Type, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

		Family type						
Item	All adults	Adults and children 12 years or less	children 19 years	Total or average				
Families, number	38	49	37	124				
Average income per family, dol	1,798	2,143	2,114	2,028				
Average income per capita, dol	719	438	367	459				
Use of dairy products, qt.								
Sweet milk	1.5	1.4	1.5	1.5				
Buttermilk	1.0	.6	.8	.8				
Cream	1	1	1					
Canned milk	.3	.6	.4 .2 .5	.4				
Dried milk	.1	.1	.2	.1				
Cheese	.6	.6	.5	.6 .1				
Ice cream	.1	.1	1	.1				
Total milk equivalent used, qt	3.6	3.4	3.4	3.5				
Recommended milk equivalent, qt	3.5	4.4	4.9	4.4				
Percentage of recommended								
amount used	103	77	69	80				

¹ Less than 0.05 quart.

APPENDIX TABLE 22. AVERAGE PER PERSON USE OF DAIRY PRODUCTS OVER A 7-DAY PERIOD, BY SIZE OF HOUSEHOLD, 378 WHITE FAMILIES, ANNISTON, ALABAMA, MARKET AREA, FALL, 1954

		Rang	e in size	e of hou	sehold		
Item	1.0- 1.9	2.0- 2.9	3.0- 3.9	4.0-	5.0- 5.9	6.0 or more	Total or average
Families, number	35	116	111	56	33	27	378
Average income per family, dol.	3,995	3,433	4,045	4,169	3,528	3,939	3,818
Average income per capita, dol.	1,916	1,245	1,032	871	591	488	955
Use of dairy products, qt. Sweet milk							
Buttermilk Cream	.7	.8	} .(β_{1} .		4	.6,
Canned milk	.7	.5		5 .	3 .7	.7	.6
Dried milk Cheese				5 .0 2 .5 7 .5	2 .3 7 .4	.2 .4	.2 .7 .1
Ice cream		2 .2	2 .5	2 .:	1 .1	.1	.1
Total milk equivalent used, qt	. 5.8	3 5.5	5.5	3 5.	2 4.2	4.3	5.0
Recommended milk equivalent, qt		3.7	4.	1 4.	4 4.4	4.7	4.2
Percentage of recom- mended amount used	161	149	129	118	95	91	119

¹ Less than 0.05 quart.

Appendix Table 23. Average Per Person Use of Dairy Products Over a 7-Day Period, by Size of Household, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

		Total or				
Item	2 or less	2.1- 3.0	3.1- 4.0	4.1- 5.0	5.1 or more	average
Families, number	33	23	22	13	33	124
Average income per family, dol	1,481	1,968	2,241	1,902	2,526	2,028
Average income per capita, dol	652	647	530	369	343	459
Use of dairy products, qt. Sweet milk		1.5	1.5	1.0	1.5	1.5
Buttermilk	1.0	.8	.8	.4	.8	.8
Cream Canned milk	.3	.5	.5	.3	.5	.4
Dried milk Cheese		.1 .7	.2 .8	$ar{.4}$.1 .4	.1 .6
Ice cream Total milk equivalent		.1	.1	.1	1	.1
used. at.	4.1	3.7	3.9	2.2	3.3	3 .5
Recommended milk equivalent, qt	3.6	4.2	4.3	4.7	4.8	4.4
Percentage of recom- mended amount used	114	88	91	47	69	80

¹ Less than 0.05 quart.

Appendix Table 24. Average Per Person Use of Dairy Products Over a 7-Day Period, by Age of Youngest Person, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

		<u> </u>					
		Range ir	age of	younge			-Total or
Item	\mathbf{Under}	1-5	6-12	13-15	16-19	20 year	saverage
-	1 year	years	years	years	years	& over	
Families, number	30	108	90	23	21	106	378
Average age of youngest							
person, yr.	0.5	2.6	9.0	13.8	17.8	45.0	17.4
Average income							
per family, dol	4,410	3,804	4,040	4,237	2,945	3,560	3,818
Average income		-	000	1 100	000	1 000	022
per capita, dol	837	762	930	1,160	909	1,392	955
Use of dairy products, qt.	0.77	0.0	0.0	0.7	0.4	0.0	0.0
Sweet milk	2.7						
Buttermilk	.3	.5	.5	.7	8	.9 1. '	.6,
Cream Canned milk	1.0	.5	4	e e	.5		.6
Dried milk	1.0	.ა	.4 .3	٠,٠	.3	.3 .3	.0
	.3		.7	.6 .2 .7	.4	.9 .9	.2 .7
Cheese	.4	.0	.2	.2	.1	.9	.1
Ice creamTotal milk equivalent	.1		.4	.4	.1	.2	+1
used, qt	4.8	4.8	5.0	5.1	5.4	5.5	5.0
Recommended milk	4.0	4.0	0.0	0.1	0.1	0.0	0.0
equivalent, qt	4.3	4.4	4.4	4.5	4.3	3.3	4.2
Percentage of recom-	1.0	1.1	1.1	1.0	1.0	0.0	
mended amount used	112	109	114	113	126	167	119

¹ Less than 0.05 quart.

Appendix Table 25. Average Per Person Use of Dairy Products Over a 7-Day Period, by Age of Youngest Person, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Range in age of youngest person						
Item	Under 1 year¹	1-5 years	6-12 years	13-19	20 years and over	Total or average	
Families, numberAverage age of youngest	17	36	25	8	38	124	
person, yr. Average income	0.4	2.9	8.7	15.1	38.5	15.4	
per family, dol	2,167	2,336	1,983	1,527	1,811	2,028	
per capita, dol.	3 65	410	431	407	709	459	
Use of dairy products, qt. Sweet milk Buttermilk	1.1	1.8	1.2	1.3	1.5	1.5	
Cream		.6	.82	.8	1.0	.8	
Canned milk Dried milk	.3	.4 .1 .5 .1	.5 .2	.3	.3 .1	.4 .1	
Cheese Ice cream	.4	.5	.6	.9 .1	.6 .1	.6 .1	
Total milk equivalent used, qt.	3.2	3.5	3.3	3.8	3.6	3.5	
Recommended milk equivalent, qt.	4.7	4.5	4.9	4.7	3.5	4.4	
Percentage of recom- mended amount used	68	78	67	81	103	80	

¹ All infants in colored families in the study were breast fed. Fluid milk used was for supplementary feeding.

² Less than 0.05 quart.

Appendix Table 26. Average Per Person Use of Dairy Products Over a 7-Day Period, by Age of Homemaker, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

		Range in	age of ho	omemaker		. T-1-1
Item	No infor- mation	Under 20 years		40-59 years	60 and over	Total or average
Families, number	2	4	193	141	38	378
Average income		0.076	9 000	2.040	0.605	0.010
per family, dol.	3,375	2,376	3,999	3,940	2,625	3,818
Average income per capita, dol		864	919	1,016	941	955
Use of dairy products, qt.						
Sweet milk	2.8	4.4	3.1	2.5	2.7	2.8
Buttermilk	.7		.5,	.7	.9	.6
Cream	1	1	1	1	. 1	1
Canned milk		.5	.6	.6	.4	.6
Dried milk			.2	.2	.2	.2
Cheese	2.0	.6	.6	.6	.4 .2 .7	.6 .2 .7
Ice cream	3	.1	.1	.2	.2	.1
Total milk equivalent						
used, qt	6.9	5.6	5.1	4.8	5.1	5.0
Recommended milk						
equivalent, qt.	4.2	4.5	4.3	4.0	3.7	4.2
Percentage of recom-						
mended amount used	. 164	124	119	120	138	119

¹ Less than 0.05 quart.

Appendix Table 27. Average Per Person Use of Dairy Products Over a 7-Day Period, by Age of Homemaker, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Ra	nge in age	of homema	ker	
Item	No infor- mation or no home- maker	39 years or less	40-59 years	60 years and over	Total or average
Families, number	2	61	45	16	124
Average income					
per family, dol	2.507	2,288	2,113	743	2,028
Average income	,	,	. ′		,
per capita, dol	716	461	495	258	459
Use of dairy products, qt.					
Sweet milk	1.1	1.2	1.9	1.1	1.5
Buttermilk		.6	1.0	.9	.8
Cream		1	1	••	1
Canned milk	.2	5	.3	.5	.4
Dried milk	· - 7	2.	$\ddot{1}$.2	.ī
Cheese	.6	.5 .2 .5	. <u>.</u> 6	.9	.6
Ice cream		ĭ	ĭ	.01	.ĭ
Total milk equivalent	•==	• 4	•		•-
used, qt.	3.4	3.1	4.0	3.6	3.5
Recommended milk	0.1	0.1	4.0	0.0	0.0
equivalent, qt	4.9	4.5	4.4	4.2	4.4
Percentage of recom-	. 4.0	4.0	7.7	7.4	7.7
mended amount used	. 69	69	91	86	80
mended amount used	. 09	09	01		

¹ Less than 0.05 quart.

Appendix Table 28. Average Per Person Use of Dairy Products Over a 7-Day Period, by Education of Homemaker, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Range in education of homemaker							
Item	No infor- mation or no home- maker	1-3		7-9 grades	10-12 grades	high	Total or average	
Families, number	7	11	62	108	144	46	378	
Average income								
per family, dol	_ 2,556	2,523	3,041	3,417	4,238	4,996	3,818	
Average income		PP 1	001	000	1 104	1.000	~~~	
per capita, dol.	. 559	771	691	802	1,134	1,336	955	
Use of dairy products, qt. Sweet milk	_ 2.4	1.7	2.4	2.9	3.1	3.2	2.8	
Buttermilk								
Cream			ر. د ،	ن ، ن	1 1	1	.6,	
Canned milk		.4	.6	.7	.5 .3 .7	.4	.6	
Dried milk			.3	.7 .2 .6	.5 .3 .7	.4 .1 .7	.6 .2 .7 .1	
Cheese	6	$\overline{}$ $\overline{.7}$.5	.6	.7	.7	.7	
Ice cream	:	.1	;	.1	.2	.2	.1	
Total milk equivalent								
used, qt.	5 . 3	3.8	4.6	5.2	5.2	5.0	5.0	
Recommended milk			4.0		4.0	4.4	4.0	
equivalent, qt.	- 4.2	4.1	4.2	4.2	4.2	4.1	4.2	
Percentage of recom- mended amount used	. 126	93	110	124	124	122	119	

Appendix Table 29. Average Per Person Use of Dairy Products Over a 7-Day Period, by Education of Homemaker, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Ra	nge in ed	ucation of	homema	ker	
Item	No infor- mation or no home- maker	3 grades or less	4-6 grades	7-9 grades	10 grades or higher	Total or average
Families, number	2	23	39	33	27	124
Average income						
per family, dol	3,007	1,198	2,101	2,036	2,550	2,028
Average income			4.7.0	4.0.0		
per capita, dol	547	363	418	439	615	459
Use of dairy products, qt.					1.0	
Sweet milk		1.2	1.3	1.6	1.8	1.5
Buttermilk		$.6_{_{1}}$.9	$.6_{_{1}}$.8,	.8
Cream		-	_	-	-	
Canned milk		.3	.5	.4	.5 .3	.4
Dried milk		.3 .2 .7 .1	$.5\\.1\\.5_{_{1}}$	$\begin{array}{c} .4 \\ .1 \\ .5 \end{array}$.3	.4 .1 .6 .1
Cheese		. 1	.5	.5	.6	.6
Ice cream	1	.1	*	.1	.1	.1
Total milk equivalent	2 -	0.1	0.0	0.0	4.1	٠.
used, qt. Recommended milk	2.5	3.1	3.3	3.3	4.1	3.5
	4.0	4.0	4 =	4 ~	4.0	1.1
equivalent, qt.	4.6	4.3	4.5	4.5	4.3	4.4
Percentage of recom- mended amount used	54	72	73	73	95	80

¹ Less than 0.05 quart.

Appendix Table 30. Average Per Person Use of Dairy Products Over a 7-Day Period, by Frequency of Drinking Milk by the Homemaker, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Homemal	er's frequ	uency of	drinking s	weet mill	Total an	
Item	No infor- mation	Every meal	Every day	Some- times	Never	Total or average	
Families, number	1	26	207	111	33	378	
Average income per family, dol	2,250	4,062	4,004	3,584	3,296	3,818	
Average income per capita, dol	450	1,089	1,016	878	777	955	
Use of dairy products, qt.		•	•				
Sweet milk Buttermilk		4.1 .4	3.0 .7	2.6 .5	$\begin{array}{c} 2.0 \\ .4 \end{array}$	2.8 .6	
CreamCanned milk		.1 .6	.6	1	1	1	
Dried milk		.0 .2 .7	.2	. 6 .3	.4 .2 .5	.6 .2 .7	
Cheese Ice cream		.7 .1	.7 .1	.6 .1	.5 .1	.7 .1	
Total milk equivalent							
used, qt Recommended milk		6.2	5.3	4.7	3.6	5.0	
equivalent, qt Percentage of recom-	4.5	4.0	4.2	4.2	4.2	4.2	
mended amount used	. 100	155	126	112	86	119	

¹ Less than 0.05 quart.

Appendix Table 31. Average Per Person Use of Dairy Products Over a 7-Day Period, by Frequency of Drinking Milk by the Homemaker, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Homemal	cer's frequ	uency of o	drinking s	weet mill	Total on
Item	No infor- mation	Every meal	Every day	Some- times	Never	Total or average
Families, number	. 2	11	41	46	24	124
Average income						
per family, dol	. 2,507	1,999	2,464	1,682	1,923	2,028
Average income	•	•	•	•	•	•
per capita, dol	716	468	581	356	448	459
Use of dairy products, qt.						
Sweet milk	. 1.1	3.3	1.8	1.1	0.9	1.5
Buttermilk	. .6	1.4	1.0	.5	.5	.8
Cream		1	,1	1	1	1
Canned milk		.3	.5	.5	.4	.4
Dried milk	7	.4	.1	.2	.1	.1
Cheese		.9	.6	.5 .2 .5	.4	.6
Ice cream	. .2	.1	.1	1	1	.6 .1
Total milk equivalent						
used, qt.	. 3.4	6.4	4.1	2.8	2.3	3.5
Recommended milk						
equivalent, qt	_ 4.9	4.3	4.2	4.7	4.4	4.4
Percentage of recom-						
mended amount used	69	149	98	60	52	80

¹ Less than 0.05 quart.

Appendix Table 32. Average Per Person Use of Dairy Products Over a 7-Day Period, by Homemaker's Employment, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

		Homemaker's employment						
Item	Pro- fes- sional	Cleri- cal and white	Not gain- fully	Skilled craft and labor-	d In- come not	Self emp. mgr.	ma-	Total or aver- age
Families, number	. 8	20	257	88	2	2	1	378
Average income								
per family, dol	5,456	5,378	3,707	3,687	3,515	2,875	2,250	3,818
Average income	1 000	1 200	014	001	1 ==0			
per capita, dol	1,898	1,582	914	891	1,758	1,150	450	955
Use of dairy products, qt.	0.5					7 0/		
Sweet milk Buttermilk								
Cream		3 .4 1 .]	t .0	1 .	7 .8	3 .4	1	1
Canned milk	•		.6		1 .6 6 .8 2 .	ž 9	3 .5	.6
Dried milk			3 .2		9.	5	4	
Cheese				7	5 3	3 .2	ž .s	.2
Ice cream		2 .4			i 3	2	2	i
Total milk equivalent	-							
used, at	. 5.0	5.8	3 5.1	4.	7 5.9	9 1.9	4.5	5.0
Recommended milk						.=		•
equivalent, qt	4.0	4.1	4.2	4.0	4.5	3.6	4.5	4.2
Percentage of recom-								
mended amount used	125	141	121	118	137	63	100	119

¹ Less than 0.05 quart.

Appendix Table 33. Average Per Person Use of Dairy Products Over a 7-Day Period, by Homemaker's Employment, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Home	Homemaker's employment						
Item	No information	All types of employment	Not gainfully employed	Total or average				
Families, number	. 2	48	74	124				
Average income per family, dolAverage income	2,507	1,849	2,132	2,028				
per capita, dol	716	446	461	459				
Use of dairy products, qt. Sweet milk	6	1.4 .9	1.5 .7 ₁	1.5 .8 ₁				
Canned milk	2	.4	.5	.4				
Dried milk	7	.1	. <u>1</u>	.1				
Cheese Ice cream		.6 .1	.5 .1	.6 1				
Total milk equivalent used, qt	3.4	3.5	3.4	3.5				
Recommended milk equivalent, qt. Percentage of recommended	4.9	4.4	4.5	4.4				
amount used	. 69	80	7 6	80				

¹ Less than 0.05 quart.

Appendix Table 34. Average Per Person Use of Dairy Products Over a 7-Day Period, by Sex of Head of House, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

TI	Sex of he	Sex of head of house				
Item -	Male	Female	average			
Families, number	347	31	378			
Average income per family, dol	3,919	2,692	3,818			
Average income per capita, dol	968	787	955			
Use of dairy products, qt.						
Sweet milk	2.8	2.7	2.8			
Buttermilk	.6	.5	.6			
Cream	1	1	1			
Canned milk	.6	.5	.6			
Dried milk	.3	.1	.2			
Cheese	.7	.5	.7			
Ice cream	.1	.1	.1			
Total milk equivalent used, qt.	5.1	4.4	5.0			
Recommended milk equivalent, qt.	4.2	4.3	4.2			
Percentage of recommended amount used	121	102	119			

¹ Less than 0.05 quart.

Appendix Table 35. Average Per Person Use of Dairy Products Over a 7-Day Period, by Sex of Head of House, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

Thomas	Sex of hea	Total or	
Item -	Male	Female	average
Families, number	97	27	124
Average income per family, dol.	2,326	958	2,028
Average income per capita, dol	507	251	459
Use of dairy products, qt.			
Sweet milk	1.5	1.1	1.5
Buttermilk	.8	.5	.8
Cream	1	1	. 1
Canned milk	.4	.5	.4
Dried milk	.2	.1	.1
Cheese	.6	.6	.6
Ice cream	.1	1	.1
Total milk equivalent used, qt.	3. 6	2.8	3.5
Recommended milk equivalent, qt.	4.4	4.5	4.4
Percentage of recommended amount used	82	62	80

¹ Less than 0.05 quart.

Appendix Table 36. Average Per Person Use of Dairy Products Over a 7-Day Period, by Number of Earners, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

		Numl	er of ea	rners in	family		m1
Item	None	One	Two	Three	Four	Five or more	Total or average
Families, number	20	231	107	17	1	2	378
Average income per family, dol.		3,685	4 945	4,408	4,320	10,220	3,818
Average income	1,000	0,000	1,210	4,400	4,020	10,220	0,010
per capita, dol	693	928	1,100	781	360	1,136	955
Use of dairy products, qt .			•				
Sweet milk	2.7	2.9	2.8		3.4		
Buttermilk	1.5	.6		.8		. . 6	.6
Cream						.4	
Canned milk	.7	.6 .3	.6	.5	1.3	.4	.6
Dried milk	.3		.2 .7	.1 .5			.2
Cheese	.8	.6	.7		1.1		7
Ice cream		.1	.2	.1		.1	.1
Total milk equivalent							
used, qt	6.0	5.1	5.0	3.9	5.8	5.2	5.0
Recommended milk							
equivalent, qt	4.0	4.2	4.1	4.1	4.6	4.4	4.2
Percentage of recom-							
mended amount used	150	121	122	95	126	118	119

¹ Less than 0.05 quart.

Appendix Table 37. Average Per Person Use of Dairy Products Over a 7-Day Period, by Number of Wage Earners, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Numb	family	m 1		
Item	None	One	Two	Three or more	Total or average
Families, number	11	63	39	11	124
Average income					
per family, dol.	779	1,970	2 ,389	2,332	2,028
Average income					
per capita, dol.	286	422	601	372	4 59
Use of dairy products, qt.					
Sweet milk	1.0	1.2	2.0	1.4	1.5
Buttermilk	.9	.6	.9	1.0	.8
Cream	'	1	1	1	1
Canned milk	.4	.5 .2 .5	.4 .1	.3	.4
Dried milk	.2	.2		.1	.1
Cheese	.2 .8	.5	.6	.1	.4 .1 .6 .1
Ice cream	1	.1	.1	1	.1
Total milk equivalent					
used, qt	3.3	3.1	4.1	3.3	3.5
Recommended milk		4.22			
equivalent, qt	4.2	4.6	4.2	4.6	4.4
Percentage of recom-					
mended amount used	79	67	98	72	80

¹ Less than 0.05 quart.

Appendix Table 38. Average Per Person Use of Dairy Products Over a 7-Day Period, by Source of Principal Income, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Co	nsumpt	ion by s	ource	of princ	ipal inco	ome	_
Item	Cleri- cal and white collar	Pro- fes-	Self em- ployed mana- ger of busi- ness	tory		Un- skilled		Total or aver- age
Families, number	. 27	39	43	24	175	40	30	378
Average income per family, dol	.5,287	4,919	4,450	4,071	3,610	3,063	2,183	3,818
Average income per capita, dol	1.322	1.323	1.051	1.110	871	761	642	955
Use of dairy products, qt.		_,	-,	-,				
Sweet milk	. 3.0	3.0	0.8	3.8	3 2.7	7 2.3	2.8	
Buttermilk	8		5 . 4		3. 1	3 .5	1.0	
Cream	_	1 .	1	1	1	_	1	
Canned milk		۱. ا	6 .6	3 .	5 .6	6.	.7	.6
Dried milk]	١.		, ,	5 .5	3 .2	.4	.2
Cheese	ِ. ۔	3 .	8 .6	j .	8.6	3 .2 3 .4 .1	.9	.7
Ice cream	2	2 .	1.2	3	1.1	1	.2	.1
Total milk equivalent							0.0	۲.
used, qt .	. 4.6	3 5.5	$2 ext{5.0}$	5.8	8 5.1	4.1	6.0	5.0
Recommended milk equivalent, qt.	4.2	2 4.0	0 4.0	4.5	2 4.9	3 4.2	4.2	4.2
Percentage of recom-		•						
mended amount used	. 110	130	125	138	119	98	143	119

¹ Less than 0.05 quart.

Appendix Table 39. Average Per Person Use of Dairy Products Over a 7-Day Period, by Source of Principal Income, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Source	of principal in	ncome	
Item	Self employ- ment, pro- fessional, skilled, and semi-skilled, military, white collar	Unskilled labor	From other than work	Total or average
Families, number	41	69	14	124
Average income per family, dol	2,471	2,006	840	2,028
Average income per capita, dol.	. 530	435	302	459
Use of dairy products, qt. Sweet milk Buttermilk	. 1.5 9	1.5 .6 ₁	0.9 1.0	1.5 .8 ₁
Cream Canned milk Dried milk	4 2	.5 .1	$\frac{\overline{.4}}{.1}$.4
Cheese	6	.6 .1	.8	.6 .1
used, qt. Recommended milk	3.6	3.4	3.3	3.5
equivalent, qt	4.4	4.5	4.2	4.4
Percentage of recom- mended amount used	. 82	76	79	80

¹ Less than 0.05 quart.

Appendix Table 40. Average Per Person Use of Dairy Products Over a 7-Day Period, by Age of Husband, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Consumpt	ion accordi	ing to age o	f husband	
Item	No infor- mation or no husband	20-39 years	40-59 years	60 years and over	Total or average
Families, number	. 37	147	148	46	378
Average income					
per family, dol	2,530	4,150	4,088	2,925	3,818
Average income	•	ŕ	•	•	•
per capita, dol.	726	999	954	982	955
Use of dairy products, qt. Sweet milk					
Sweet milk	2.5	3.1	2.7	2.5	2.8
Buttermilk	.6	.4	.7	1.1	.6
Cream	. 1	1	1	1	1
Canned milk	.5	.6	.6	.5	.6
Dried milk	.2	.3	.2	.4	.2
Cheese	.5 .2 .6	.6 .3 .7 .1	.6 .2 .6	.4 .7	.6 .2 .7 .1
Ice cream	.1	.1	.1	.1	.1
Total milk equivalent					
used, qt.	4.5	5.2	4.9	5. 3	5.0
Recommended milk					
equivalent, qt	4.3	4.3	4.2	3.8	4.2
Percentage of recom-					
mended amount used	105	121	117	139	119

¹ Less than 0.05 quart.

APPENDIX TABLE 41. AVERAGE PER PERSON USE OF DAIRY PRODUCTS OVER A 7-DAY PERIOD, BY AGE OF HUSBAND, 124 COLORED FAMILIES, ANNISTON, ALABAMA, MARKET AREA, FALL, 1954

THRUSTON, MEADAWA, WIARKET MEA, TALL, 1904								
	Consumpt							
Item	No infor- mation or no husband	39 years or less	40-59 years	60 years and over	Total or average			
Families, numberAverage income	34	40	36	14	124			
per family, dol	1,253	2,504	2,384	1,638	2,028			
Average income per capita, dol.	318	506	511	478	459			
Use of dairy products, qt. Sweet milk Buttermilk	1.2 .7	1.3 .6	1.8 1.0	1.4 .8	1.5 .8 ₁			
Cream	.1	.5 .2 .6	.4 .1	$\frac{.\overline{4}}{.1}$.4			
Cheese Ice cream Total milk equivalent	.6 .1	.6 .1	.6 .1	.6,	.1 .6 .1			
used, qt. Recommended milk	3.1	3.3	4.0	3.3	3.5			
equivalent, qt. Percentage of recom-	4.5	4.5	4.5	4.1	4.4			
mended amount used	69	73	89	80	80			

¹ Less than 0.05 quart.

Appendix Table 42. Average Per Person Use of Dairy Products Over a 7-Day Period, by Education of Husband, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Consun	nption b	y range	in educa	ation of l	husband	
Item	No infor- mation or no husband		4-6 grades	7-9 grades		hiah	Total or average
Families, number	49	19	59	82	107	62	378
Average income							
per family, dol	2,629	3,357	2,994	3,645	4,329	5,031	3,818
Average income							
per capita, dol	. 708	717	730	8 59	1,114	1,333	95 5
Use of dairy products, qt.	• •			• •			• •
Sweet milk		2.3					2.8
Buttermilk		1.2	8,	.7,			.6
Cream Canned milk						_	
Dried milk	0	.7	.7	g.	.5	.4	.6
Cheese		.3 .7	.4	.6 .2 .6	.2 .7	.4 .3 .8	.2 .7
Ice cream		• ':	.4 .5 .1	.0	.2	.0	i.i
Total milk equivalent			.1	•1	.2	.1	•1
used, qt	. 4.4	5.2	5.2	4.8	5.2	5.3	5.0
Recommended milk	. 1.1	0.2	0.2	4.0	0.2	0.0	0.0
equivalent, qt.	4.2	4.3	4.1	4.1	4.2	4.1	4.2
Percentage of recom-		2.0				***	
mended amount used	. 105	121	127	117	124	129	119

Appendix Table 43. Average Per Person Use of Dairy Products Over a 7-Day Period, by Education of Husband, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

THINDION, TEMPANIA, HARRET THEA, TALL, 1004						
	Consump	tion by ra	ange in ed	ucation of	f husband	
Item	No infor- mation or no husband	3 grades or less	4-6 grades	7-9 grades	10 grades or higher	Total or average
Families, number	35	20	34	11	24	124
Average income						
per family, dol	1,406	1,983	2,163	2,433	2,598	2,028
Average income	•	•	•	•	•	•
per capita, dol	354	426	478	582	5 38	459
Use of dairy products, qt.						
Sweet milk		1.7	1.5	1.4	1.5	1.5
Buttermilk	.6	.7	1.1	.8	.4	.8
Cream	1		1	1	1	1
Canned milk	.5	.3	.4	.4	.7	.4
Dried milk		.2	.1		.2	.1
Cheese	.5	.6	.6	.7	.6	.1 .6
Ice cream	.1	1	.1	.1	.1	.1
Total milk equivalent						
used, qt	3.0	3.5	3.8	3.4	3.5	3.5
Recommended milk						
equivalent, qt	4.5	4.5	4.4	4.5	4.4	4.4
Percentage of recom-						
mended amount used	67	78	86	76	80	80

¹ Less than 0.05 quart.

Appendix Table 44. Average Per Person Use of Dairy Products Over a 7-Day Period, by Frequency of Husband's Drinking Milk, 378 White Families, Anniston, Alabama, Market Area, Fall, 1954

	Consu					
Item	No infor- mation or no husband	Every meal	Every day	Some- times	Never	Total or average
Families, number	. 38	42	197	77	24	378
Average income per family, dol.	. 2,576	4,044	4,139	3,706	3,123	3,818
Average income per capita, dol.	725	1,005	1,027	875	861	955
Use of dairy products, qt. Sweet milk Buttermilk	. 2.5 6	$3.5 \\ .5_{1}$	3.1 .7 ₁	$2.4 \\ .5_{_{1}}$	$\overset{1.6}{{\cdot 4}_{_{1}}}$	2.8 .6 ₁
CreamCanned milkDried milk	5 2	.6 .2 .7 .2	.6 .3 .7	.5 .2 .6	.5 .4 .6	.6 .2 .7 .1
Ice creamTotal milk equivalent	1	.2	:i	.1	.1	ä
used, <i>qt</i>	4.4	5.7	5.5	4.3	3.6	5.0
Recommended milk equivalent, <i>qt</i> Percentage of recom-	4.3	4.1	4.2	4.1	4.2	4.2
mended amount used	. 102	139	131	105	86	119

¹ Less than 0.05 quart.

Appendix Table 45. Average Per Person Use of Dairy Products Over a 7-Day Period, by Frequency of Husband's Drinking Milk, 124 Colored Families, Anniston, Alabama, Market Area, Fall, 1954

	Consu					
Item	No infor- mation or no husband	Every meal	Every day	Some- times	Never	Total or average
Families, number	. 32	8	29	43	12	124
Average income per family, <i>dol</i> Average income	. 1,097	2,109	2,499	2,272	2,446	2,028
per capita, dol	279	511	562	448	699	459
Use of dairy products, qt.		4.0	* 0			
Sweet milk		4.0		1.1	0.9	1.5
Buttermilk Cream		1.8	$1.0_{_{1}}$.6,	.6	.8,
Canned milk	. 4	.1	5	5	.5	.4
Dried milk			.5 .2 .7	.5 .2 .5 .1	.1	.î
Cheese	5	.5	.7	.5	.4	.6 .1
Ice cream	. 1	.1	.1	.1	1	.1
Total milk equivalent						
used, qt .	2.8	6.5	4.4	3.0	2.5	3.5
Recommended milk equivalent, qt.	4.4	4.3	4.4	4.5	4.3	4.4
Percentage of recom- mended amount used	. 64	151	100	67	58	80

¹ Less than 0.05 quart.