THE DIETARY HABITS OF FIFTY COLLEGE WOMEN IN DENTON, TEXAS, INCLUDING TWENTY-FIVE VETERANS

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN FOODS AND NUTRITION IN THE GRADUATE DIVISION OF THE TEXAS STATE COLLEGE FOR WOMEN

DEPARTMENT OF
HOME ECONOMICS

BY

FRANCES ELIZABETH WYATT, B. S.

DENTON, TEXAS

AUGUST, 1947

TEXAS STATE COLLEGE FOR WOMEN

DENTON, TEXAS

August, 1947

I hereby recommend that the thesis prepared under my supervision by Frances Elizabeth Wyatt entitled

THE DIETARY HABITS OF FIFTY COLLEGE WOMEN IN DENTON, TEXAS, INCLUDING TWENTY-FIVE VETERANS

be accepted as fulfilling this part of the requirements for the Degree of Master of Arts.

Laura Mc Laughlin, J. C.
In Charge of Thesis

Johnnie Christian
Director of Department

Accepted:

W. A. Clark
Director, Graduate Division

ACKNOWLEDGMENT

Grateful acknowledgment is made to Dr. Laura McLaughlin, director of this study, without whose generous guidance, helpful criticism, and sympathetic encouragement the study could not have been made. Sincere appreciation is also expressed to the students who so willingly cooperated in making this study possible.

TABLE OF CONTENTS

LIST OF TABLES

TABLE PAGE

CHAPTER I

INTRODUCTION

During the past few years there has been a great deal of emphasis placed on the food habits of young men of an age for military service. Young women also served in the armed forces and are returning to colleges today along with men veterans. The school year 1946-1947 was expected to see the largest enrollment of veterans, since the army and the navy were returning to peace-time status, and most of the reserve forces were released by or during 1946.

The writer, being an ex-service woman, was interested in the women veterans in school and in the influences military service may have had on their habits. It was decided that the study of their food habits compared with those of a control group might indicate whether military service had made permanent changes in their habits.

Texas State College for Women, being a residential college, presented an excellent opportunity for making such a study. With the exception of local, graduate and mature women, students are required to reside in college

dormitories and to take their meals in the college dining halls or cafeteria. Most of the graduate and mature students also live in the dormitories because of their convenience. Therefore, most students attending the Texas State College for Women have the same food offered to them, and live under the same regulations and conditions, thereby making it easier to make comparative studies. There were enough veterans enrolled in school so that it was felt the results would be fairly indicative of the habits of ex-service women in this section. There were enough other women enrolled in school so that a control group matching the group of veterans as nearly as possible in height, weight, and home location, could be obtained.

CHAPTER II

REVIEW OF THE LITERATURE

In order to understand more clearly the dietary habits of the women included in this study, or of any people, it is necessary to trace the development of food habits and to determine the factors influencing food choices.

Food Habits of Ancient Times

Primitive man had such a difficult time struggling for an existence that he could not exercise much choice in his food. He ate what he could obtain to keep from starving. During the evolution of the complex dietaries of today, most of the foods found in earliest diets have been discarded.[1]

Changes in man's food habits can be traced through the different phases of his social progress and development. Earliest tribal associations reveal no division of labor between male and female; one could forage for food as well as the other. Principal foods included herbs, roots, meat, and game.

---

[1]Remington Roe, "The Social Origin of Dietary Habits," Scientific Monthly, XLIII (1936), 194.

With the advent of weapons, man assumed the role of hunter. A woman was left to plant and till the soil and to provide food during the seasons when game was not plentiful. It was in that age that agriculture was born. When cooked foods were introduced in the diet, people did not accept them at once. They had to learn to like foods which were cooked. The fact that people were slow to accept such a radical change in their food habits is offered in support of the theory that dietary instinct is a distrust for the unknown, for foods of unfamiliar taste and nothing more.[1]

In early Biblical times, the Hebrews thought that animals with uncleft hoofs and not ruminating were impure, and therefore they were taboo. So were fish without fins and scales, all worms, shellfish, snails, squid, and most birds. Locusts, beetles, and grasshoppers were among the approved foods.[2]

The ancient Greeks partook their main meal in the evening. More has been written about the banquets of these people than about the family meal. The wife and children dined only in the most intimate circle. They dined alone in the wife's chambers when there were guests.

---

[1] Ibid., p. 198.

[2] Mark Graubard, Man's Food, Its Rhyme or Reason (New York: Macmillan Company, 1943), p. 12.

Since men entertained frequently, the wife and children seldom dined with the master of the house.[1] It was the custom for the men to meet each evening at the public bath and later go to one man's house for dinner. Attendants, either those of the host or those brought by the guests, removed the sandals and washed the feet of the diners. The diners reclined on couches covered with costly materials and ate from individual tables. The attendants brought the food from a special board. The food had been cut up in small pieces; knives and forks were used only in the kitchen. The guests ate with their hands, spoons or pieces of hollowed-out bread. The hands had to be washed several times during the meal to protect the couches.

The meats most commonly in use were those of sacrificial animals, especially oxen, sheep, goats, and swine. Swine was very popular, either roasted, salted, or as sausage. Fowls were plentiful, and the most popular ones were duck, geese, and quail. Hares and fish, particularly eels, were used. Even the poorest people had plenty of fish, the most common ones being tunnis, herring, and sardines. With the fish, the poor people ate a barley cake known as "maza." The richer people had caviar, oysters,

---

[1]Alice Zimmern, The Home Life of the Ancient Greeks (New York: Funk and Wagnalls Company, 1930), p. 203.

and turtles. Wheat, barley, and vegetables such as asparagus, radishes, mushrooms, lentils, and peas were also included in their diet. Cheese and fruit cakes were used for dessert.[1]

The ancient Romans also had their main meal following the bath. In some parts of the country, the Romans had four meals a day, but the first three, usually consisting of bread and cheese, were so light that there was no need for setting the table and using finger bowls.[2]

Contrary to the practice of the Greeks, the Roman wives dined with their husbands. The tables were covered with cloth, and napkins were used. The people ate with their hands. The dinner of the wealthy class of Romans consisted of seven courses. Strange, unusual dishes were served, the host bragging on his ability to concoct new, unheard-of dishes. Little drinking was done during the meal, but heavy drinking bouts followed the dinner.

Some classes of Romans had discreet and charming meals where the mind had as much play as the appetite. The middle classes had simple meals, consisting of only one course. Theirs was a family affair, and there was no drinking.

---

[1] Ibid., p. 208.

[2] Henry T. Powell, Daily Life in Ancient Rome (New Haven: Yale University Press, 1941), p. 263.

The Christians gathered together for the evening meal and spent the time eating their simple meal and praising God.[1]

Food Habits of the Middle Ages

In the Middle Ages, writers tell us that Englishmen of every class were better fed than their counterparts on the Continent.[2] Even their best, however, seems inadequate when compared to the complex dietaries of today.

The fourteenth century found the people of England divided into four classes with regard to their diets. The peasant's diet consisted of black bread, milk and dairy products, known as "white meat," salt pork in season, cheese, and some eggs. His diet lacked fruits and vegetables. The manor servants and farmers had diets consisting of bread, cheese, meat, salt fish, ale, beer or cider. Mutton and pork were more plentiful in their diets than in the diets of the peasants. The wealthy countrymen had the elaborate dietaries of the day with meat and fish, lighter bread, both red and white wines, and such vegetables as cabbage, onions, leeks, and garlic. Lettuce, spinach, and beets were known, and prunes and

---

[1] Ibid., p. 275.

[2] J. C. Drummond and Anne Wilbraham, The Englishman's Food (London: Jonathan Cape, 1940), p. 78.

raisins were frequently used. The townsmen ate meat, fish, milk, and cheese for their standard diets with stews, soups, onions, and cabbage being used less frequently.

The fifteenth century marked an improvement in the peasants' diet in that beef and mutton were added. However, there was a depression in the latter half of the sixteenth century which caused the peasants to have even poorer diets than those of the fourteenth century. The sixteenth century found the Humoral Doctrine being used in setting up dietary standards. This involved a complicated system of classifying people according to their complexions. Certain qualities and characteristics were given and certain diets were prescribed for each group. It was believed that the complexion and characteristics of an individual could be changed if an excess of foods prescribed for another temperament was eaten. For example, children were considered phlegmatic and were supposed to have moist and cold qualities. According to the Doctrine, they should be nourished with meats and drinks which were moderately warm and moist and should never be given wine.[1]

Another school of thought was presented by the School of Salerno, the foremost medical center of the day.

---

[1] Ibid., p. 217.

The five centuries including the twelfth and sixteenth centuries saw little change in medical views on food and diet. Fruits were regarded with suspicion because it was thought that they gave rise to fever. The Salerno School advocated that all infants should be breast fed. If a wet nurse was necessary, exceeding care had to be exercised in the choice. It was felt that the moral and spiritual character of the baby was influenced by the milk it imbibed. Wet nurses, contrary to the practice of excluding fruits and vegetables, were given fresh herb soups made from lettuce, sorrel and parsley. Salerno doctors advised they not be given soups made from the stronger vegetables but gave no basis for this advice.[1] Milk was an important item of diet. It was considered closely related to blood. Ranked in order of importance were mother's milk, first; asses' or goats' milk, second; and cows' milk, last. Most of the teachings of the Salerno School with regard to food were derived from earlier Greek teachings.

Only the very wealthy of this period knew a wide variety of cheeses. Doctors said hard cheeses could be kept for long periods of time, but soft cheeses, of the cottage cheese varieties, were considered perishable.

---

[1] Ibid., p. 301.

Butter was used more extensively in cooking than for table use. Bread, if leavened and well-baked, was considered a digestible and nutritious food. Meat was widely used in this period.

It was the Salerno School which edited the Regimen Sanitatis Salernitanum, the dietary standard for the twelfth century and the one which was used for several succeeding centuries. Few changes were made, though it was rewritten numerous times. A few of the rules laid down by the Regimen included: One should not eat until his stomach was completely emptied of all previous food, under threat of severe results; newly laid eggs were advocated but older ones were to be carefully avoided. Many other rules were found in the Regimen to keep the people healthy and strong.

The seventeenth century found the Humoral system in use to a great extent. Three kinds of diets were recognized at that time: the full, the moderate, and the thin or low. The first type was recommended for the growing and for the strong, vigorous people; the moderate was for the middle aged; while the low diet was for the aged and the ill. Meats were used extensively and milk was thought to be suitable only for young children and very old people. That there was an insufficiency of vitamins in the diets of all classes was evidenced by the

widespread cases of scurvy and rickets.[1]

Early American Food Habits

When the English settled in the New World, they brought many of their food habits and preferences with them. Once their original supplies were depleted, they had to depend upon the foods available and on the limited supplies brought by the few ships which found their way from the Old World.[2] Their food habits underwent changes from necessity. While tea and spices from the Orient were still considered the most choice delicacies, the English colonizer learned from the Indian neighbor how to grow corn and other grains and how to preserve them for the winter. Although settlers from Spain, France, and other parts of Europe brought their food habits and traditions with them, as did the English, they had to make adaptations to existing conditions.

Since transportation and storage facilities were so limited, there was little opportunity for the food habits of one section to spread to other sections. Citrus fruits of the South were unknown in New England; salt water fish of the coast were not found inland.[3]

---

[1] Ibid., pp. 330-335.

[2] Ibid., p. 340.

[3] Richard Osborn Cummings, The American and His Food (Chicago: University of Chicago Press, 1940), p. 47.

Even today, with all of the modern transportation and storage facilities which have made foods common to one area universally known, the influences of early family traditions are still evidenced. The Mexican family in the United States eats the tortilla, frijole beans, and tamales which constituted the diet of their forefathers in Mexico. The people of Italian ancestry prefer spaghetti, cheese, tomato sauces, and other items of the dietary pattern brought by the Italian immigrants. German communities retain their preference for sour dough light bread and beer, articles of food eaten in their homeland. American diets have been and still are influenced to a great extent by foods available on local markets and the traditions of the family.

Other Factors Influencing Dietary Habits

Religion. -- In the days when sacrifices were offered to the gods, religion affected the dietary habits of the people, and down through the ages it has continued to influence food habits. Primitive Arabian tribes, with much ceremony and formality, offered camels for sacrifice. After the leader had blessed the animal, he killed it and drank the blood. All of the other worshippers fell upon the victim and ate it raw. It was thought to bring bad

luck if any of the animal was not devoured.[1]

During the pastoral period the people did not kill their cattle except for the annual clan sacrifice. When times were prosperous, excuses for killing meat under pretext of sacrifice were common. Later, sacrifices were offered at the graves of departed friends, or on joyous occasions. These sacrifices were all made in the name of religion but were also a means of gratifying the people's taste for meat.[2]

Hebrew sacrifices were public ceremonies with the rich and poor sharing alike. There was hilarity and merry making implying earthly joys, but they were not selfish ceremonies. Praying was done for the community and not for the individual. There was a renewal of the bond of the worshipper and his God and also of the bonds of friendship.

Even though the ancient practice of animal sacrifices have been abandoned by most civilized peoples, there are still religious influences affecting people's food habits, as, for example, in India, the Brahma is a sacred animal and cannot be killed for food.

The Catholics have numerous rites and regulations concerning their food habits. A commonly known practice

---

[1]Frank B. Jerons, An Introduction to the History of Religion (New York: Macmillan Company, 1910), p. 144.

[2]Ibid., p. 157.

of the Catholic Church requires that no meat be eaten on Friday and on certain fast days. During the period of Lent, meat is also omitted on Wednesday. Under certain conditions, such as war, special dispensation is made, allowing the eating of meat. Some days are spent in fasting with no eating done before six o'clock in the evening. Friday is often called "Fish Day" because of the widespread use of fish on that day by public eating places and homes in deference to the Catholics.

The Jews, like their ancestors, do not eat pork as it is considered impure. Another taboo of their religion is the eating of leavened bread. There are many special days observed by the Jews which require certain practices. For example, in observing one holiday, no food which has been in the house over night can be eaten, and no dishes which have been used before can be used that day.

The Mormon religion also influences food habits. A Mormon in good standing in his church cannot drink coffee, Coca-Colas, tea, or any alcoholic beverages. There are certain days when he fasts, also.

Home influences. -- Food habits may be a result of economic necessity. Children brought up in countries at war or during a depression form strong desires for foods given to them because they were cheap and plentiful.

Carbohydrates were used extensively during the 1930-1937 depression, and children from homes which had employed such a diet who were moved to institutions or foster homes presented difficult feeding problems because they wanted only carbohydrate foods.[1]

Probably the largest single factor influencing food choices and habits is tradition. There is a natural tendency for most people to continue doing the things that they like and to resist taking up something new. The child is influenced first by his parents who are inclined to feed him what they believe to be "best for him." What is thought to be best for an individual varies from time to time. As the child grows into an adult, his food habits become fairly well-fixed. They are likely to change only if he moves from an isolated community to one with wider variation in foods, or if he changes from one country to another, where the food habits are different.[2] Families who readily adopt a new food are likely to be those whose traditions involve flexible diets. The inability to change comes more from a philosophy than from a state of health. The part of a community most likely to adjust to a new article of diet is the group who still have some of the adventurousness of adolescence with well-rounded

---

[1]Lowell S. Selling and Mary A. Ferraro, The Psychology of Diet and Nutrition (New York: W. W. Norton and Company, Inc., 1945), pp. 37-39.

[2]Ibid., p. 42.

attitudes toward food, so they are no longer being coached as to what to eat and who are yet not so old that they are resistant to new ideas.

Beyond age groups, emotions play an important part in habituation to food. Parents are admired by their children, hence an example of good food practices on the part of parents produces results in the children.

There have been various programs inaugurated from time to time, either to study existing situations pertaining to food habits or to institute reforms. In the 1880's, work on diet reforms was started in America. The reformers were thought to be cranks and little attention was paid to them. The work was needed, however, since the diets of even the prosperous were far from conducive to good physical condition or health. Even had the talks on the virtues of perishables, such as fresh milk and vegetables, been convincing, it was impossible for all people to obtain them in sufficient amounts. The improvement of methods of supply, such as steam transportation and canning, may have contributed as fully to the development of a healthful, vigorous manhood as major measures of sanitary reform and preventive medicine have.

Outside influences. -- Advertising has done much to make foods common to one section universally known and

to introduce new foods into the diet. A new or different food is usually encouraged by stressing one of the following points: (1) palatability, (2) nutritional claims, or (3) therapeutic value. The Pure Food and Drug Act has served to prevent advertising from making false claims.[1] Everyone has a certain amount of susceptibility to clever advertisements and enticing pictures, and these contributions cannot be overlooked in the spread of food and nutrition information.

A "food fashion" may be deliberately started just as other fashions are introduced. It is not necessarily a good or a healthful innovation; however, most food fashions are harmless. The gooey ice cream concoctions and steady diet of hamburger adopted by adolescents are examples of food fashions of one generation. The food habits of a people tend to harmonize with other customs of the group. For instance, the "gay nineties" with its elaborate clothes and lavish entertainments favored heavy, rich foods. The advancements made by science have greatly increased the knowledge on nutrition and food habits. Experts in the field have experimented and carried out studies in working toward obtaining optimum diets for all people. Since this study is concerned with the food habits of adults, other adult food studies were

reviewed in an effort to form a better background in making the study.

Dietary Studies

Verz R. Goddard and Herbert R. Morgan conducted a study at the University of California to determine the protein adequacy for college students.[1] The albumin-globulin ratio was used as an indication of protein inadequacy. The students were first given basal metabolism tests. The study indicated that there was no relationship between the protein intake level and the albumin-globulin ratio. Eight students whose diets were found to be low in protein were studied further and no abnormalities were revealed. Their metabolic rates were lower than the rates of a group used for a control, however.

At about the same time the above study was made, a study was made of one week's dietary of one hundred women students at the Utah Agricultural College.[2] The women were classified into four groups according to residence. These groups were (1) home, (2) boarding house, (3) bachelor quarters, and (4) dormitories. The standards of comparison were developed from recommendations proposed

---

[1]Verz R. Goddard and Herbert R. Morgan, "Protein Adequacy for College Students," Journal of the American Dietetic Association, XIV (1938), 251-254.

[2]Sadie O. Morris and Mildred Bowers, "A Study of One Hundred College Women Students," Journal of the American Dietetic Association, XV (1939), 358-362.

by Sherman and Rose, 2,300 calories for a moderately active woman. A record of one week's food intake was kept for each girl and the calculated intakes of nutrients were compared with the standards. It was found that the diets of all the groups were generally lower than the standards used for comparison. The dietaries of those living in dormitories were consistently superior to the others both in quantity and in quality, while the diets of those living in homes were poorest in both respects. The dietary records of all the groups showed deficiencies in phosphorus, iron, Vitamin B, and ascorbic acid.

In 1940, Mary Margaret Shaw made a study of the food habits of eighty college students at the Utah Agricultural College.[1] Ninety students kept a two-day record of all the food they ate. Eighty of the records were found suitable for the study. The greater percentage of the students studied were eating in a college dining hall where foods were equally available to all. The failure of the students to eat some foods might seem due to a combination of food dislikes and perverted appetites resulting from between-meal eating of sweets. The results of the study revealed that thirty-two per cent of the subjects had no breakfasts or breakfasts that were

---

[1]Mary Margaret Shaw, "A Study of the Food Habits of Eighty College Students," Journal of Home Economics, XXXII (1940), 614-615.

decidedly inadequate; sixteen per cent had inadequate lunches; thirteen per cent had inadequate dinners; six per cent had all three meals inadequate. Other findings showed that forty-five per cent had one pint of milk per day, sixteen per cent had half a pint per day, twenty-three per cent had no milk; the consumption of green leafy vegetables was low, while the consumption of citrus fruits was fair.

At Purdue University in Lafayette, Indiana, Pearl Jackson and Cecilia Schuck made a study on the nutritional adequacy of foods purchased on limited and more liberal food budgets. The study included a group of women students living in a sorority house and two groups living in cooperative houses. Records for the study were obtained by use of the inventory method for two periods of twelve weeks each. The records were analyzed to determine the percentage distribution of costs and calories among the different food classes and the results were compared with standards for diets at different cost levels. The standards used were from the United States Department of Agriculture Circular No. 296, Standards for Diets of Different Cost Levels. An evaluation was made

---

[1]Pearl Jackson and Cecilia Schuck, "Nutritional Adequacy of Foods Purchased by College Women on Limited and More Liberal Food Budgets," Journal of the American Dietetic Association, XVII (1941), 784-789.

of the nutritive values of foods purchased in terms of calories, protein, calcium, and iron. The first cooperative group was found to be superior with regard to calcium, phosphorus, and iron. The liberal provision of calcium and phosphorus on a low cost budget was made possible through the use of skim milk. Whole grain cereals contributed to the high iron content. The sorority members studied during the first period had the most deficient diets. The second cooperative group, with the lowest per capita expenditure, had diets superior in calcium and phosphorus to that of the sorority group of each period. The women making the study concluded that adequate diets may be had even though the food budget is limited.

In 1941 when the selective service was inaugurated, Lieutenant-Colonel Paul P. Logan wrote an article to tell the people of the nation how the American soldier was being fed. He said:

> Modern war with its lightning speed, whirlwind devastation, and nerve-shattering machines, lays heavy toll on the physical and nervous stamina of men. Not only must the quantity of food be adequate for men who are under the strain of war, but the variety must provide all the constituents of a properly balanced diet.[1]

The standards then used for the garrison ration or peace-

---

[1]Lieut.-Col. Paul P. Logan, "How the American Soldier Is Fed," Journal of the American Dietetic Association, XVII (1941), 226-233.

time diet were proposed by the Department of Agriculture and were based upon the needs of active men.

A dietary study made by nutrition workers in 1942 included six mid-western colleges with 3,432 students taking part in the study.[1] The colleges represented were the University of Wisconsin, Iowa State College, Kansas State College, Ohio State University, the University of Minnesota, and the University of Nebraska. The students kept food intake records for seven consecutive days. The record sheet included the name of each meal, the place where the meal was eaten, the approximate amounts in the servings, the ingredients in mixed dishes, and the amounts and kinds of foods eaten between meals.

It was found that meat was chosen most frequently by the largest number of students, while whole-grain products were least often selected. The women making the study felt that the data presented were indicative of the present dietary practices among students.

In the same year that the above study was made, a group of workers studied the caloric intakes of twenty-seven college women, twelve of whom were in Kansas and fifteen of whom were in Ohio.[2] The caloric intakes were

---

[1]May S. Reynolds and others, "The Dietary Habits of College Students," Journal of Home Economics, XXXIV (1942), 379-384.

[2]M. S. Pittman and others, "The Caloric Intake of Twenty-seven College Women," Journal of the American Dietetic Association, XVIII (1942), 449-453.

obtained from food intake records and were compared with the generally accepted standard of 2,500 calories per day for the average woman (recommended dietary allowance of the Food and Nutrition Board of the National Research Council). The caloric intakes of the subjects studied varied greatly. There was a range of from 27.6 to 56.4 calories per kilogram body weight for the Kansas subjects or a difference of 104 per cent. The Ohio group ranged from 19.9 to 50.0 calories per kilogram body weight, a difference of 151 per cent. From these figures it was evident that the mean energy consumption of these subjects was lower than the recommended allowance for active women. Results indicated that college women were consuming fewer calories than those of earlier studies with only nineteen per cent equalling or exceeding the Sherman standard of 2,400 calories per day for the average moderately active woman. The women making the study made the following statements in summing up their findings:[1]

> Examination of the dietary records of these subjects showed that the protective foods, particularly milk, green and raw vegetables, citrus fruits and tomatoes, and in some cases, eggs, appeared frequently in the majority of diets. This may represent a change in dietary habits fully as striking as the apparent trend toward a decrease in caloric intake. The more liberal use of protective foods explains, in part, why the diets, in

---

[1] Ibid.

spite of seemingly low caloric intakes, were adequate as judged by maintenance of weight and general health of the subjects.

Jessie Whitacre of the Department of Rural Home Research of the Texas Agricultural and Mechanical College made a survey of the foods used by Texas rural families in 1943.[1] She studied four hundred families in three sections of the state. She found that most of the families had milk in their diets with only a few having less than 0.6 pint per day. Milk was used extensively for cooking as well as for drinking. All but one of the families studied used eggs. There was liberal use of vegetables. In season, there was an abundant use of home-grown vegetables. The foods used by the families in all sections were strikingly similar.

During the war years, there was a great interest shown in the diets of men in military service. James S. McLester wrote an article in Nutrition Reviews on feeding the American soldier.[2] He gave the foods prescribed and consumed in the army and their nutritive values as determined by 117 nutrition surveys made by Howe. The recommended daily allowances of the Food and Nutrition Board of the National Research Council were used as a guide.

---

[1]Jessie Whitacre, "The Food Supply of Texas Rural Families," Texas Agricultural Experiment Station Bulletin No. 642, October, 1943.

[2]James S. McLester, "Feeding the American Soldier," Nutrition Reviews, I (1943), 225-227.

The ration was liberal, particularly in protein content, to insure a good intake of the Vitamin B complex. The following table shows the average nutritive values of the food issued and consumed as determined by Howe's surveys:

	Average Nutritive Value of Food	
	Issued	Consumed
Calories	4,101	3,888
Protein, gms	130	124
Fat, gms	193	193
Carbohydrate, gms	460	415
Calcium, mg.	954	883
Phosphorus, mg.	1,946	1,882
Iron, mg.	28	25
Vitamin A, I. U.	10,760	9,255
Thiamin, mg.	2.2	2.1
Riboflavin, mg.	3.0	2.3
Nicotinic acid, mg.	32	27.4
Ascorbic acid, mg.	93.2	86

The plan of rationing followed in the army recognized (1) adequacy of the diet was the essential consideration, (2) such a dietary might be obtained in many ways, (3) there were differences in the availability of foods in the different parts of the country, and (4) within reasonable limits, dietary habits should be honored.[1] The army considered that food and its preparation were important factors in maintaining morale. There were two

---

[1]Paul E. Howe, "Nutritional Aspects of Feeding an Army," Journal of the American Medical Association, CXX (1945), 93-95.

factors involved in the army's problem of planning dietaries: (1) that of meeting the nutritive requirements for the particular situation, and (2) that of selecting foods acceptable to the group and of preparing and serving these foods in a pleasing manner.

The navy had problems other than the army's problem in that diets must be planned, prepared, and served to men aboard ship, as well as to land-based forces. This involved the selection of foods that could be kept for long periods, that required a minimum space for storage, and that supplied the necessary nutrients. In a study comparing the amounts of food issued a ship's crew, a navy base force of the Pacific Fleet, and an army corps, it was found that the ship's crew and navy base force received more pounds of food than the army corps, although the number of calories supplied was higher for the army corps and base force than for the ship's crew.[1] Protein allowances for the ship's crew exceeded those of the base force and the army corps, as did all the other nutrients with the exception of calcium, which was highest in the army corps. All of the figures either equaled or excelled the daily allowances for an active man as recommended by the National Research Council.

---

[1]Ernest W. Brown, "Nutritional Aspects of Feeding the United States Navy," Journal of the American Medical Association, CXX (1945), 96-99.

The dietary studies cited in this chapter have been done in many locations under various conditions. The data presented indicate the different angles from which studies of this type may be approached. Some of these methods were (1) by use of daily food intake records, (2) by the inventory method of food purchased, and (3) by studies of the amounts of food issued and the amounts of food consumed. These studies have proved most helpful in determining the best methods for obtaining data for this study.

CHAPTER III

THE GENERAL PLAN OF THE STUDY

Recognizing the various factors which influence dietary habits and food choices, the writer planned this study to serve as a comparison of the dietary habits of a group of women veterans and a group of women non-veterans, all college students at the time the study was conducted. The methods for obtaining data involved the use of questionnaires, daily food intake records, and personal interviews.

The questionnaire, a copy of which will be found on the following page, was considered the best way to obtain the necessary information with the least inconvenience to the subject. The questions were so planned that they could be answered by a check mark, a number, or a single word. Data included in the questionnaire included physical characteristics of the subjects; their home background factors such as size and location of home community, nationality of parents, and home resources; and general health habits which might influence food habits.

Data Affecting Dietary Habits of the Individual

A. Physical data.
Age ____yrs. ____mo.
Height ____ft. ____in.
Weight ____lbs.

B. Problems affecting dietary.
Place of eating (check one): Dormitory____
Cafeteria____
Home ____
Other ____ Where__
Nationality of parents _____ & _____
Religion (check) Jewish____ Catholic____ Seven Day Adventist____ Protestant____ Greek Orthodox____
Other (write in)_____
Interest in food (check) Good____ Poor____ indifferent____.
Home state_____ County_____
Home town (check) Community with population less than 2500____
Town with a population of 2500-10,000____
City with a population of 10,000-50,000____
City with a population over 50,000____
Food resources at home during childhood (check)
Vegetable garden____ Fruit trees____ Cow____ Chickens____ Home preserved foods____ Yes____ No____
Kind of fuel used. Electric____ Gas____ Oil____
Wood____ Coal____
Kind of refrigeration. Ice box____ Mechanical box___
Frozen food locker. Yes____ No____

C. General health habits.
Appetite (check) Good____ Poor____ Indifferent____
Time spent in eating Breakfast ____ min. Lunch ____min.
Dinner ____min.
Tendency toward constipation. None____ Some____
Great deal____
Cathartics used (name)_____
Tonics, vitamins used_____
Fluid intake per day.
Water ____glasses.
Coffee ____cups.
Tea ____cups.
Soft drinks____
Others_____
Hours of sleep each night____ Day rest ____ hrs.

D. Activities.
No. of credit hours carried now____. Extra-curricular activities_____
Do you havw a job?____ If so, what kind?_____
Exercise. Type_____ Frequency_____

E. Military service.
Length of service_____ Branch of service_____
Rank_____ (check) Duty in States____
Overseas duty____ If so, where?_____

F. How long have you been away from home?_____
If there was an interval between high school and entrance into college, what did you do?_____
Where did you live? A home____ Institution____
Barracks____ Other (write in)_____

On the following pages are samples of the food intake records, of records showing varieties among foods, and of food preference records. These records were used for obtaining the present dietary habits of the subjects.

The food intake records had spaces for the name of the meal, the servings of foods with the appropriate amounts in the servings, and the kinds and amounts of foods eaten between meals. The sheet for the distribution of kinds of food eaten was kept for the period during which the food intake records were kept. The food preference records were checked to indicate whether each food listed was liked, disliked, accepted, or unfamiliar to the subject.

Food Intake Record

Original Record

Date_____

Foods	Estimated Measure	Estimated Servings No.	Remarks
Breakfast			
Lunch			
Dinner			
Between meals			

Date_____

VARIETY OF FOODS, AS PURCHASED, FOR ONE WEEK'S DIETARY

Milk and milk products No._____	Meats No._____
Fruits No._____	Vegetables No._____
Cereals and cereal products No._____	Fats and sweets No._____

Total number of purchased foods_____

Type of dining room: check below

Home_____ Boarding House_____ Cafeteria_____
Dormitory____ Cooperative House_____ Here and there__

Were all your foods for the week supplied from the same kitchen?

FOOD PREFERENCE AND PREJUDICE RECORD

Put a check in the proper column:

Food	Like	Dislike	Accept	Unfamiliar
A. Beverages				
1. Coffee				
2. Tea				
3. Soft drinks				
B. Breads, Cereals				
1. Biscuits				
2. Bran				
3. Bread, white				
4. Bread, w. wheat				
5. Rolls, cinnamon				
6. Corn bread				
7. Cornflakes				
8. Shredded wheat				
9. Doughnuts				
10. Grits				
11. Hominy				
12. Macaroni				
13. Oatmeal				
14. Rice				
15. Tapioca				
C. Eggs and Dairy Products				
1. Butter				
2. Buttermilk				
3. Cheese, American				
4. Cheese, cottage				
5. Cheese, Swiss				
6. Cream				
7. Eggs				
8. Ice cream				
9. Milk, sweet				
10. Oleomargarine				
D. Fish				
1. Catfish				
2. Red snapper				

Food	Like	Dislike	Accept	Unfamiliar
3. Halibut				
4. Oysters				
5. Salmon				
6. Scallops				
7. Shrimp				
8. Tuna				
E. Fruits				
1. Raisins				
2. Raspberries				
3. Strawberries				
4. Watermelon				
5. Apples				
6. Apricots				
7. Avocado				
8. Banana				
9. Blackberries				
10. Cherries				
11. Cranberries				
12. Cantaloupe				
13. Dates				
14. Figs				
15. Grapes				
16. Grapefruit				
17. Grape juice				
18. Lemons				
19. Olives				
20. Oranges				
21. Peaches				
22. Pears				
23. Pineapple				
24. Plums				
25. Prunes				
F. Meats and Poultry				
1. Bacon				
2. Beef, corned				
3. Beef, roast				
4. Beef steak				
5. Beef, dried				
6. Beef stew				
7. Ham				
8. Lamb				

Food	Like	Dislike	Accept	Unfamiliar
9. Pork chops				
10. Pork sausage				
11. Pork roast				
12. Veal cutlets				
13. Liver				
14. Brains				
15. Chicken				
16. Turkey				
G. Nuts				
1. Almonds				
2. Brazil nuts				
3. Cocoanut				
4. Peanuts				
5. Pecans				
6. Walnuts				
H. Vegetables				
1. Artichokes				
2. Asparagus				
3. Beans, navy				
4. Beans, lima				
5. Beans, string				
6. Beets				
7. Carrots				
8. Cabbage				
9. Celery				
10. Corn				
11. Cucumbers				
12. Egg-plant				
13. Lettuce				
14. Mushrooms				
15. Okra				
16. Peas				
17. Peppers, green				
18. Potatoes, Irish				
19. Potatoes, sweet				
20. Pumpkins				
21. Radishes				
22. Rhubarb				
23. Spinach				
24. Squash				
25. Tomatoes				

Food	Like	Dislike	Accept	Unfamiliar
26. Broccoli				
27. Brussels sprouts				
28. Cauliflower				
29. Leeks				
30. Onions				
31. Turnips				
I. Miscellaneous				
1. Chocolate				
2. Mayonnaise				
3. Molasses				
4. Salt				
5. Sugar				
6. Mustard				
7. Spices				

Selecting the Subjects for Study

The names of all the ex-service women attending the Texas State College for Women in September, 1946, were obtained from the Registrar. There were twenty-seven veterans enrolled. Each of them was personally visited and the records to be kept and the information needed were explained to her. Twenty-five of the women agreed to become subjects for the study, but before the study had begun, one of the women withdrew from school. By visiting the representative of the Veterans' Administration in Denton, the writer obtained the names of the ex-service women attending the North Texas State Teachers College in Denton. One of those women was visited, and

she agreed to cooperate in the study.

From the matriculation cards in the Registrar's office, information as to the height, weight, and age of each veteran was obtained. These statistical data were used as a basis for selecting a second group of non-veterans to serve as a control group in the study. By going through the matriculation card files of all the students enrolled in the Texas State College for Women and comparing the data on their cards with the corresponding information concerning the veterans, the writer selected twenty-seven names. Each woman was visited and the details of the plan were explained to her. Twenty-four of this group agreed to become subjects for the study. The files were searched again, and another non-veteran was selected who agreed to cooperate in the study. Thus, two groups of twenty-five each were selected.

Obtaining the Data

All of the women were weighed and measured by the same individual, a graduate student in Foods and Nutrition. The figures were recorded on their data sheets, and the remainder of each data sheet was filled out in the presence of the interviewer to avoid misunderstanding about the information needed.

Daily food intake records for seven consecutive

days were distributed to the subjects. Most of them ate in the dormitory dining halls, and the blanks distributed to those women had each day's menu typed on the record blank for that day to make it easier to keep. At the end of the week, these records were taken up, and each of the subjects was given the food preference list to check.

When all of the records were obtained, there were records for twenty-three veterans and twenty-four non-veterans which could be used. One of the veterans withdrew from school before completing her records, and the other did not keep all the records necessary. The non-veteran whose record was not used was ill and withdrew from school at the end of the first semester. Since all of the other subjects were normal and apparently in good health, the records of one such student were not comparable to those of any veteran.

All data were tabulated in two groups, the veterans and the non-veterans, so comparisons could be made and conclusions drawn as to the purpose of the investigation, to determine whether the veterans' dietary habits were sufficiently different from those of the non-veterans' habits as to indicate that military service may have had permanent influences on their food habits.

CHAPTER IV

PRESENTATION AND DISCUSSION OF DATA

The information obtained from the questionnaires, the food intake records, and the food preference records was tabulated by groups, veteran and non-veteran.

The Subjects: Their Physical Characteristics

The average woman in each group was found by averaging the information for the entire group. The table on the following page shows the range and the average of ages, heights, and weights of the veterans.

Table II gives corresponding information concerning the non-veterans, and Table III shows how the veterans and non-veterans compared in age, height, and weight.

The average veteran was older than the average non-veteran. Since the minimum age for military service was twenty years of age with the consent of parents and twenty-one years of age without the consent of parents, it would be expected that the veterans would be older than the average college student. There was a difference of four pounds in the average weights of the two groups. The non-veterans averaged 137 pounds, while the veterans averaged 133 pounds. The veterans were slightly taller than the non-veterans.

TABLE I

VETERANS: AGES, HEIGHTS, AND WEIGHTS

Subjects	Age in Years	Height		Weight
		Feet	Inches	
1. BR	25	5	2	98
2. BG	30	5	9.75	143
3. BD	28	5	3	123
4. BJ	24	5	5.25	133
5. CV	31	5	3	139
6. CP	27	5	7.5	126
7. CK	24	5	3.5	118
8. FE	25	5	1	111
9. GB	25	5	6	114
10. GE	26	5	4	135
11. GN	23	4	9	155
12. HN	27	5	5	145
13. HF	28	5	8	145
14. HA	22	5	10	143
15. MH	28	5	6	162
16. JI	25	5	5.5	140
17. PE	24	5	8	142
18. RM	24	5	4	127
19. RJ	26	5	5	134
20. RN	25	5	3	123
21. WI	24	5	6.25	137
22. WC	22	5	6	128
23. WF	24	5	5	156
24. HW	34	4	4	110
25. WA	23	5	6	129
Average...	26.2 $\pm$ 0.38	5.76 $\pm$ 0.12		133 $\pm$ 0.7

TABLE II

NON-VETERANS: AGES, HEIGHTS, AND WEIGHTS

Subjects	Age in Years	Height		Weight in Pounds
		Feet	Inches	
1. AE	22	5	8.5	145
2. AL	27	5	5.25	141
3. BM	23	5	3	128
4. CR	24	5	8	146
5. CB	24	5	2	102
6. CE	25	5	3	143
7. FM	22	5	4	135
8. FA	26	5	0	85
9. FC	24	5	5.25	160
10. GG	37	5	4	154
11. GA	23	5	3	121
12. GM	25	5	6.5	150
13. GL	23	5	8.75	149
14. HH	24	5	4.5	122
15. HR	30	5	3.5	133
16. HM	24	5	8	143
17. HB	27	4	5	137
18. MJ	25	5	7.25	153
19. RP	25	5	5.25	160
20. SI	31	5	6	150
21. SG	23	5	4.5	129
22. WE	24	5	6.25	151
23. SD	23	5	5	125
24. UD	22	5	6	159
25. FM	23	5	3	123
Average	25.4 ∠ 0.69	5	5.4 ∠ 0.07	137 ∠ 0.09

TABLE III

VETERANS AND NON-VETERANS: COMPARISON OF AGES, HEIGHTS, AND WEIGHTS

Subjects	Average	Minimum	Maximum
	Age in Years		
Veterans.....	26.2 ± 0.38	22	34
Non-veterans.....	25.4 ± 0.69	22	37
	Height in Feet and Inches		
Veterans.....	5 5.76±0.12	5 1	5 10
Non-veterans.....	5 5.4 ±0.07	5 0	5 8.75
	Weight in Pounds		
Veterans.....	133 ± 0.7	98	162
Non-veterans.....	137 ± 0.09	85	160

Background Factors That Might Affect the Dietary Habits of Subjects

Location of homes. -- According to Selling, one of the important influences on dietary habits is geographical location.[1] Since original dietary patterns are formed to a great extent during childhood, it was felt that the locality in which the subjects lived as children would give

[1]Selling and Ferraro, op. cit., p. 41.

an indication of why their dietary habits were as they were. The tables on the following pages give the home state, county, and population of the home town of each subject.

From the information presented in these tables it was found that eight of the veterans, thirty-two per cent, and five of the non-veterans, twenty per cent, were from rural communities, either from farms or from towns with populations of less than 2,500. Four of the veterans, sixty per cent, and nine of the non-veterans, thirty-six per cent, were from towns with populations of from 2,500 to 10,000. Eight of the veterans, thirty-two per cent, and the same number of non-veterans lived in communities with populations ranging from 10,000 to 50,000. Five, twenty per cent, of the veterans and three, twelve per cent, of the non-veterans lived in cities with populations over 50,000. These figures showed that there was little difference between the two groups in the size of home communities. There were more veterans from rural communities and from the largest urban communities, while the non-veterans had the largest number in the middle groups of smaller cities.

Eighteen, seventy-two per cent, of the veterans and twenty, eighty per cent, of the non-veterans were from Texas. Other states represented in the veteran

TABLE IV

VETERANS: HOME STATE, COUNTY AND POPULATION OF HOME TOWN*

Subject	Home State	Home County	Population of Home Town			
			Rural **	2,500-10,000	10,000-50,000	Over 50,000
1. BR	Florida	Polk		x		
2. BG	New Jersey	Hudson			x	
3. BD	Texas	Harris				x
4. BJ	Texas	Denton		x		
5. CV	Texas	Dimmit	x			
6. CP	New York	York				x
7. CK	Illinois	Cook				x
8. FE	Pennsyl.	Denton			x	
9. GB	Texas	Hood	x			
10. GE	Arkansas	Pope			x	
11. GN	Texas	Howard			x	
12. HN	Texas	Kerr			x	
13. HF	Texas	Brown	x			
14. HA	Texas	Brooks		x		
15. MH	Texas	Cherokee	x			
16. JI	Texas	Mitchell	x			
17. PE	Texas	Willacy		x		
18. RM	Texas	Anderson			x	
19. RJ	Texas	Harris				x
20. RN	Texas	Harris				x
21. WI	Texas	Denton			x	
22. WC	Texas	Karnes	x			
23. WF	Texas	Uvalde	x			
24. HW	Texas	Tarrant			x	
25. WA	Wisconsin	Crawford	x			
	Total.....		8	4	8	5

*During childhood.
**Farms and communities with populations up to 2,500.

TABLE V

NON-VETERANS: HOME STATE, COUNTY AND POPULATION OF HOME TOWN*

Subject	Home State	Home County	Population of Home Town			
			Rural **	2,500-10,000	10,000-50,000	Over 50,000
1. AE	Texas	Jones	x			
2. AL	Texas	Bexar		x		
3. BM	Texas	Harris				x
4. CR	Texas	Mitchell			x	
5. CB	Texas	Harris				x
6. CE	Texas	Bexar				x
7. FM	Texas	Fannin		x		
8. FA	Texas	Nacogdoches		x		
9. FC	Louisiana	Anderson			x	
10. GG	Texas	Hemphill		x		
11. GA	Texas	Ellis		x		
12. GM	Texas	Brazos	x			
13. GL	Texas	Hidalgo			x	
14. HH	Texas	Montague	x			
15. HR	Texas	Cllahan	x			
16. HM	Texas	Rusk			x	
17. HB	Texas	Fisher		x		
18. MJ	Texas	Limestone		x		
19. RP	Indiana	Elkhart			x	
20. SI	Texas	Denton			x	
21. SG	Iowa	Boone		x		
22. WE	Texas	Ward	x			
23. SD	Texas	Collin		x		
24. UD	Pennsyl.	Westmorland			x	
25. FM	Pennsyl.	Westmorland			x	
	Total.....		5	9	8	3

*During childhood. **Population up to 2,500.

group were Florida, New Jersey, New York, Illinois, Pennsylvania, Arkansas, and Wisconsin. Other states represented by the non-veteran group were Louisiana, Iowa, Indiana, and Pennsylvania. Although the difference in the numbers in each group from out of state was not great, there might be some significance in the figures. Four of the non-veterans from out of state were graduate students who had graduated from colleges closer to their homes and were serving dietetic internships in Denton; the fifth non-veteran from out of state was from Shreveport, Louisiana, just across the Texas state line.

The veterans from out of state were all doing undergraduate work and only one was from near Texas, a student from Arkansas. These data indicate that more of the veterans were willing to go to school greater distances from home. Reasons might be that they were more accustomed to being away from home; that, since they were economically independent due to the provisions of the G. I. Bill of Rights, they could exercise more choice in selecting a school; or they may have been stationed in Texas and decided to make this their home. One of the out-of-state veterans married a Texas man and is attending school while he completes his college work.

Most of the students in both groups were from Texas and since Texas covers a great deal of territory and

includes various kinds of climate and geographic features, the groups were further classified according to the section of the state in which they lived. Texas was divided into six sections according to geographic regions, as shown on the map on the following page.

As can be seen from Tables VI and VII, the majority of both groups were from the northeastern part of Texas. This might be attributed to the fact that Denton is in this section, and the subjects chose to attend college in Denton because of its proximity to their homes.

Nationality and religion. -- Other data which might influence the food habits of people are nationality and religion, as was pointed out in Chapter II. Tables VIII, IX, and X give the nationality of the parents and the religion of each of the subjects.

Table X shows how the two groups compare in regard to nationality and religion. The table shows the number of each group having parents of only one nationality and the number having parents of two or more nationalities. For this purpose Scotch, Irish, English, and Welsh were grouped under the common grouping indicated in the table as the "British Isles."

This table reveals that the veterans showed more mixture in the nationalities of their parents than did the non-veterans, although both groups had nationalities

GEOGRAPHIC REGIONS OF TEXAS

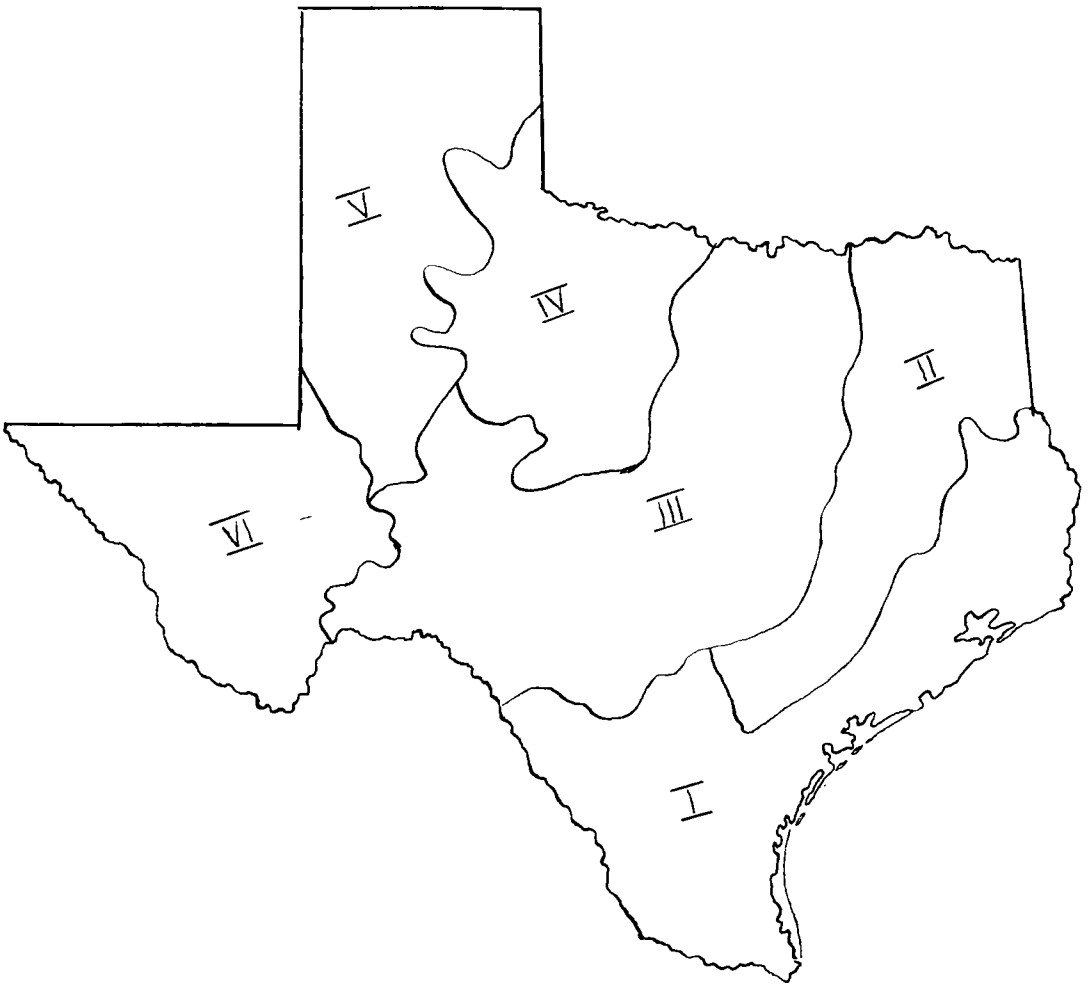

TABLE VI

DISTRIBUTION OF TEXAS VETERANS ACCORDING TO THE SECTION OF THE STATE IN WHICH THEY LIVED

Veterans	Section of State					
	I	II	III	IV	V	VI
1.						
2.						
3.	x					
4.			x			
5.	x					
6.						
7.						
8.			x			
9.			x			
10.						
11.					x	
12.			x			
13.			x			
14.	x					
15.		x				
16.				x		
17.	x					
18.		x				
19.	x					
20.	x					
21.			x			
22.	x					
23.			x			
24.			x			
25.						
Total	7	2	8	1	1	

TABLE VII

DISTRIBUTION OF TEXAS NON-VETERANS ACCORDING TO THE SECTION OF TEXAS IN WHICH THEY LIVE

Non-veterans	Section of State					
	I	II	III	IV	V	VI
1.				x		
2.			x			
3.	x					
4.				x		
5.	x					
6.			x			
7.		x				
8.		x				
9.						
10.					x	
11.			x			
12.		x				
13.	x					
14.			x			
15.				x		
16.		x				
17.				x		
18.			x			
19.						
20.			x			
21.						
22.						x
23.		x				
24.						
25.						
Total	3	5	6	4	1	1

TABLE VIII

VETERANS: NATIONALITY OF PARENTS AND RELIGION OF SUBJECTS

Subject	Nationality of Parents		Religion	
			Protestant	Catholic
1. BR	Irish	English	x	
2. BG	Irish	French		x
3. BD	German	French	x	
4. BJ	English	Irish	x	
5. CV	English	German	x	
6. CP	Irish	Irish		x
7. CK	Irish	Irish		x
8. FE	German	German	x	
9. GB	English	Irish	x	
10. GE	Czech	German	x	
11. GN	Scotch	Irish-German		x
12. HN	German	German	x	
13. HF	Scotch	Irish-German	x	
14. HA	Irish	Swedish	x	
15. MH	French	Irish		x
16. JI	English	Scotch-Irish		x
17. PE	English	Scotch	x	
18. RM	English	Irish	x	
19. RJ	Scotch	Irish	x	
20. RN	German	German	x	
21. WI	Scotch	Irish	x	
22. WC	German	Scotch-Irish	x	
23. WF	English	Scotch-Irish	x	
24. HW	Welsh	English	x	
25. WA	Irish	French		x
	Total.....		18	7

TABLE IX

NON-VETERANS: NATIONALITY OF PARENTS AND RELIGION OF SUBJECTS

Subject	Nationality of Parents		Religion		
			Protestant	Catholic	Seventh Day Adventist
1. AE	Irish	English	x		
2. AL	English	German	x		
3. BM	English	Irish		x	
4. CR	German	German	x		
5. CB	English	German	x		
6. CE	Scotch	English			x
7. FM	Scotch	Irish		x	
8. FA	Scotch	Irish	x		
9. FC	Irish	German	x		
10. GG	German	German	x		
11. GA	Irish	Irish		x	
12. GM	English	Irish	x		
13. GL	German	Irish	x		
14. HH	Scotch	Irish	x		
15. HR	English	German	x		
16. HM	English	English	x		
17. HB	Scotch	Irish	x		
18. MJ	German	French-English	x		
19. RP	English	English	x		
20. SI	Scotch	Irish	x		
21. SG	Scotch	Irish	x		
22. WE	English	Irish	x		
23. SD	English	English	x		
24. UD	Irish	French		x	
25. FM	Swedish	English	x		
	Total.....		20	4	1

TABLE X

COMPARISON OF THE NATIONALITY OF PARENTS AND THE RELIGION OF VETERANS AND NON-VETERANS

Factors	Veterans	Non-veterans
Nationality of parents:		
British Isles.....	20	23
French.....	4	2
German.....	9	8
Balkan.....	1	0
Scandinavian.....	1	1
Number of nationalities in background:		
One.....	15	20
Two or more.....	10	5
Religion:		
Protestant.....	18	20
Catholic.....	7	4
Seventh Day Adventist.....	0	1

that were predominantly those of the British Isles. There were more Protestants than Catholics in each group, with the veterans having more Catholics; there was one Seventh Day Adventist in the non-veteran group. More of the veterans were from the large urban cities where there are more different races found, which might partially explain the reason for more mixture of nationalities in the veterans' parents.

Home resources during childhood. -- Another factor which may have an influence upon the food habits of an individual is the resources which he had as a child. Whether the family had a garden, cows, chickens, fruit trees, and kind of fuel and refrigeration used -- all these might influence the kind of food eaten. Tables XI to XVI show the home resources during childhood of each of the students included in this study.

Tables XV and XVI show how the two groups compare as to home resources and methods of cooking and preserving.

As in other phases of comparison, the two groups are rather similar in the home resources during their childhood. It is interesting to note that the greatest difference between the two groups is in the kind of fuel used. In both groups, gas is the leading fuel, but in the veteran group eight used oil while none of the non-veterans checked oil as the fuel used for cooking. Four veterans listed wood while only two non-veterans checked wood as the fuel used. Electricity was little used, although several members of each group said thatthey had electricity as a fuel for cooking when they were older. Coal was checked by one member of each group, a veteran from Pennsylvania and a non-veteran from Iowa, although the latter said that gas was used in her later childhood.

TABLE XI

VETERANS: HOME RESOURCES DURING CHILDHOOD

Subjects	Home Resources				
	Garden	Fruit Trees	Cows	Chickens	Home Preserving
1. BR.....	x	x	x	x	x
2. BG.....		x			x
3. BD.....	x	x			x
4. BJ.....	x				x
5. CV.....	x	x	x	x	x
6. CP.....					
7. CK.....					x
8. FE.....	x	x		x	x
9. GB.....	x	x	x	x	x
10. GE.....	x			x	
11. GN.....	x				
12. HN.....	x	x	x	x	x
13. HF.....	x	x	x	x	x
14. HA.....	x	x	x	x	x
15. MH.....	x	x	x	x	x
16. JI.....	x	x	x	x	x
17. PE.....	x	x	x	x	x
18. RM.....	x	x	x	x	x
19. RJ.....					x
20. RN.....	x	x	x	x	x
21. WI.....	x	x	x	x	x
22. WC.....	x	x	x	x	x
23. WF.....	x	x	x	x	x
24.. HW.....	x	x		x	x
25. WA.....	x	x		x	x
Total.....	21	19	15	18	21

TABLE XII

VETERANS: KIND OF FUEL AND REFRIGERATION USED DURING CHILDHOOD

Subjects	Kind of Fuel Used for Cooking					Kind of Refrigeration		Frozen Food Locker	
	Wood	Oil	Gas	Electricity	Coal	Ice Box	Mechanical	Yes	No
1. BR.....			x			x			x
2. BG.....			x			x			x
3. BD.....			x				x		x
4. BJ.....			x				x		x
5. CV.....		x				x			x
6. CP.....			x				x		x
7. CK.....				x			x		x
8. FE.....					x	x			x
9. GB.....			x			x			x
10. GE.....			x			x			x
11. GN.....	x					x			x
12. HN.....	x					x			x
13. HF.....		x				x			x
14. HA.....	x					x			x
15. MH.....			x			x			x
16. JI.....	x						x		
17. PE.....		x					x	x	
18. RM.....			x			x			x'
19. RJ.....			x				x		x
20. RN.....		x				x			x
21. WI.....		x				x			x
22. WC.....		x					x	x	
23. WF.....		x				x			x
24. HW.....			x			x			x
25. WA.....			x			x			x
Total....	4	8	11	1	1	17	8	2	23

TABLE XIII

NON-VETERANS: HOME RESOURCES DURING CHILDHOOD

Subject	Home Resources				
	Garden	Fruit Trees	Cows	Chickens	Home Preserving
1. AB	x	x	x	x	x
2. AL	x	x	x	x	x
3. BM					
4. CR	x	x			x
5. CB	x				x
6. CE	x	x			x
7. FM	x	x	x	x	x
8. FA		x			
9. FC	x	x	x	x	x
10. GG	x				
11. GA	x	x	x	x	x
12. GM	x	x	x	x	x
13. GL	x	x	x	x	x
14. HH	x		x	x	x
15. HR	x	x	x	x	x
16. HM					x
17. HB	x	x	x	x	x
18. MJ	x				x
19. RP	x	x	x	x	x
20. SI	x	x	x	x	x
21. SG	x	x	x	x	x
22. WE	x		x	x	x
23. SD	x	x		x	x
24. UD	x	x	x	x	x
25. FM					
Total	21	17	15	16	20

TABLE XIV

NON-VETERANS: KIND OF FUEL AND REFRIGERATION USED DURING CHILDHOOD

Subjects	Kind of Fuel Used for Cooking					Kind of Refrigeration		Frozen Food Locker	
	Wood	Oil	Gas	Electricity	Coal	Ice Box	Mechanical	Yes	No
1. AE	x		x			x			x
2. AL			x			x			x
3. BM			x			x	x		x
4. CR			x			x			x
5. CB			x			x			x
6.									
6. CE			x			x			x
7. FM			x				x		x
8. FA			x			x			x
9. FC			x				x	x	
10. GG			x			x			x
11. GA			x			x			x
12. GM			x			x			x
13. GL			x				x		x
14. HH			x			x			x
15. HR			x			x			x
16. HM				x			x	x	
17. HB				x			x		x
18. MJ			x			x			x
19. RP			x			x			x
20. SI	x					x			x
21. SG					x	x		x	
22. WE			x				x		x
23. SD			x				x		x
24. UD			x				x	x	
25. FM			x			x			x
Total	2	0	20	2	1	18	9	4	21

TABLE XV

COMPARISON OF THE HOME RESOURCES OF VETERANS AND NON-VETERANS DURING CHILDHOOD

Home Resources	Veterans	Non-veterans
Garden.....	21	21
Fruit trees.....	19	17
Cows.....	15	15
Chickens.....	18	16
Home preserving.....	21	20

TABLE XVI

COMPARISON OF THE KIND OF FUEL AND REFRIGERATION USED BY VETERANS AND NON-VETERANS DURING CHILDHOOD

Home Resources	Veterans	Non-veterans
Kind of fuel used for cooking:		
Wood.....	4	2
Oil.....	8	0
Gas.....	11	20
Electricity.....	1	2
Coal.....	1	1
Kind of refrigeration		
Ice box.....	17	16
Mechanical.....	8	9
Frozen food locker:		
Yes.....	2	4
No.....	23	21

The home resources show a relationship with the size of the community where the subjects spent their childhood.[1] The subjects of both groups living in smaller communities checked more resources than did the subjects from large cities. However, with the exception of one veteran who was from New York, the veterans in the largest cities (over 50,000 population) said that there was preserving done in their homes. Of the three non-veterans living in cities with populations over 50,000, two said they had home preserving. One of the veterans living in cities with populations exceeding 50,000 had a cow. All of the veterans living on farms or in communities with populations of less than 2,500 had gardens, fruit trees, cows, and chickens. Only one of the eight did not have home preserving. In the non-veteran group living in rural communities with populations of less than 2,500, all had gardens and chickens, four of the five had fruit trees and cows and did preserving at home. There were more veterans than non-veterans from towns with populations of less than 2,500, and the average as to home resources was slightly higherthan for the non-veterans. There were also more veterans than non-veterans from cities with populations over 50,000. The percentage of home resources of the non-veterans of

---

[1]See Tables IV and V, pp. 44-45.

this group was higher than for the veterans. These results indicate that the students of both groups were familiar with home-grown products and cows and chickens.

Activities since leaving home. -- One of the factors which may affect dietary habits is change in geographic location. Tables XVII and XVIII show the length of time the students had been away from home and how that interval had been spent.

The information in these tables reveals that the veterans and non-veterans had been away from home about the same length of time, the average for the veterans being 5.92 years, while the average for the non-veterans was 5.76 years. All of the veterans lived in barracks part of the time during the interval between leaving home and the current school year. Twenty-one of them spent part of the time in homes, either boarding houses, homes, or apartments, and fourteen of them spent a part of the time in an institution. "Institution," in this instance, was used to designate school dormitories, YWCA's, and similar residences. Only one of the non-veterans lived in a barracks, a woman who did research work on the atomic bomb in Seattle, Washington. Nineteen of the non-veterans spent part of the time in homes, and twenty-four had lived in institutions. Only one of the group had not lived in an institution, a woman whose home

TABLE XVII

VETERANS: ACTIVITIES SINCE LEAVING HOME*

Subjects	Length of Time Away from Home (Years)	Occupations Since Leaving Home	Place of Living Since Leaving Home		
			Home	Institution	Barrack
1. BR	6	Parachute rigger	x		x
2. BG	6	Clerical	x	x	x
3. BD	3	Window decorator	x		x
4. BT	6	Tele. op., defense	x		x
5. CV	11	Nursing school, nursing	x	x	x
6. CP	5	Clerical, sales	x		x
7. CK	6	School	x	x	x
8. FE	8	Chemical plant	x		x
9. GB	7	School, clerical	x		x
10. GE	6	School		x	
11. GN	3	School, clerical	x	x	x
12. HN	3.5	Defense, dental assistant	x		x
13. HF	11	School, teaching	x		x
14. HA	4	Florist	x		x
15. MH	4	Defense	x		x
16. JI	8	School	x		x
17. PE	5	School		x	
18. RM	7	School		x	
19. RJ	7	School, teaching	x	x	x
20. RN	7	School	x	x	x
21. WI	6	School	x	x	x
22. WC	4.5	School, clerical	x	x	x
23. WF	7	School		x	x
24. HW	3	School	x	x	x
25. WA	4	Clerical	x	x	x
Total....			21	14	25
Average..	5.92				

*Other than military service.

TABLE XVIII

NON-VETERANS: ACTIVITIES SINCE LEAVING HOME

Subjects	Length of Time Away from Home (Years)	Occupations Since Leaving Home	Place of Living Since Leaving Home		
			Home	Institution	Barrack
1. AE	3	School		x	
2. AL	10	School, teaching, dietitian	x	x	
3. BM	3.5	School	x	x	
4. CR	6	School, clerical	x	x	
5. CB	6	School, defense	x	x	
6. CE	7	School, clerical	x	x	
7. FM	4	School	x	x	
8. FA	3	School, teaching	x	x	
9. FC	6	School, teaching, clerical	x	x	
10. GG	13	School, chemist, dietitian, clerical	x	x	x
11. GA	3.5	School	x	x	
12. GM	7	School, defense	x	x	
13. GL	5	School, camp counselor		x	
14. HH	6	School, clerical		x	
15. MR	10	School, clerical	x	x	
16. HM	4	School		x	
17. HB	7	School, canteen mgr.	x	x	
18. MS	7	School, clerical	x	x	
19. RP	6	School, house work	x	x	
20. SI	15	Marriage, motherhod	x	x	
21. SG	6	School, clerical	x	x	
22. WE	3	School	x	x	
23. SD	3	School		x	
24. UD	5	School, food worker		x	
25. FM	5	School, clerical	x	x	
Total Average	5.76		19	24	1

was in Denton, and who started her college work after her marriage.

Of the veteran group, thirteen spent part of the interval between leaving home and the current school year in attending school. Eight had done clerical work. Other occupations mentioned by the veteran group were defense plant work, parachute rigging, window decorating, telephone office work, assisting a dentist, teaching school, florist work, nursing, and chemical research. Seven of the non-veterans had spent all of the interval since leaving home in school. Eighteen of the group had attended school part of the time and had had other occupations part of the time. Nine had done clerical work, four had worked in foods, three had taught school. Other occupations were house work, marriage and motherhood, camp counselling, and chemist.

Through studying the tables and comparing the information obtained for each group, the writer found that the two groups were evenly matched as far as physical data were concerned. When data on the questionnaires were tabulated, the second group, which was selected because of similarity to the veterans in the statistical information found on matriculation cards, there were further evidences of similarity between the two groups. The average veteran was slightly older than the average non-veteran, their ages being 26.2 and 25.4,

respectively. In both groups, the average height was over five feet, five inches. There was a difference of only four pounds in the average weights of the groups with the veterans weighing an average of 133 pounds and the non-veterans averaging 137 pounds.

There was only a small difference between the two groups so far as the communities in which they spent their childhoods were concerned. In both groups, most of the students were from Texas with the veterans having seven from out of the state, while the non-veterans had five from out of the state. Not only were most of the students in each group from Texas, but most of the Texans were from the northeastern section of the state.

In each group the majority of women had parents whose nationalities were predominantly those of the British Isles. Although most of the women in each group had parents of only one nationality, the veterans had more students with parents of two or more nationalities. There were more Protestants than Catholics in each group.

In comparing the home resources during childhood of the two groups, the writer found that further marked similarity existed. The number of each group having gardens and a cow was the same; the veterans led by two the number having fruit trees and chickens, and by one the number doing home preserving. The differences were so

slight as to be insignificant. There were greater differences in the kind of fuel used for cooking, although in each group, gas was the fuel most used. Eight veterans used oil while none of the non-veterans did, and more veterans used wood.

The average interval between leaving home and the current school year was practically the same for each group. Most of the women in each group lived in homes during part of the interval, and more of the non-veterans lived in institutions. All of the veterans lived in barracks part of the time, while only one non-veteran lived in a barracks. However, since living in institutions involved group living, this could be compared to barracks living.

All of these data show how evenly matched the two groups were in regard to physical measurements and background factors which migh affect dietary habits. The known difference of the two groups at the start was that the students of one group had had military service. Tables XIX and XX give information on the veterans' military service.

Military Service of Veterans

Table XIX presents data on the veterans' length of service in the various branches, the rank attained, overseas duty, and the length of time since discharge.

TABLE XIX

VETERANS' MILITARY SERVICE

Subjects	Years of Service	Branch of Service	Rank		Overseas Duty	Months Since Discharge
			Officer	Enlisted		
1. BR	1.5	WAC		x		14
2. BG	3.25	WAC	x		Germany	12
3. BD	2.5	WAVE		x		19
4. BJ	1.5	WAVE		x		9
5. CV	2	Army	x			12
6. CD	3	WAC		x	Italy	16
7. CK	2.66	WAVE		x		16
8. FE	2.5	WAC		x		12
9. GB	2.5	WAVE		x		14
10. GE	3	SPAR		x		16
11. GN	2	WAC		x	France	12
12. HN	2.33	Marine		x		17
13. HF	2.5	SPAR		x		15
14. HA	3	WAC		x		15
15. MH	1.75	Marine		x		8
16. JI	2	WAC		x	New Guinea	14
17. PE	3	WAC		x	Italy, Germany	9
18. RM	3	WAVE		x	Hawaii	12
19. RJ	2	Marine		x		12
20. RN	2.5	WAVE		x		14
21. WI	3	WAC		x		16
22. WC	1.5	SPAR		x	Alaska	12
23. WF	2	WAVE		x		10
24. HW	2	WAVE		x		12
25. WA	3	WAC		x	Philippines	12

Table XIX shows the average length of time spent in service to be two years and four months. The different branches represented and the number in each are shown in Table XX, along with the number of enlisted and the number of officer personnel in each branch.

TABLE XX

VETERANS: BRANCH OF SERVICE AND RANK

Branch of Service	Number	Rank	
		Enlisted	Officer
WAC.....	10	9	1
Marines.....	3	3	0
WAVES.....	8	8	0
SPAR.....	3	3	0
Army Nurse's Corps.....	1	0	1
Total.....	25	23	2

Eight of the veterans had overseas service, four having served in Europe, one each having served in the Philippine Islands, New Guinea, Alaska, and Hawaii. The average length of time since discharge until February, 1947, was 12.7 months.

Present Habits of the Subjects

One section of the questionnaire concerned the present lives of the students with regard to general health

habits and activities. These data and the food intake records were analyzed to determine similarities or differences in the two groups. Since the students were so evenly matched with respect to age, physical measurements, and home factors affecting the availability of foods during childhood, it might be supposed that certain eating habits would be similar unless military service caused changes in the habits of the veteran group.

Rest and activities. -- Tables on the following pages show the activities and the rest habits of the students. The four students marked with an asterisk in Table XXII were graduate students who were serving a dietetic internship. They received three semester hours credit, but since they spent eight hours a day as assistant dietitians in the various food units on the campus as a requirement, they were counted as taking twelve hours for the purpose of this study. One of them who was also doing work toward a Master of Arts degree was counted as taking eighteen semester hours.

Table XXIII shows how the veterans and non-veterans compared in amount of sleep, rest, activities, and jobs.

This table reveals that both the veterans and the non-veterans had slightly over seven hours sleep each night. Only seven veterans and nine non-veterans had

TABLE XXI

VETERANS: SLEEP, REST, CREDIT HOURS, ACTIVITIES, WORK, AND EXERCISE

Subjects	Sleep (Hours)	Day Rest (Mi.)	Credit Hours	Job	Extra Activities	
					Activity	Hours
1. BR	7.5	0	16	A	Outing club	
2. BG	7.5	30	13	A		
3. BD	8	0	18		Play organ, golf	3 wk.
4. BJ	8	0	15	B		
5. CV	7	0	17		Golf	3 wk.
6. CP	6	0	17	C		
7. CK	6.5	60	17			
8. FE	6	0	15	D		
9. GB	8	0	16	E		
10. GE	7	0	15	A		
11. GN	7	15	17	a	Golf	3 wk.
12. HN	7	30	12			
13. HF	6.5	0	10	A	Golf	3 wk.
14. HA	8	30	15	C		
15. MH	7	30	17		Fencing	3 wk.
16. JI	7	0	17			
17. PE	7	0	16	A		
18. RM	6.5	0	17		Scouting, swimming	3 wk. 1 day
19. RJ	7	0	15	E		
20. RN	7	0	15	E		
21. WI	8	0	16		Badminton	1 day.
22. WC	8	0	14		Golf	1 day
23. WF	7	0	9	A	Swimming	1 day
24. HW	6.5	0	15	A	Golf	3 wk.
25. WA	8	0	17			
Average Total	7/		15/	15		

A Dormitory staff B Clerk in department store
C Serving in cafeteria D House work
E Departmental office assistant.

TABLE XXII

NON-VETERANS: SLEEP, REST, CREDIT HOURS, ACTIVITIES, WORK, AND EXERCISE

Subjects	Sleep (Hours)	Day Rest (Mi.)	Credit Hours	Job	Extra Activities	
					Activity	Hours
1. AE	8	0	17	A		
2. AL	7	30	9			
3. BM	8	0	15			
4. CR	7	40	12	B	Outing Club	3 wk.
5. CB	7.5	0	15			
6. CE	7	60	16		Flying, sports	1 day 3 day
7. FM	7	0	17	C		
8. FA	7.5	0	9	B		
9. FC	7	30	12	B	Riding	3 wk.
10. GG	5	0	15		Golf	1 wk.
11. GA	6.5	60	17		Band	3 wk.
12. GM	8	0	16			
13. GL	7.5	0	15		Swimming	3 wk.
14. HH	8	0	15	B	Badminton	3 wk.
15. HR	7.5	30	17		Golf	3 wk.
16. HM	7	60	13	A		
17. HB	7	0	12	C		
18. MJ	6	60	16		Folk dance, golf	3 wk. 3 wk.
*19. RP	7	60	12			
20. SI	6	0	10	E	Homemaking	
*21. SG	6	0	18			
22. WE	7.5	0	18		Outing Club, riding	3 wk. 3 wk.
23. SD	7.5	0	17		Tennis	3 wk.
*24. UD	7.5	0	12			
*25. FM	7	0	12		Calisthenics	.5 day
Average Total	7/		14/	13		

A Dining room work
B Dormitory staff
C Departmental office assistant
D Dining room supervisor

*Serving dietetic internship.

any rest during the day. The number of semester hours carried by all the students was about the same.

TABLE XXIII

COMPARISON OF VETERANS AND NON-VETERANS: SLEEP, REST, CREDIT HOURS, ACTIVITIES, AND WORK

Items of Comparison	Veterans	Non-veterans
Sleep (hours).....	7/	7/
Day rest (number having).....	7	9
Credit hours.....	15/	14/
Number with jobs.....	15	9
Extra activities (number having)...	12	18

General health habits. -- The subjects were asked whether their appetites were good, poor, or indifferent, and the length of time spent in eating. They were also asked to list any tonics, vitamins, or cathartics they took since it was felt this would give an indication of their general health habits. Tables on the following pages show these data tabulated for each group. Table XXVI shows how the veterans and non-veterans compare in general health habits.

All of the veterans said that their appetites were good, while one of the non-veterans said that hers was indifferent. One veteran and one non-veteran did not

TABLE XXIV

VETERANS: GENERAL HEALTH HABITS, APPETITE, TIME SPENT IN EATING, TENDENCY TOWARD CONSTIPATION, VITAMINS, TONICS, AND CATHARTICS USED

Subjects	Appetite	Minutes in Eating			Constipation		Vitamins, Tonics	Cathartics
		B	L	D	None	Some		
1. BR	Good	20	30	30	x			
2. BG	Good	20	20	35	x		Vit. A.	Milk mag.
3. BD	Good	30	30	40	x		Proloid	
4. BJ	Good	15	20	30	x			
5. CV	Good	20	20	30		x		Milk mag.
6. CP	Good	15	30	15	x			
7. CK	Good	10	15	30	x			
8. FE	Good	15	30	30	x			
9. GB	Good	15	15	30		x	Vitamins	Salt
10. GE	Good	15	15	15	x			Ex-Lax
11. GN	Good	10	20	30	x			
12. HN	Good	15	15	25	x			
13. HF	Good	20	20	30		x	Vitamins	Milk mag.
14. HA	Good	10	15	15		x		Soda
15. MH	Good	20	25	30	x		Vita. A	
16. JI	Good	20	30	30	x			
17. PE	Good	15	15	15	x			
18. RM	Good	15	20	20	x			
19. RJ	Good	15	20	30		x		
20. RN	Good	15	20	20	x			
21. WI	Good	15	20	20	x			
22. WC	Good	0	20	20	x			
23. WF	Good	15	20	30	x		Unicaps	
24. HW	Good	15	20	20		x		
25. WA	Good	15	20	20	x			
Total	25				19	6	6	6
Average		15	21	25				

TABLE XXV

NON-VETERANS: GENERAL HEALTH HABITS, APPETITE, TIME SPENT IN EATING, TENDENCY TOWARD CONSTIPATION, VITAMINS, TONICS, AND CATHARTICS USED

Subjects	Appetite	Minutes in Eating			Constipation		Vitamins, Tonics	Cathartics
		B	L	D	None	Some		
1. AE	Good	20	20	30		x		
2. AL	Good	20	30	30	x			
3. BM	Ind.	5	10	10	x			
4. CR	Good	0	20	30	x			
5. CB	Good	15	20	25		x		
6. CE	Good	15	20	20	x			
7. FM	Good	15	15	20	x			
8. FA	Good	15	20	20	x			Feen-a-Mint
9. FC	Good	15	20	30	x			
10. GG	Good	20	15	25	x		Vit. A	
11. GA	Good	15	20	30		x	Unicaps	
12. GM	Good	20	30	30		x		Milk mag.
13. GL	Good	15	20	30	x			
14. HH	Good	10	15	20				
15. HR	Good	15	15	20		x		
16. HM	Good	15	15	30		x		
17. HB	Good	15	20	30	x		Iron	Milk mag.
18. MJ	Good	10	15	20		x		
19. RP	Good	15	20	25	x			
20. SI	Good	15	30	30	x			
21. SG	Good	15	20	30	x			
22. WE	Good	15	20	20		x		Milk mag.
23. SD	Good	10	20	20	x			
24. UD	Good	15	15	60	x			
25. FM	Good	15	15	45	x			
Total	24 G 1 I				17	8	3	4
Average		13	19	27				

TABLE XXVI

VETERANS AND NON-VETERANS: COMPARISON OF GENERAL HEALTH HABITS

General Health Habits	Veterans	Non-veterans
Appetite:		
Good	25	24
Indifferent	0	1
Minutes spent in eating:		
Breakfast	15	13
Luncheon	21	19
Dinner	25	27
Tendency toward constipation:		
None	19	17
Some	6	8
Number using tonics and vitamins	6	3
Number using cathartics	6	4

attend breakfast. The average number of minutes which were spent in eating breakfast and lunch was longer for the veterans, but the non-veterans spent more time in eating dinner, with the total time spent in eating being about an hour a day for each group. Nineteen veterans and seventeen non-veterans had no tendency toward constipation, while six of the first group and eight of the

latter group showed some tendency toward constipation. None of the subjects were troubled to a great extent by constipation. More of the veterans took vitamins, tonics, and cathartics than did the non-veteran group. These figures would seem to indicate that the general health of all the subjects was good. However, since this was the opinion of the subjects themselves, definite conclusions could not be drawn.

Regularity in eating habits. -- The food intake records were first studied to determine the students' habits regarding meal attendance and between-meal eating. It was found that both groups attended lunch and dinner regularly, but there were differences in breakfast attendance.

Tables on the following pages show the number of each group omitting breakfast, the frequency of omissions, and between-meal eating habits.

The veterans attended breakfast more regularly than did the non-veterans. Out of a possible 161 breakfasts, the veterans missed twenty-two, while the non-veterans missed thirty-three out of a possible 168 breakfasts, a ratio of about two to three. One student in each group did not attend breakfast a single time. The veterans did more between-meal eating. While most of the non-veterans ate between meals from two to four times in one week, more of the veterans ate between meals, from

TABLE XXVII

VETERANS: BREAKFAST ATTENDANCE AND BETWEEN-MEAL EATING HABITS

Subjects	Breakfast Omissions in One Week	Between-meal Eating (Times Weekly)			
		2-4	5-7	8-10	Over 10
1. BR	0	x			
2. BG	0	x			
3. BD	0	x			
4. BJ	3			x	
5. CV	1		x		
6. CP	0		x		
7. CK	2				13
8. PE	0	x			
9. GB	0		x		
10. GE	1			x	
11. GN	1		x		
12. HN	0		x		
13. HF	0		x		
14. NA	0	x			
15.	0		x		
16. JI	4	x			
17. PE	0		x		
18. RM	0		x		
19. RS					
20. RN	3			x	
21. WI	0	x			
22. WC	7	x			
23. WF	0		x		
24. HW	0	x			
25. WA					
Total.....	22	9	10	3	1
Average...	0.95	6.7			

TABLE XXVIII

NON-VETERANS: BREAKFAST ATTENDANCE AND BETWEEN-MEAL EATING HABITS

Subjects	Breakfast Omissions in One Week	Between-meal Eating (Times Weekly)			
		2-4	5-7	8-10	Over 10
1. AE	2	x			
2. AL	1	x			
3. BM	0	x			
4. CR	7			x	
5. CB	0	x			
6. CE	1		x		
7. FM	5	x			
8. FA	0		x		
9. FC	3				11
10. GG	1		x		
11. GA	0	x			
12. GM	2	x			
13. GL	0		x		
14. HH	0	x			
15. HR	1	x			
16. HM	0		x		
17. HB	5	x			
18. MJ					
19. RP	0	x			
20. SI	0	x			
21. SG	1	x			
22. WE	2		x		
23. SD	2		x		
24. UD	0	x			
25. FM	0	x			
Total....	33	15	7	1	1
Average	1.3	4.0			

TABLE XXIX

COMPARISON OF VETERANS AND NON-VETERANS: BREAKFAST ATTENDANCE AND BETWEEN-MEAL EATING

Eating Habits	Veterans	Non-veterans
Breakfast omissions in one week.....	22 (of possible 161)	33 (of possible 168)
Between-meal eating in one week:		
2-4 times.....	9	15
5-7 times.....	10	7
8-10 times.....	3	1
Over 10 times.....	1 (13)	1 (11)

five to seven times. There did not seem to be any relationship between the number of times breakfast was omitted and the number of between-meal eatings. The veteran who ate between meals thirteen times did not miss breakfast at all during the week; the non-veteran who ate between meals eleven times missed breakfast three times.

Since the Texas State College for Women is a residential college, most of the subjects lived in dormitories and ate in college dining halls. Mature students were not required to reside in dormitories, and some of them lived in homes and boarded, ate in the college

cafeteria, or in restaurants. Tables on the following pages show the place of eating.

Fewer of the veterans ate in the dormitories; more of them lived in private homes off the campus. Those veterans who lived off the campus probably did so because they were tired of living with so many women and under the more strict rules of the dormitories. More of the veterans than non-veterans ate in the cafeteria, some of them living in private homes and boarding at the cafeteria. The two non-veterans who ate in the cafeteria also lived off the campus.

Two of the four veterans eating in a home have permanent residence in Denton, one of them being married and the other living with her parents. The other two veterans eating in homes board at the place where they live. Both of the non-veterans eating in homes are local residents. One veteran ate in restaurants, drug stores, and the cafeteria and had no fixed eating habits which could be related to definite time and place of eating. The results of these tabulations shoe that the non-veterans were more alike in their places of eating than were the veterans. More of the non-veterans were having the same food offered to them, since most of them ate in the college dining halls.

TABLE XXX

VETERANS: PLACE OF EATING

Subject	Dormitory	Cafeteria	Home	Restaurants
1. BR	x			
2. BG	x			
3. BD	x			
4. BS			x	
5. CV		x		
6. CD		x		
7. CR	x			
8. FE			x	
9. GB	X			
10. GE	x			
11. GN	x			
12. HN	x			
13. HF	x			
14. HA	x			
15.		x		
16. SI	x			
17. PE	x			
18. RM		x		
19. RS		x		
20. RN				x
21. WI			x	
22. WC	x			
23. WF	x			
24. AW	x			
25. WA			x	
Total	15	5	4	1

TABLE XXXI

NON-VETERANS: PLACE OF EATING

Subject	Dormitory	Cafeteria	Home	Restaurants
1. AE	x			
2. AL	X			
3. BM	X			
4. CR	X			
5. CB	X			
6. CE	x			
7. FM	x			
8. FA	x			
9. FC	x			
10. GG		x		
11. GA	x			
11. GM			x	
13. GL	x			
14. HH	x			
15. HR	x			
16. HM		x		
17. HB	x			
18. MJ	x			
19. RP	x			
20. 31*	x		x	
21. SG	x			
22. WE	x			
23. SD	x			
24. UD	x			
25. FM	x			
Total...	22	2	2	0

*One woman works in the dormitory dining room as supervisor and takes part of her meals there and part of them at home, which accounts for the extra number.

TABLE XXXII

VETERANS AND NON-VETERANS: COMPARISON OF PLACE OF EATING

Place of Eating	Veterans	Non-veterans
Dormitory.....	15	22
Cafeteria.....	5	2
Home.....	4	2
Restaurant, etc.....	1	0

Daily intake of food and nutrients. -- Tables on the following pages show the average daily caloric intakes, the average daily intakes of calcium and of protein of the two groups. The figures used for calculating the caloric, calcium, and protein intakes are given in Clara Mae Taylor's Food Values in Shares and Weights.[1]

The average intake for the veterans was higher than for the non-veterans with differences of a hundred calories per day. The protein and calcium intake was also higher for the veterans, though the difference in calcium intake may not be significant. The amounts of food eaten seemed to have little relationship with the heights and weights of the students. The smallest non-veteran had an average daily caloric intake of 2,300 calories, yet she gained only three pounds in four months. She was not participating in active sports. The student gaining the most weight was GE, a veteran with an initial

[1]P.p. 57-87.

TABLE XXXIII

VETERANS: AVERAGE DAILY INTAKE OF CALORIES, PROTEIN, AND CALCIUM

Subject	Energy	Protein	Calcium
	Calories	gms.	mg.
1. BR	1,800	75.0	1,100
2. BG	2,050	83.3	1,260
3. BD	2,130	70.2	1,020
4. BJ	2,000	64.0	890
5. CV	2,300	73.6	1,080
6. CP	2,270	67.0	1,140
7. CK	2,090	64.5	1,070
8. FE	1,830	61.7	910
9. GB	2,300	72.3	1,200
10. GA	2,100	69.7	865
11. GN	1,800	55.4	760
12. HN	1,800	61.3	1,000
13. HF	1,960	86.7	1,080
14. HA	2,120	68.1	1,230
15. MH	1,885	63.0	1,070
16. JI	1,880	68.4	890
17. PE	1,700	76.2	1,070
18. RM	2,260	71.6	1,149
19. RJ			
20. RN	1,830	62.0	1,280
21. WI	2,025	57.0	650
22. WC	1,875	65.0	730
23. WF	2,100	64.3	1,080
24. HW	2,140	70.0	1,200
25. WA			
Average....	2,010	68.5	1,074

TABLE XXXIV

NON-VETERANS: AVERAGE DAILY INTAKE OF CALORIES, PROTEIN, AND CALCIUM

Subject	Energy	Protein	Calcium
	Calories	gms.	mg.
1. AE	2,130	68.2	749
2. AL	2,020	77.6	1100
3. BM	1,900	57.8	860
4. CR	1,850	63.1	980
5. CB	1,800	68.7	1,000
6. CE	2,320	86.5	1,240
7. FM	1,940	55.4	950
8. FA	2,300	67.1	1,060
9. FC	1,850	60.3	1,267
10. GG	2,000	61.1	1,020
11. GA	1,800	55.7	975
12. GM	1,870	53.7	800
13. GL	2,030	65.7	1,080
14. HH	1,790	51.4	680
15. HR	1,980	64.1	1,100
16. HM	1,890	57.3	960
17. HB	2,250	70.4	1,280
18. MJ			
19. RP	2,240	64.5	1,020
20. SI	1,625	60.3	700
21. SG	1,770	59.2	1,000
22. WE	2,100	62.0	1,050
23. SD	1,830	61.8	980
24. UD	1,860	59.0	1,000
25. FM	1,800	62.4	1,120
Average....	1,910	63.0	1,000

TABLE XXXV

SUMMARY OF FINDINGS ON NUTRITIVE VALUE OF DIETS

Food Values	Veterans	Non-veterans
Average daily caloric intake.....	2,010	1,910
Average daily protein intake (gms.).....	68.5	63.0
Average daily calcium intake.....	1,074	1,000

weight of 135 pounds, who gained eighteen pounds in four months. Her average daily caloric intake was 2,100 calories. The veteran with the lowest caloric intake, PE, with an average intake of 1,700 calories, showed no weight loss during four months. The non-veteran with the lowest caloric intake, SI, who averaged, as calculated, 1,625 calories a day, showed a loss of four pounds during the four months. She said the week for which she kept the food intake records may not have been a true indication of her food intake since two days were spent in travel. However, she does not drink milk, eat bread nor potatoes, and seldom eats desserts, so it would be expected that her intake might be lower than for women consuming those foods.

The numbers of different kinds of food eaten in the week were tabulated, and the tables on the following pages show the results of the findings.

Table XXXVIII shows how the veterans and non-veterans compared in the number of different foods eaten during the week.

There were more veterans than non-veterans with a high distribution of foodstuffs. Since more veterans than non-veterans ate in places other than the college dining halls, this different frequency might have meant that the students eating in the dining halls were not offered as great a variety as the students chose when selecting their own food. This did not prove to be the case, however, since the veteran eating in restaurants and drug stores was one of the students eating from forty to forty-nine different foods, while ten of the fourteen veterans in the highest frequency distribution group ate in the dining hall. The other veteran eating from forty to forty-nine different foods also ate in the dining hall.

In the non-veteran group, nine of the ten students in the highest frequency distribution group ate in the college dining hall. Both of the students in the lowest frequency distribution group ate in the college dining hall.

TABLE XXXVI

VETERANS: KINDS OF FOOD PURCHASED AND EATEN IN ONE WEEK

Subjects	Number of Different Foods Eaten in One Week		
	40-49	50-59	60-69
1. BR			x
2. BG			x
3. BD		x	
4. BJ		x	
5. CV		x'	
6. CP			x
7. CK		x	
8. FE			x
9. GB			x
10. GE			x
11. GN	x		
12. HN		x	
13. HF			x
14. HA			x
15. MH		x	
16. JI			x
17. PE			x
18. RM			x
19. RJ			
20. RN	x		
21. WI			x
22. WC			x
23. WF		x	
24. HW			x
25. NA			
Total.....	2	7	14

TABLE XXXVII

NON-VETERANS: KINDS OF FOOD PURCHASED AND EATEN IN ONE WEEK

Subjects	Number of Different Foods Eaten in One Week		
	40-49	50-59	60-69
1. AE			x
2. AL			x
3. BM		x	
4. CR		x	
5. CB		x	
6. CE			x
7. FM			x
8. FA			x
9. FC	x		
10. GG			x
11. GA		x	
12. GM		x	
13. GL		x	
14. HH			x
15. HR	x		
16. HM		x	
17. HB		x	
18. MJ			
19. RP			x
20. SI			x
21. SG			x
22. WE		x	
23. SD		x	
24. UD		x	
25. FM		x	
Total	2	12	10

TABLE XXXVIII

VETERANS AND NON-VETERANS: COMPARISON OF KINDS OF FOODS PURCHASED AND EATEN IN ONE WEEK

Kinds of Food	Veterans	Non-veterans
40-49 kinds of food...	2	2
50-59 kinds of food...	7	12
60-69 kinds of food...	14	10

The fact that more of the veterans ate a wider variety of foods might be attributed to the fact that while some of them were in service, they had to eat the food served in mess halls because there was no place else where they could get food. This might have caused them to learn to accept more foods which they have continued to eat. However, on the average their diets showed the same variety -- fifty-five to fifty-six different foods in a week.

The food intake records were analyzed to determine the amounts of milk drunk by the students and the number of fruits and vegetables and foods rich in thiamin, such as cereals and bread, eaten in the week, during which the records were kept. Tables on the following pages show these data.

TABLE XXXIX

VETERANS: AMOUNT OF MILK DRUNK PER DAY

Subjects	Amount of Milk Drunk Per Day			
	None	Half-pint	Pint	1.5 Pints
1. BR			x	
2. BG				x
3. BD			x	
4. BJ		x		
5. CV			x	
6. CD				x
7. CK				x
8. FE			x	
9. GB				x
10. GE		x		
11. GN		x		
12. HN			x	
13. HF			x	
14. HA				x
15. MH			x	
16. JI		x		
17. PE			x	
18. RM			x	
19. RJ				
20. RN			x	
21. WI	x			
22. WE	x			
23. NF				
24. HW			x	
25. WA			x	
Total.....	2	4	12	5

TABLE XL

NON-VETERANS: AMOUNT OF MILK DRUNK PER DAY

Subjects	Amount of Milk Drunk Per Day			
	None	Half-pint	Pint	1.5 Pints
1. AE		x		
2. AL				x
3. BM		x		
4. CR			x	
5. CB			x	
6. CE				x
7. FM			x	
8. FA			x	
9. FC				x
10. GG			x	
11. GA			x	
12. GM		x		
13. GL			x	
14. HH	x			
15. HR			x	
16. HM		x		
17. HB				
18. MJ				x
19. RP			x	
20. SI	x			
21. SG			x	
22. WE			x	
23. SD			x	
24. UD			x	
25. FM			x	
Total.....	2	4	14	4

The amount of milk drunk by the two groups was about the same, as shown by the following table.

TABLE XLI

COMPARISON OF VETERANS AND NON-VETERANS: AMOUNT OF MILK DRUNK PER DAY

Amount of Milk	Veterans	Non-veterans
None.....	2	2
One-half pint.....	4	4
One pint.....	12	14
One and one half pints.....	5	4
Average.....	1.7/ half pints	1.8- half-pints

There were two students in each group who drank no milk. Both of them had calcium intakes below the amount recommended by the Food and Nutrition Board of the National Research Council. Both of the non-veterans who drank no milk were also low in calcium intake. The same number of each group had one-half pint of milk per day; more of the non-veterans had one pint per day; and more of the veterans had one and one-half pints per day. Most of the students met the Texas nutritional standard of at least one pint of milk per day for adults.

Tables XLII-XLIV present data concerning the consumption of fruits and vegetables by the two groups of students included in this study.

TABLE XLII

VETERANS: NUMBER OF FRUITS AND VEGETABLES EATEN IN ONE WEEK

Subject	Citrus Fruits	Raw Green Vegetables	Cooked Green Vegetables	Other Fruits
1.	9	9	3	18
2.	12	7	3	21
3.	7	9	3	23
4.	4	4	1	16
5.	7	8	5	19
6.	5	7	2	22
7.	9	5	2	17
8.	10	7	4	14
9.	9	9	3	21
10.	6	5	2	17
11.	9	7	3	14
12.	5	6	3	21
13.	14	10	3	19
14.	7	7	3	17
15.	9	5	3	17
16.	3	3	1	10
17.	9	9	2	19
18.	7	4	4	15
19.				
20.	5	6	2	14
21.	7	6	3	17
22.	9	8	3	21
23.	14	10	3	11
24.	7	9	3	22
25.				
Average	8-	7-	2.8	18

TABLE XLIII

NON-VETERANS: NUMBER OF FRUITS AND VEGETABLES EATEN IN ONE WEEK

Subject	Citrus Fruits	Raw Green Vegetables	Cooked Green Vegetables	Other Fruits
1. AE	4	6	3	17
2. AL	12	7	3	25
3. BM	7	9	3	19
4. CR	9	8	2	16
5. CB	5	5	3	14
6. CE	4	6	4	21
7. FM	6	7	3	16
8. FA	9	10	2	23
9. FC	3	5	2	9
10. GG	7	6	2	17
11. GA	12	9	3	17
12. GM	4	6	3	21
13. GL	5	7	2	18
14. HH	10	7	2	21
15. HR	5	7	2	11
16. HM	9	6	3	16
17. HB	7	7	3	21
18. MJ				
19. RP	13	11	4	24
20. SI	12	10	3	14
21. SG	13	10	3	22
22. WE	9	6	3	18
23. SD	8	9	3	23
24. UD	5	7	3	19
25. FM	10	8	2	22
Average	7.8	7.5	2.7	18/

The veterans and the non-veterans were very similar in the intake of fruits and vegetables, as is evidenced by the figures in the following table:

TABLE XLIV

COMPARISON OF VETERANS AND NON-VETERANS: NUMBER OF FRUITS AND VEGETABLES EATEN IN ONE WEEK

Fruits and Vegetables	Veterans	Non-veterans
Number eaten in one week:		
Citrus fruits.....	8	7.8
Raw green vegetables	7	7.5
Cooked green vegetables.....	2.8	2.7
Other fruits and vegetables.....	18	18
Total.....	36	36
Average.....	5	5

The numbers of fruits and vegetables eaten by the two groups were the same. The two groups barely met the recommended allowances for raw green vegetables as suggested by the Texas Food Standard. Since the records were kept during November, the intake might be lower because of inability to obtain fresh green vegetablss at that time.

Tables XLV and XLVI show in detail the number of foods containing Vitamin B which were eaten by the individual members of both groups during one week. Table XLVII indicates a comparison of the veterans and the non-veterans as to the number of foods containing Vitamin B eaten during the week.

The veterans were slightly higher in the consumption of flaked cereals and bread, and the groups were the same in the consumption of prepared cereals, cake, and other foods containing Vitamin B. The low prepared cereal intake is probably due to the fact that it was winter and hot cereal was offered. According to the results shown, the non-veterans averaged eating bread twice a day while the non-veterans averaged eating bread 2.3 times a day. This consumption of bread might be one indication of why the average caloric intake of the students was lower than the recommended allowances of the Food and Nutrition Board.

The total numbers of thiamin-rich foods were so near the same for the two groups as to make the difference insignificant.

Food preferences and prejudices. -- The food preference and prejudice records were tabulated by the total number of students in each group liking, disliking, accepting, or being unfamiliar with each food. The

TABLE XLV

VETERANS: NUMBER OF FOODS CONTAINING VITAMIN B EATEN IN ONE WEEK

Subjects	Flaked Cereal	Prepared Cereal	Bread	Cake and Other Foods
1.	5	0	18	10
2.	4	0	20	13
3.	6	0	21	10
4.	6	1	14	9
5.	3	0	17	9
6.	4	2	19	14
7.	4	2	20	17
8.	1	0	10	6
9.	3	0	19	13
10.	2	0	20	15
11.	1	0	8	9
12.	5	0	17	11
13.	5	0	16	6
14.	3	0	17	12
15.	3	0	19	12
16.	0	3	18	10
17.	5	1	16	13
18.	3	1	17	5
19.				
20.	0	0	18	14
21.	2	0	18	14
22.	3	0	13	9
23.	7	0	14	6
24.	5	0	17	10
25.				
Average..	3.3	0.4	16	10.3

TABLE XLVI

NON-VETERANS: NUMBER OF FOODS CONTAINING VITAMIN B EATEN IN ONE WEEK

Subjects	Flaked Cereal	Prepared Cereal	Bread	Cakes and Other Foods
1. AE	4	5	20	16
2. AL	7	0	18	6
3. BM	3	0	14	4
4. CR	2	0	17	13
5. CB	2	1	18	9
6. CE	4	0	17	17
7. FM	5	0	15	10
8. FA	3	0	19	14
9. FC	2	0	16	9
10. GG	6	0	21	11
11. GA	2	2	17	13
12. GM	2	0	9	8
13. GL	1	0	13	12
14. HH	1	0	18	10
15. HR	3	0	16	13
16. HM	2	0	14	9
17. HB	3	1	11	8
18. MJ				
19. RP	2	0	16	6
20. SI	3	0	4	10
21. SG	3	0	19	14
22. WE	3	0	14	6
23. SD	1	0	9	9
24. UD	2	0	15	10
25. FM	3	0	5	7
Average..	2.8	0.4	14.8	10.2

TABLE XLVII

COMPARISON OF VETERANS AND NON-VETERANS: NUMBER OF FOODS CONTAINING VITAMIN B EATEN IN ONE WEEK

Foods	Veterans	Non-veterans
Flaked cereals.....	3.3	2.8
Prepared cereals....	0.4	0.4
Bread.....	16	14.8
Cakes and other foods.....	10.3	10.2
Total.....	30	28

classes of foods were then totaled in the four columns. The following tables show these tabulations.

TABLE XLVIII

VETERANS: NUMBER LIKING, DISLIKING, ACCEPTING, AND UNFAMILIAR WITH EACH FOOD

Food	Like	Dislike	Accept	Unfamiliar
A. Beverages:				
1. Coffee.....	22	1		
2. Tea.....	21	1	1	
3. Soft drinks...	20	1	2	
Total.....	63	3	2	

TABLE XLVIII -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
B. Breads, cereals:				
1. Biscuits.....	22	1		
2. Bran.....	20	2	1	
3. Bread, white..	22		1	
4. Bread, w. wheat	22	1		
5. Rolls, cinnamon.....	20	1	2	
6. Corn bread....	19	1	3	
7. Cornflakes....	20		3	
8. Shredded wheat	19	1	4	
9. Doughnuts.....	22		1	
10. Grits.....	17	3	3	
11. Hominy.....	18	1	4	
12. Macaroni.....	19	1	3	
13. Oatmeal.....	20		3	
14. Rice.....	19		4	
15. Tapioca.....	17	1	5	
Total.....	296	13	36	
C. Eggs and dairy products:				
1. Butter.....	22	1		
2. Buttermilk....	11	4	8	
3. Cheese, American.....	20	1	2	
4. Cheese, cottage.....	16	3	4	
5. Cheese, Swiss.	15	5	3	1
6. Cream.....	19	1	3	
7. Eggs.....	21	1	1	
8. Ice Cream.....	22		1	
9. Milk, sweet...	19	2	2	
10. Oleomargarine.	17	4	2	
Total.....	181	22	26	1

TABLE XLVIII -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
D. Fish:				
1. Catfish.....	9	6	3	5
2. Red snapper.....	6	2		15
3. Halibut.....	9	6	1	7
4. Oysters.....	14	4	5	
5. Salmon.....	16	4	3	
6. Scallops.....	5	2		16
7. Shrimp.....	18	2	3	
8. Tuna.....	18	2	3	
Total.....	96	28	18	43
E. Fruits:				
1. Raisins.....	20	1	2	
2. Raspberries.....	19	1	3	
3. Strawberries.....	21	1	1	
4. Watermelon.....	22		1	
5. Apples.....	22		1	
6. Apricots.....	21	1	1	
7. Avocado.....	18	3	2	
8. Banana.....	22	1		
9. Blackberries.....	18	1	1	1
10. Cherries.....	22		1	
11. Cranberries.....	17	2	4	
12. Cantaloupe.....	17	2	4	
13. Dates.....	18	1	4	
14. Figs.....	15	3	5	
15. Grapes.....	20		3	
16. Grapefruit.....	18	1	4	
17. Grape juice.....	21		2	
18. Lemons.....	23			
19. Olives.....	21	1	1	
20. Oranges.....	22	1		
21. Peaches.....	22	1		
22. Pears.....	22	1		
23. Pineapple.....	20	2	1	
24. Plums.....	20		3	
25. Prunes.....	16	1	6	
Total.....	497	25	51	1

TABLE XLVIII -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
F. Meats and poultry:				
1. Bacon.....	23			
2. Beef, corned.....	12	2	9	
3. Beef, roast.....	22		1	
4. Beef steak.....	23			
5. Beef, dried.....	13	2	6	2
6. Beef stew.....	15	1	7	
7. Ham.....	22		1	
8. Lamb.....	17	2	4	
9. Pork chops.....	22		1	
10. Pork sausage.....	21		2	
11. Pork roast.....	22		1	
12. Veal cutlets.....	21		2	
13. Liver.....	4	15	4	
14. Brains.....	2	16	4	1
15. Chicken.....	20	1	2	
16. Turkey.....	21	1	1	
Total.....	280	40	45	3
G. Nuts:				
1. Almonds.....	18	1	4	
2. Brazil nuts.....	18	2	3	
3. Cocoanut.....	20	1	2	
4. Peanuts.....	17	1	5	
5. Pecans.....	20	1	2	
6. Walnuts.....	21	1	1	
Total.....	114	7	17	
H. Vegetables:				
1. Artichokes.....	16	2	2	3
2. Asparagus.....	17	3	3	
3. Beans, navy.....	15	2	6	
4. Beans, lima.....	15	2	6	
5. Beans, string....	19	1	3	

TABLE XLVIII -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
6. Beets.....	18	1	4	
7. Carrots.....	19	2	2	
8. Cabbage.....	16	3	4	
9. Celery.....	20		3	
10. Corn.....	21		2	
11. Cucumbers.....	20	1	2	
12. Egg-plant.....	15	4	4	
13. Lettuce.....	20	1	2	
14. Mushrooms.....	16	3	4	
15. Okra.....	13	5	5	
16. Peas.....	22		1	
17. Peppers, green...	21	1	1	
18. Potatoes, Irish..	22		1	
19. Potatoes, sweet..	20	1	2	
20. Pumpkin.....	16	2	5	
21. Radishes.....	18	1	4	
22. Rhubarb.....	12	5	6	
23. Spinach.....	18	2	3	
24. Squash.....	16	3	4	
25. Tomatoes.....	20		3	
26. Broccoli.....	18	3	2	
27. Brussels sprouts.	15	3	5	
28. Cauliflower.....	17	4	2	
29. Leeks.....	1		2	20
30. Turnips.....	13	4	6	
Total.....	525	62	106	23
I. Miscellaneous:				
1. Chocolate.....	20	1	2	
2. Mayonnaise.....	19	2	2	
3. Molasses.....	18	1	4	
4. Salt.....	22		1	
5. Sugar.....	23			
6. Mustard.....	20	1	2	
7. Spices.....	19	1	3	
Total.....	141	6	14	

TABLE XLIX

NON-VETERANS: NUMBER LIKING, DISLIKING, ACCEPTING, AND UNFAMILIAR WITH EACH FOOD

Food	Like	Dislike	Accept	Unfamiliar
A. Beverages:				
1. Coffee.....	21	1	2	
2. Tea.....	19	3	2	
3. Soft drinks.....	21		3	
Total.....	61	4	7	
B. Breads, cereals:				
1. Biscuits.....	24			
2. Bran.....	17		2	
3. Bread, white.....	22		2	
4. Bread, whole wh..	21		3	
5. Rolls, cinnamon..	23		1	
6. Corn bread.....	18	2	4	
7. Cornflakes.....	19		5	
8. Shredded wheat...	20	1	3	
9. Doughnuts.....	23		1	
10. Grits.....	17	4	3	
11. Hominy.....	18	2	4	
12. Macaroni.....	20	1	3	
13. Oatmeal.....	19	3	2	
14. Rice.....	20		4	
15. Tapioca.....	16	3	5	
Totals.....	297	19	44	
C. Eggs and Dairy products:				
1. Butter.....	23		1	
2. Buttermilk.....	9	7	8	
3. Cheese, American.	24			
4. Cheese, cottage..	10	9	5	

TABLE XLIX -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
5. Cheese, Swiss....	15	3	6	
6. Cream.....	21	2	2	
7. Eggs.....	23		1	
8. Ice cream.....	22		2	
9. Milk, sweet.....	17	3	4	
10. Oleomargarine....	18	1	5	
Total.....	182	24	34	
D. Fish:				
1. Catfish.....	9	8	4	3
2. Red snapper.....	5	3		16
3. Halibut.....	8	7	2	7
4. Oysters.....	13	6	3	2
5. Salmon.....	14	5	5	
6. Scallops.....	4			20
7. Shrimp.....	17	3	4	
8. Tuna.....	17	2	5	
Total.....	87	34	23	48
E. Fruits:				
1. Raisins.....	20	1	3	
2. Raspberries.....	20	1	2	1
3. Strawberries.....	23	1		
4. Watermelon.....	22	1	1	
5. Apples.....	22		2	
6. Apricots.....	20	2	2	
7. Avocado.....	17	4	2	1
8. Banana.....	24			
9. Blackberries.....	20		3	1
10. Cherries.....	23	1		
11. Cranberries.....	16	4	4	
12. Cantaloupe.....	15	5	4	
13. Dates.....	17	2	5	
14. Figs.....	16	1	7	

TABLE XLIX-- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
15. Grapes.....	23		1	
16. Grapefruit.....	22	1	1	
17. Grape juice.....	23	1		
18. Lemons.....	23	1		
19. Olives.....	22	2		
20. Oranges.....	24			
21. Peaches.....	24			
22. Pears.....	20	1	3	
23. Pineapple.....	20	1	3	
24. Plums.....	22	1	1	
25. Prunes.....	17	4	3	
Total.....	535	35	28	
F. Meats and poultry:				
1. Bacon.....	23		1	
2. Beef, corned.....	12	7	5	
3. Beef, roast.....	24			
4. Beef steak.....	24			
5. Beef, dried.....	13	5	4	2
6. Beef stew.....	13	2	9	
7. Ham.....	23		1	
8. Lamb.....	18	3	3	
9. Pork chops.....	22		2	
10. Pork sausage.....	21		3	
11. Pork roast.....	22		2	
12. Veal cutlets.....	22		2	
13. Liver.....	6	13	5	
14. Brains.....	3	17	1	3
15. Chicken.....	23		1	
16. Turkey.....	23		1	
Total.....	282	47	40	5

TABLE XLIX -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
G. Nuts:				
1. Almonds.....	22	1	1	
2. Brazil nuts.....	22		2	
3. Cocoanut.....	21	1	2	
4. Peanuts.....	17	3	4	
5. Pecans.....	23		1	
6. Walnuts.....	23		1	
Total.....	138	5	11	
H. Vegetables:				
1. Artichokes.....	13	4		7
2. Asparagus.....	16	5	3	
3. Beans, navy.....	17	3	4	
4. Beans, lima.....	17	3	4	
5. Beans, string....	20	1	3	
6. Beets.....	16	4	4	
7. Carrots.....	14	5	5	
8. Cabbage.....	14	7	3	
9. Celery.....	23	1		
10. Corn.....	24			
11. Cucumbers.....	20	2	2	
12. Egg-plant.....	13	7	4	
13. Lettuce.....	21	1	2	
14. Mushrooms.....	13	4	5	2
15. Okra.....	13	6	5	
16. Peas.....	23		1	
17. Peppers, green...	20	2	2	
18. Potatoes, Irish..	21		3	
19. Potatoes, sweet..	19	3	2	
20. Pumpkin.....	16	3	5	
21. Radishes.....	17	4	3	
22. Rhubarb.....	13	7	4	
23. Spinach.....	14	4	6	
24. Squash.....	14	5	5	
25. Tomatoes.....	23	1		
26. Broccoli.....	14	4	6	
27. Brussels sprouts.	13	4	6	

TABLE XLIX -- CONTINUED

Food	Like	Dislike	Accept	Unfamiliar
28. Cauliflower.....	14	6	4	
29. Leeks.....	1			23
30. Onions.....	20	2	2	
31. Turnips.....	13	7	4	
Total.....	508	106	95	42
I. Miscellaneous:				
1. Chocolate.....	22	1	1	
2. Mayonnaise.....	23	1		
3. Molasses.....	17	3	4	
4. Salt.....	24			
5. Sugar.....	24			
6. Mustard.....	19	3	2	
7. Spices.....	21	2	1	
Total.....	150	10	8	

Table L shows how the two groups compare in food preferences and prejudices.

Since there were twenty-four non-veterans and twenty-three veterans, the figures in the table, when compared by proportion, showed that the veterans liked more foods, showed dislike for fewer, accepted more, and were unfamiliar with fewer foods than were the non-veterans. These data revealed the greatest difference in the two groups of any information studied. An

TABLE L

COMPARISON OF VETERANS AND NON-VETERANS: FOOD PREFERENCES AND PREJUDICES

Food Class	23 Veterans				24 Non-veterans			
	Like	Dis-like	Ac-cept	Unfa-miliar	Like	Dis-like	Ac-cept	Unfa-miliar
Beverages..	63	3	2		61	4	7	
Cereals....	296	13	36		297	19	4	
Eggs and dairy products.	181	22	26	1	182	24	34	
Fish.....	96	28	18	43	87	34	23	48
Fruits.....	497	25	51	1	535	35	28	
Meats and poultry..	280	40	45	3	282	47	40	5
Nuts.....	114	7	17		138	5	11	
Vegetables.	525	62	106	23	508	106	95	32
Miscel-laneous..	141	6	14		150	10	8	
Total...	2193	206	315	71	2240	284	290	85

explanation of the differences might be that the veterans were accustomed to discipline in all phases of their lives and thus learned to accept more foods. Then, too, having moved from one geographic region to others, the veterans may have had foods common to other regions offered to them in sufficient quantities to cause them to like or to accept them.

The data presented regarding the present lives

and habits of the students further emphasized the similarity between the two groups. The differences which might be significant were that more of the veterans held jobs which might mean that, since they had been "on their own," they did not feel like accepting aid from their friends and they could not live on the subsistence without other income; the number of omissions of breakfasts with the non-veterans missing from two to three times the number that the veterans missed may also be significant. Also, the veterans did enough more between-meal eating as to make the difference noticeable.

The fourth notable point of difference between the two groups was in their food preferences and prejudices, with the veterans having more liked and accepted foods and the non-veterans, more prejudices.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The food habits of two groups of young women students, veterans and non-veterans, were analyzed in this study. All of the women were college students in Denton, Texas, and most of them ate in the same dining hall. The non-veterans were chosen to match, as nearly as possible, the veterans in age, height, and weight. When the data on their religion, nationalities, home resources which might affect dietary habits, and geographic location of their homes were tabulated, further similarities were shown. The non-veterans selected really constituted a control group.

The seven-day food intake records which included the menus for each meal, the number and approximate sizes of servings, and the kinds and amounts of food eaten between meals, revealed that the two groups were much alike in kinds of food eaten and in total caloric intakes. The calculation of calcium and protein and the estimated intakes of ascorbic acid and B-complex vitamins showed that the nutritive values of food intakes of the two groups differed little.

Veterans attended breakfast more regularly and did more between-meal eating, although the differences between the groups were small. The veterans were more cosmopolitan as evidenced by their food preferences and prejudices indicated on the records; they liked and accepted more foods and disliked and were unfamiliar with fewer foods than the non-veterans. However, the differences between the two groups on all the data studied were not so marked that definite conclusions could be drawn that military service had made permanent changes in the food habits of the veterans.

Conclusions

As was stated in the review of the literature, one of the strongest influences affecting dietary habits is tradition. Habits are formed to a great extent during childhood, and people are slow to change these habits.[1] When the veterans entered military service, their habits were rather firmly established, and since the longest time any of the veterans of this study had been in service was three years, perhaps that length of time could not be expected to cause permanent changes in adults. So much has been written on the subject of the returning veterans, how changed they are and what difficult

---

[1]Selling and Ferraro, op. cit., p. 42.

adjustments they must make, that one is led to assume that living conditions in military service had been sufficiently different from their previous lives as to cause marked changes in the veterans. It was on this assumption that the present study was made, but from the data presented, it was felt that, as far as these veterans were concerned, their early training and traditions were stronger influences upon their dietary habits than were military training and discipline.

BIBLIOGRAPHY

BOOKS:

Cummings, Richard Osborn. The American and His Food. Chicago: University of Chicago Press, 1940.

Drummond, J. C., and Wilbraham, Anne. The Englishman's Food. London: Jonathan Cape, 1940.

Graubard, Mark. Man's Food, Its Rhyme or Reason. New York: Macmillan Company, 1943.

Jerons, Frank B. An Introduction to the History of Religion. New York: Macmillan Company, 1910.

Powell, Henry T. Daily Life in Ancient Rome. New Haven: Yale University Press, 1941.

Selling, Lowell S., and Ferraro, Mary A. The Psychology of Diet and Nutrition. New York: W. W. Norton and Company, Inc., 1945.

Zimmern, Alice. The Home Life of the Ancient Greeks. New York: Funk and Wagnalls Company, 1930.

ARTICLES:

Brown, Ernest W. "Nutritional Aspects of Feeding the United States Navy," Journal of the American Medical Association, XX, 96-99.

Goddard, Verz R., and Morgan, Herbert R. "Protein Adequacy for College Students," Journal of the American Dietetic Association, XIV (1938), 251-254.

Howe, Paul E. "Nutritional Aspects of Feeding an Army," Journal of the American Medical Association, CXX, 93-96.

Jackson, Pearl, and Schuck, Cecilia. "Nutritional Adequacy of Foods Purchased by College Women on Limited and More Liberal Food Budgets," Journal of the American Dietetic Association, XVII (1941), 784-789.

Logan, Lieut.-Col. Paul P. "How the American Soldier Is Fed," Journal of the American Dietetic Association, XVII (1941), 226-233.

McLester, James S. "Feeding the American Soldier," Nutrition Reviews, I (1943), 225-227.

Morris, Sadie O., and Bowers, Mildred. "A Study of One Hundred College Women Students," Journal of the American Dietetic Association, XV (1939), 358-362.

Pittman, M. S.; McKay, H.; Kunerth, B. L.; Patton, M. B.; Edelblate, N.; and Cox, G. "The Caloric Intake of Twenty-seven College Women," Journal of the American Dietetic Association, XVIII (1942), 449-453.

Reynolds, May S.; Ohlson, Margaret A.; Pittman, Martha S.; McKay, Hughina; Patton, Mary B.; Donelson, Eva; Leverton, Ruth; Muller, Ella J.; and Bitling, Mary H. "The Dietary Habits of College Students," Journal of Home Economics, XXXIV (1942), 379-384.

Roe, Remington. "The Social Origin of Dietary Habits," Scientific Monthly, XLIII (1936), 193-204.

Shaw, Mary Margaret. "A Study of the Food Habits of Eighty College Students," Journal of Home Economics, XXXII (1940), 614-615.

BULLETINS:

Whitacre, Jessie. The Food Supply of Texas Rural Families. Texas Agricultural Experiment Station Bulletin No. 642. College Station: Texas Agricultural and Mechanical College, October, 1943.