

AN EVALUATION OF STUDENT GROWTH WHEN THE
GOAL SEEKING METHOD IS EMPLOYED IN
TEACHING A FOODS UNIT

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TEACHING A FOODS UNIT

THESIS

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INTRODUCTION

The methods to be used in this study have been criticized by numerous individuals. Hatcher (1942)¹ made a study in Minnesota which involved thirty-five homemaking classes taught by seventeen teachers in twelve senior high schools. Two methods of teaching were used: the goal-seeking method and the traditional method. The goal-seeking method was made up of goals set up cooperatively by students and teacher with every device being used to guide students and to keep them aware of their goals. In the traditional method the teacher selected the goals and subject matter and presented it to the class. Evaluation was continuous in the two methods. Every measure applied showed the goal method superior. By the goal-seeking method we mean that the students, under the direction of the teacher, work out cooperatively goals toward which they can direct their thoughts and energies.

The purpose of this study is to analyze the extent of certain aspects of growth in foods units in homemaking classes through several evaluative methods, such as; pre-tests and end tests, anecdotal records, self-evaluations of students, and student and teacher planned devices.

¹Hazel Hatcher, "Effective Teaching in Homemaking," Journal of Home Economics, XXXIV (1942), 293-298.

PROCEDURE

The data for this study were obtained from three homemaking classes of Sanger High School during the period from February 2, 1948 to March 19, 1948. There were ninety-six students enrolled in the high school and forty-two of these students were enrolled in homemaking, although only thirty-six of these students were used in this study because of absences during the month of February. Of the thirty-six, there were fourteen students who lived in the country and twenty-two who lived in Sanger, which is a small town with a population of 1,500.

For at least one year preceding this study the students in the Sanger Homemaking Department were acquainted with the problem solving method² of working. That is, instead of the teacher planning the work for the students and directing their procedure as she desired; the teacher and students planned cooperatively, attempting to consider the needs of the individual, home, and community. The students carried on their work under close supervision, at the same time they were encouraged to use their own initiative.

A foods unit was selected for this study for two reasons:

(1) All classes usually express a need and desire for such a

²Edith Sunderlin, "A Technique of Evaluation Learning," Journal of Home Economics, Vol. 39, No. 6, (1947), 321-323.

unit. (2) It was necessary to base the study on a unit in which all students would participate, since the study was not to influence the student's choice of problem or manner of working.

In this study the three classes were referred to as sections A, B, and C. Section A was made up of fourteen freshman girls, with no previous homemaking experience, and whose ages ranged from thirteen to fifteen. Section B was made up of sixteen sophomore girls who had had one year of homemaking, and whose ages ranged from fourteen to sixteen. Section C was a combination group made up of both boys and girls; their ages ranged from fifteen to eighteen. There were two junior girls who had had two years of homemaking; two sophomore boys and six junior boys with no homemaking experience.

Since the Sanger High School was one of the Off-Campus Student-Teacher Centers for North Texas State College, student teachers in homemaking education from this school helped the teacher in working with two of the groups. The same procedures were worked out cooperatively between student, student-teacher, and teacher in each class. The author of this study was the supervisory homemaking teacher at Sanger, and will be referred to as "the teacher".

Long before this unit began, the teacher set up the general and specific purposes of the unit; the attempts which would be made in order to show growth, and what she thought

might actually happen in the unit.

The traditional method of teaching foods placed the emphasis on food preparation alone. In the foods unit the teacher was interested in finding possibilities of growth in other areas of development, and so the following general purposes were set up in order that she would have a better understanding of what she was working toward before starting the unit:

1. To develop the ability to weigh facts and to recognize prejudices in order to clarify thinking.

2. To develop an increasing ability to work cooperatively and democratically.

3. To develop an understanding of individual social responsibility.

4. To meet student's individual needs by using those problems which grow out of his daily living so that education may provide continuous growth.

5. To encourage in the student an open minded, critical, yet constructive attitude toward his own behavior and growth.

The following specific purposes were assumed to be important since this study was limited to one foods unit:

1. To plan procedures with the students which would allow for the maximum practice of the general purposes stated above.

2. To develop an ability to buy intelligently (Food and Equipment).

3. To develop an ability to use more appropriate social customs.

4. To develop an ability to conserve time and energy in planning, preparing, and serving a family meal.

5. To develop an appreciation for and an ability to improve methods of cleanliness and sanitation.

6. To improve daily food habits.

7. To develop a better understanding of the relation of food to health and happiness.

8. To develop an ability to use, care for, and repair equipment.

9. To develop an ability to store foods and kitchen equipment in the proper place in order to conserve time, energy, and space.

10. To develop a better understanding and appreciation for the food we have through relationships between world problems and daily food needs.

a. To eliminate unnecessary waste of food.

b. To develop an understanding of the role food preservation can play.

11. To develop an understanding and use of principles involved in cooking foods for maximum flavor, health value, and attractiveness.

The teacher anticipated the following possible activities and procedures for promoting growth toward these purposes:

1. Class divided into family size groups for the purpose of planning, preparing and serving a meal.³ Each group might be responsible for the following related activities:

- a. Plan a well-balanced meal on a limited budget.
- b. Work out a whole day's menu in order to check for food value and calories.
- c. Make market order and buy own groceries.
- d. Plan time and management procedures.
- e. Plan the setting of the table and how one should act at the table, including grace before meals.
- f. Make definite plans about the clearing away after the meal has been finished.

2. Entire group participation in discussion and study of:

- a. Use of equipment.
- b. Storage of equipment and food.
- c. Food likes and dislikes.
- d. World food supply, prices, and relation to individual's diet.

3. Sponsor a clean plate drive in the lunchroom.

4. Actually rearrange the laboratory by plans made in the groups.

5. Study the world supply of food by making a field trip to Fort Worth to visit the following plants:

- a. Packing House
- b. Candy Kitchen
- c. Cafeteria
- d. Bakery
- e. Dairy

³"Suggestions for Teaching Foods on the 3 Meal A Day Plan"

6. Survey lunchroom plate waste.

Since there are so many activities that could be learning situations in a foods unit, the following tentative block plan was worked out by the teacher for her own use:

WORK PLAN

Weeks	Days				
	Monday	Tuesday	Wednesday	Thursday	Friday
1	Discussion of the reason for testing	Pre-Test	Continue Pre-Test	Set up student and teacher goals for unit. Set amount of money	Plan the storage of food and equip. in lab. Plan best method of cleaning
2	Go into the lab. and actually rearrange it including cleaning	Make the plans for actually preparing a family meal	Divide into family groups, make plans	Planning	Planning continued
3	Planning continued	Prepare first meal	Evaluation of meals	Make plans for second meal	Planning and preparation
4	Preparation of second meal	Evaluation	Planning of third meal	Planning continued	Preparation of third meal
5	Evaluation	Evaluation	Planning trip	Planning trip	Field Trip
6	Discussion of trip	Evaluation	End Test	End Test	End Test

After the teacher had thought through the unit and arrived at ways in which the students might grow and activities that might bring about continuous growth, it was necessary to find ways to show evidences of that growth.

The following methods were planned:

Pre-testing and End Testing.--In selecting the tests the teacher tried to find ones which would cover the total growth, instead of those only related to food preparation. The tests used were as follows:

1. California Personality Test.--The major purpose of this test is to reveal the extent to which the student is adjusting to the problems and conditions which confront him; the extent to which he is developing a normal, happy, and socially effective personality.

2. Unit Scales of Attainment in Foods and Household Management.--This test brings in buying, selecting, food preparation, and techniques for general management of the home.

3. Health Inventory of High School Students.--This inventory has been designed as a health measure for use in high schools. It is divided into two main parts. Part I is made up of "What you do about health." Part II is made up of "What you know about health."

4. Test of Knowledge of Social Usage.--This test is made up of statements that cover table service, social customs, and courtesies.

5. Food Preference and Acceptance Test.--The purpose of this test was to see if the unit might cause a change in attitudes toward very essential foods. The teacher could not find a standardized test in this field so she set one up using

several different food charts to find the most common foods to be included.*

Records of Individual Conferences.--Records of individual conferences at school and in the home were kept as a means of pointing out evidences of growth. This allowed the possibility of other family members participating in the program. It also showed evidence of class work being carried over into the home and community.

Student's Self-Evaluations.--These would serve the purpose of showing the students what they had accomplished and what was still ahead of them. Also the student-teachers might find it helpful in conferences to show the students why a thing happened as it did.

Teacher and Student-Teacher Self-Evaluation.--If the students evaluate themselves, then it seems appropriate for the student-teacher and teacher to take stock of where they are and where they could go from this point. If the teacher evaluations can be compared with the student evaluations, a more common understanding can be developed.

* A copy of each test may be found in the Appendix.

RESULTS

Section A

(Thirteen Freshman girls--no previous homemaking
Class hour 1 to 2:30 daily)

The teacher and students sat together in a round table discussion to make plans for the foods unit. There were five sets of tests to be given and the students needed an understanding of why they were taking the tests. First, the teacher explained to the students that she was writing a thesis about this unit, and that it was important to know where each student stood before further planning was done. "What is a thesis, Mrs. Lindley?" was the very first question that came up. The teacher explained that it was a partial requirement for her graduate work, and she would like to write it on the foods unit. Bobby asked, "Is it a book?" The teacher replied, "Yes, it is." The ways in which learning could occur during the foods unit were discussed, and it was explained that a series of tests had been set up to try to determine where they were in the beginning. This group was not alarmed about tests. Claudette said, "I've always wanted to take a standardized test. Here's my chance." Betty asked, "Will these affect our grades? This is the first time we've had a test like this in homemaking." They were not informed at this time about the

end tests that were to follow the unit. The system of testing was the only part of the study which the teacher did not work out cooperatively with the entire group.

For the following three days each member of the class took the tests.

The class sat around a large table again for the purpose of reviewing and understanding the meaning and purposes of learning and the importance of evaluation in the learning process.

The teacher gave this example of evaluation: "The business man annually takes an inventory of his stock to see how much he has on hand. In one sense this is an evaluation means because after he has taken the inventory of what he has, he has to go back to his records to see what happened to cause him to be at this point. From this overview he gains a clearer insight into better methods for meeting and solving succeeding problems. Students frequently do not realize that planning and evaluation must be done in the business world." Betty said, "That helps us to understand more clearly why we evaluate. I forget sometimes that it is for my benefit instead of yours."

From this statement the discussion went on into the purpose of goals in an evaluation. Jerri said, "To me, goals are the standards that we strive to reach." Bobbie Jo said, "It's what we wish to accomplish, or our aims." The teacher asked, "What purpose would goals have if you never reached

these goals set up?" Doris answered, "You must have something to work toward. Maybe it would help to compare what you wanted to do with what you actually did." From Doris' answer the teacher gave another example, "Think of this class. If we set as our goal to learn everything that Emily Post had to offer on table service, and at the end of the unit no one had learned all the ways of setting a table, should we become discouraged? When you start another unit, would you say, 'What is the use of setting up goals? We never do all the things that we say we are going to.'" Doris answered, "This would be an exceptional class if we all made A's all the time." After the discussion of the value of goals, the class set up the following goals and activities for their own needs:

Goals for Foods Unit

1. To learn to follow instructions and recipes accurately.
2. To learn to keep equipment clean and in order (Have a place for everything and keep everything in its place).
3. To practice neatness in appearance.
4. To learn to manage time, money, and one's self.
5. Learn to use leftovers.
6. Learn to use correct table manners.
7. Learn to share equipment.
8. Learn to use cooking vessels sparingly.
9. Learn to cooperate with the group.

10. Learn to think for one's self.
11. Learn to say grace at the table.
12. Learn to use all kinds of equipment.
13. Learn to try to eat everything on our plate.
14. Learn to plan a well-balanced daily diet.
15. To see the relationship between the world's food supply and our daily food habits.

Activities

1. Divide into groups of threes or fours and make definite plans before going into laboratory, then follow them closely.
 - a. Read and study recipes, directions and measurements
 - b. Rotate duties within our groups
 - c. Study how to act at the table, then practice
 - d. In planning, try not to have leftovers but if we do, plan a way to use them
 - e. Each group do its own selecting and buying
 - f. Allow one dollar per person for three meals
 - g. Refer to books before asking
 - h. Plan a day's menu by Texas Food Standard and check the calories
2. Go into laboratory, check and re-check equipment and place it in the best order we can figure out.
3. Always wear apron and tie hair up, before going into laboratory.
4. Listen for and read food news of the day.
5. Visit food plants.
 - a. Bakery
 - b. Packing House
 - c. Flour Mill
 - d. Candy Kitchen
 - e. Ice Cream Factory
 - f. Dairy

Every student brought a news article to class today and told the other students about it. Peggy R. said, "I didn't know there were so many things in the newspaper about food." There had been a food price fight on for a few weeks and Bobby Jo asked, "Do you buy your groceries at the stores that are going below cost on some things?" The discussion extended the advantages and disadvantages of selling foods below cost. What makes food prices rise and fall? Was food rationing necessary during the war? Why did not government controls allow prices to increase when the supply became less? The teacher asked, "What is the minimum amount of money that you would have to spend in order to serve a nutritious meal to a family size group of three or four?" Peggy R. answered, "I guess it would be about three or four dollars because it costs that much in a cafe." The other students stopped her with "No! Peggy, it wouldn't cost that much." Betty said, "I'll bet one dollar would be enough." "A lot of people spend \$90 a month for groceries," added Bobby Jo. It was decided to limit our budget to \$1 per person for three meals.

The class divided into the following family size groups:

Group I - Betty, Bobby Jo, Peggy R., and Jerri

Group II - Peggy M., Claudette, Doris, and Dorene

Group III - Pansy, Alta, and Peggy T.

Group IV - Jessie Mae and Madoline

In their groups the teacher asked, "What are you going to

do now?" Claudette answered, "I don't know." Bobby Jo said, "Oh, Claudette, think for yourself a little, and you can plan ahead, then you will see what you need to do." Later the teacher asked, "When you go into a kitchen that has not been used for a long time, what do you usually do first?" "Clean it up!" was the reply from all the students.

The teacher said, "When each group completes its plans, I'll check money out to you for that meal. You keep all bills, the amount checked out, and the amount left over." Bobby Jo said, "Mrs. Lindley, do we have to learn to keep books in homemaking?" The teacher replied, "Don't you usually have to keep an account of your money in the home?"

Everyone was working on plans when Peggy T. asked, "Can we cook tomorrow?" The teacher asked, "Will you be ready to cook tomorrow? Have you made your market order?" Peggy answered, "I didn't know we had to make a market order." From that statement a discussion developed around "how to plan" and "what should be included in our plans." The following plan was developed by the class with the help of the teacher:

1. Make menus for an entire day.
2. Check against daily food requirements.
3. Find the number of calories for the day.
4. Check for flavor and color combination.
5. Make market order and figure how much it will cost.
6. Make preparation plans.

- a. Time table
- b. Recipes
- c. Directions
- d. Table setting
- e. Cleaning

"Do you mean we need to do all of that before we can cook?" asked Doris. The teacher replied, "Do you want to have an appetizing and attractive meal?" "We're trying to learn instead of doing what we already know how to do," was Bobby Jo's answer. All of the class, but two, found the daily food requirements very quickly.

For the next four days every one was busy. "When can we cook?" was not asked again during the unit. The teacher caught a few conversations while they were planning:

Jerri said, "If a bar of candy has this many calories, I'm going to stop eating candy." Peggy T. said, "I don't see any need for writing our menu down. I never do at home." The teacher asked, "What do you have when you plan a meal?" Peggy answered, "A vegetable or two, a meat, and a dessert." "Do you have bread and a salad?" asked the teacher. Peggy answered, "Oh, yes, we always have that." The teacher replied, "What if you hadn't thought of the bread until you sat down to eat?"

Groups I and II finished their plans and checked with the teacher to see if anything needed to be changed. She approved their plan and gave them their money. They went to town to buy groceries. When they came back, Bobby Jo said, "We really watched our pennies. One store has eggs two cents cheaper

than anyone else in town. We were told that they were fresh and from what we have learned about fresh eggs, I think they were. We went over town to check prices, then went back and bought each food where it was cheapest."

The following evaluation was written of the first meal by Bobby Jo:

"Today was our first time to cook in the laboratory. We prepared a breakfast from the day's menus we had planned. The breakfast menu was:

Grapefruit
Raisin Bran Cream
Scrambled Eggs Toast
Hot Chocolate

"We started on schedule and began our duties. One member of the group was absent, but we all helped and did her part. I set the table and made the toast. Betty scrambled the eggs, and Jerri cut the grapefruit, put the cereal in the bowl, and made the cocoa. Since we didn't cook very much, it was simple. We sat down, and I said grace. I think every group in the kitchen should sit down and say grace together. The food was delicious, but I would have enjoyed it more, if I hadn't eaten so much lunch just before class time!"

During the evaluation discussion the teacher commented, "How do we set the table for a simple breakfast?" The students did not know exactly, but they began looking for books on the subject. Having found several ways to set the table, we got dishes and practiced serving a meal. Claudette said,

"I hope we don't get so confused next time!"

The following evaluation was written of the second meal by Peggy M:

"Our lunch wasn't as good as it could have been. The hot chocolate tasted terrible. I used the amount of water that was supposed to be milk, and the amount of milk that was supposed to be water. We had to make some changes in our plans, and I didn't know I was going to have to make the chocolate. I hadn't studied the recipe enough. I can see from this what good planning can do. Our menu was as follows:

	Ranch Style Beans	
Corn Fritters		Shredded Lettuce
Cornbread Muffins		Butter
	Hot Chocolate	

We had too many corn fritters. They were delicious, but we just couldn't eat all of them. While we were eating, someone noticed where our feet were. We had them on the chair rounds, on the table legs, across on the other side of the table, and everywhere. When this was mentioned, we all put our feet flat on the floor. We were five minutes late eating and that caused us to be a few minutes late clearing away our dishes, although we had allowed ten minutes extra before bell time."

In the second meal evaluation discussion Bobby Jo said, "We got off to a bad start yesterday. We lost the cornbread recipe, and Betty was gone. I carelessly failed to make some of my last minute plans." Jerri said, "I was frying the ham while the confusion was going on, when I suddenly realized

that the ham would be done long before the other food, so I just let it soak. I don't know why I did that, because I know better." Peggy R. said, "Somebody turned the burner out under the grease. I lighted it again, when I turned around for something, it burned. Our Jell-o was tough because we only put half as much water in it as it called for. That is what happens when you don't read your recipe closely."

The following evaluation was written of the third meal by Betty. This was a guest meal.

"Yesterday we prepared a dinner and invited Mrs. Cooper as our guest. Here is our menu:

Smothered Steak	Gravy
French Fried Potatoes	
Tossed Vegetable Salad	
Hot Biscuits	
Lemon Pie	Iced Tea

Bobby Jo baked the pie; Jerri fried the potatoes and helped set the table; Peggy R. fried the steak and made the biscuits. Everything worked out very nicely, although Jerri and Peggy did have a fuss about the way Jerri was frying the potatoes. We are going to have to learn to think before we speak.

We were ready to eat right on schedule. We sat down and I was very nervous because I was afraid I would not be the right kind of hostess. Our guest complimented our dinner and said that she was real proud of us. Of course, that made us want to cook some more. This was our hardest meal to prepare, but we learned more from this one than any other meal that we

prepared. Now that all three of our meals are cooked, we have seven cents left."

The following report of a home visit was written by the teacher:

"Bobby asked me to come eat dinner with her one day while we were not having school. I got there about ten minutes before meal time, and Bobby was doing her last minute preparations before the meal. She had the dining table set with everything in its proper place. The table was beautiful. In a few minutes Bobby, her mother, her cousin, and I went into the dining room. Grace was said. Then we had one of the most delicious meals I have ever eaten. We had fried chicken, potatoes, salad, green beans, hot rolls, chocolate pie, and iced tea. Bobby had killed and dressed the chicken, made the pie and rolls. Bobby's mother was very proud that Bobby had prepared such an attractive and appetizing meal."

After all the family meals were planned, prepared, served, and evaluated, plans for a field trip to Fort Worth were made. Alta asked, "What shall we wear?" It was decided they should wear something very simple and comfortable because they would have to walk a great deal.

Friday morning, March 12, the students and teacher went to Swift's Packing House, ate lunch at Milam's Cafeteria, and visited Mrs. Baird's Bakery. The following statements were taken from student written evaluations of the field trip:

"Our experience in the cafeteria was very valuable because we learned to pick a well-balanced meal by seeing it instead of reading about it. I selected chicken pie, combination vegetable salad, rolls, lemon pie, and iced tea. This cost me seventy cents."

"The most interesting thing to me at Swift's Packing House was the way the meat is cut up. It was very exciting to see how the cattle were killed."

"I really can't express how much I enjoyed this trip and everything I learned."

"This trip made me want to see more things."

"It was fun riding the escalator. That's the first one I had ever seen. I was afraid at first."

"I thought it was most interesting to see how the machinery handled the bread at the bakery."

"I think our field trip was worth more than a week or two at school. To see is much easier to believe than reading about it in a book. For example, if someone had told me that about the dough in those big bins, it wouldn't have meant anything to me, but when you see it, you remember it."

The goals were discussed again to see if they had reached at least a part of what they were striving for. The teacher explained to the students, "Since we have completed our foods unit, how much improvement can we see by taking the tests again?" Claudette said, "You mean we have to take all of

those old tests again?" The teacher answered, "It is to your advantage. It will be one way of seeing what you have learned. May be another group can profit by the mistakes we have made in this one."

The following end test results may be compared with the pretests to show any possible changes not hitherto observed.

TABLE 1
PER CENT SCORE IN CALIFORNIA
PERSONALITY TEST

Section A

	Pretest %	End Test %	Gain %
Betty	20	95	75
Bobby Jo	40	95	55
Peggy M.	20	70	50
Pansy	45	85	40
Alta	25	60	35
Claudette	65	85	20
Dorene	15	35	20
Peggy R.	25	35	10
Peggy T.	70	75	5
Jerri	40	45	5
Madoline	10	15	5
Doris	60	60	0
Jessie Mae	5	5	0
Average	32	57	25

TABLE 2

SCORE IN PER CENT IN UNIT SCALES OF ATTAINMENT
IN FOODS AND HOUSEHOLD MANAGEMENT

Section A

	Pretest %	End Test %	Gain %
Peggy M.	58	84	26
Peggy R.	58	80	22
Betty	72	91	19
Jessie Mae	65	81	16
Doris	75	86	11
Dorene	77	87	10
Madoline	71	79	8
Peggy T.	76	83	7
Jerri	83	87	4
Alta	79	82	3
Claudette	83	85	2
Bobby Jo	86	87	1
Pansy	78	78	0
Average	74	84	10

TABLE 3

SCORE IN PER CENT IN TEST OF SOCIAL USAGE

Section A

	Pretest %	End Test %	Gain %
Bobby Jo	82	96	14
Dorene	77	90	13
Betty	82	94	12
Doris	72	84	12
Claudette	82	93	11
Alta	65	76	11
Pansy	80	84	4
Peggy M.	88	90	2
Peggy R.	84	86	2
Jerri	94	94	0
Madoline	78	78	0
Peggy T.	77	70	-7
Jessie Mae	59	58	-1
Average	78	84	6

Fig. 1.--Change in attitude of food dislikes, Section A.

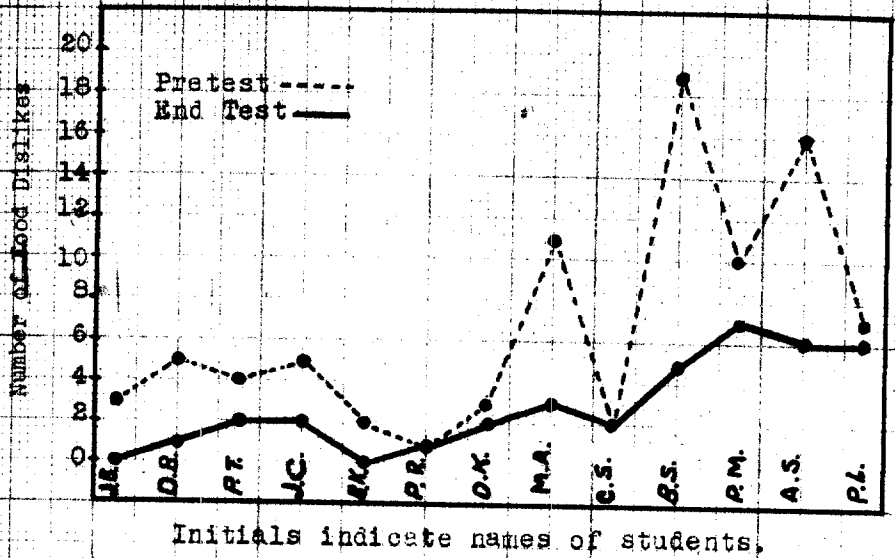


Fig. 2.--Change in attitude of eating new foods, Section A.

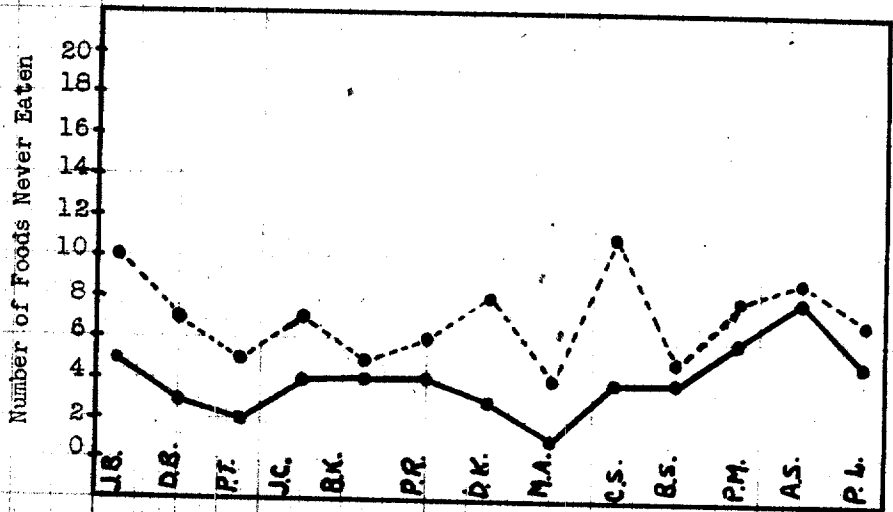


TABLE 4

PER CENT OF STUDENTS IN EACH LEVEL
IN THE HEALTH INVENTORY OF
HIGH SCHOOL STUDENTS

Section A

	Very Low %	Low %	Average %	High %	Very High %
HEALTH STATUS					
Pretest	0	39	38	23	0
End Test	0	31	46	15	8
HEALTH PRACTICE					
Pretest	23	31	46	0	0
End Test	8	31	46	15	0
HEALTH KNOWLEDGE					
Pretest	8	8	61	0	23
End Test	8	15	23	39	15

Section B

(Sixteen Sophomore girls--one year homemaking
Class hour 2:30 to 4:00 daily)

When the idea of testing was mentioned, this group was eager to see how they stood, since they had been taking a series of attitude tests in another class and were acquainted with standardized tests. The teacher explained to the students about her thesis and Patsy A. said, "I'd just like to see where I stand, just for my own benefit." Dorothy remarked, "I surely do get tired of reading them because the printing is so small."

Every student took the tests for the four days. A part of the class was absent one day causing the test to run into

the following week.

The class entered into a discussion concerning the meaning of evaluation without a great deal of participation by the students. Margaret said, "Let's hurry up with this so we can get started cooking." The teacher asked, "Margaret, what do you want to learn in this unit?" "To cook," was Margaret's reply. The teacher asked again, "Isn't there anything else that you might learn?" "Yes," said Margaret, "I could become more interested in my school work." This led the discussion into the setting up of goals. "We will have to be reminded again and again of our goals, or we will forget them." said Joy. Patsy A. suggested that they keep their goals on the first page of their folders so that they could see them at any time. Goals were then set up for the unit as follows:

Goals for Foods Unit

1. Learn to prepare special occasion meals.
2. Buy intelligently at low cost.
3. Work for an attractive table and food.
4. Manage our time better.
5. Cooperate in our groups.
6. Rotate duties in our groups.
7. Be dependable.
8. Learn to keep spare things clean.
9. If we have to talk, try to talk quietly.

10. Have a place for everything and keep it in its place.
11. Learn to save food.
12. Wear clean uniforms; be neat and attractive.
13. Learn to prepare and eat foods never eaten.
14. Learn to do duties without having to be reminded.
15. Keep gum out of classroom.
16. Learn to plan a well-balanced menu.
17. Try to make recipe of our own.
18. Think for ourselves before asking.
19. Study relationship between world food situation and daily diet.

Activities

1. Demonstrations of practical techniques of cooking.
 2. Make food price list by dividing into groups and each group be responsible for different foods.
 3. Plan entire day's menu and just prepare one meal.
 4. Figure food value of a day's diet.
 5. One member from each group buy groceries. (Rotate)
 6. Cook foods never eaten (one new food for every meal)
 7. Go to Fort Worth.
 - a. Packing House
 - b. Pangburn's Candy Kitchen
 - c. Eat at Milam's Cafeteria
 - d. Waples-Platter Packing Company
 - e. Bakery
 - f. Large Dairy
 8. Allow \$1 per person for three meals.
- In a discussion the group decided that they needed to find

the prices of foods in the stores for their benefit as well as the other classes. They divided into five groups to find the prices of all kinds of meat, vegetables, fruits, dairy products, and staples. The groups are as follows:

Group I - Margaret, Dorothy, Patsy A.

Group II - Betty, Mary, Estalene

Group III - Martha, Joy, Peggy, Patsy S.

Group IV - Jimmie, Mary Lou, Wanda

Group V - Gladys, Julia

They made a list of the things they were going to look for in order to have worthwhile information. They would need to find out the brand, size, and price.

The teacher and students went to town and visited in every grocery store looking for prices. When they got back to class, everyone wanted to talk at one time. "Look how much higher bacon is than some of the other meats," said Wanda. Peggy said, "I'll bet we can't cook three meals for one dollar. Aren't things high!" "How can we make an accurate price list because it is sometimes three cents higher at one store than another," said Jimmie.

The groups worked to make charts for the bulletin board so that all the classes could use the price list.

"What do you need to keep in mind when you think of your first meal?" asked the teacher. Gladys said, "We know how to plan if we'll follow our goals. First, we'll have to make

our menus then check against our daily food standard." All of the students agreed that they had had enough experience in planning to know what to do.

For the next three days the students were very busy planning their first meal. Martha said, "I don't see any sense in planning a whole day's meals. We'll never use them." The student-teacher reminded her of the goal they had set up regarding planning on the daily basis.

Groups I and III prepared their first meal while the other three groups were still juggling their pennies. Statements like this could be heard, "Would you sell us one-half cup of milk? We don't need a whole quart and we can't afford to buy that much." "We have about a half of a box of raisin bran that we'll sell you for a reduced price of five cents."

In the evaluation conference Groups I and II discussed such things as: whether or not the catsup bottle should be on the table; good and poor methods of using recipes, and correct procedures for setting the table. Someone had laid a cuptowel near a burner on the stove and it had caught fire. Margaret said, "We couldn't keep the cuptowel from burning." The student-teacher explained that the cuptowel's burning wasn't so important if the need for practicing safety measures would be remembered. Three groups had prepared meals. Mary Lou had made brownies not knowing salt had been added

to the sugar can until too late to save the cookies. She was worried, but the student-teacher discussed ways of avoiding a like mistake again. Julia got awfully tickled at the table and Estalene said, "Can't you think of an interesting conversation?" This group found that they had prepared too much food.

In a discussion today the entire class brought in many suggestions. Mary told why their group were so amused, "We had too much cereal and weren't able to eat it all. We just couldn't stop laughing." Joy and Martha said, "We're ready to cook our next meal." The student-teacher asked, "Do you have your entire day's menus? How many calories do you have?" Martha said, "I think that's silly. We figured all that out last time." The student-teacher reminded them that they had agreed upon certain goals, and that each meal presented different food value problems.

There had to be some "backing up" here. The students did not have the understanding of planning that they thought they did. The student-teacher asked, "Why do we make plans?" Mary Lou said, "I don't see any use in it." Jimmie said, "Yes, I think we need to make plans." Julia asked, "Why do we have to write every little thing down?" Mary suggested, "Why don't we make it in an outline such as the time we put each thing on to cook and the amount of time it has to cook?" The student-teacher suggested that they might make a chart

that would help in planning. They all began working on a form that they could use in planning.

In an individual conference the student-teacher said, "Jimmie, didn't you set up as one of your goals to make new menus each day?" Jimmie replied, "Well, we haven't prepared that breakfast." The student-teacher explained that it was the experience of making different menus for a balanced day's diet that was needed.

Mary Lou's group did not plan for any butter in their meal that they were preparing so they were without butter until they bought some from Margaret's group. The teacher asked her, "Do you see the value of planning now?" She replied, "Yes ma'am!" Gladys group was planning to buy jelly rolls for their next meal. The student-teacher asked, "Could you make your jelly rolls?" They replied, "Everything would cost too much. It would take too long. They aren't very good." Later when the student-teacher came by their table, she noticed they were copying a jelly roll recipe. Gladys said, "It will cost one cent more to make them, but at home we would have a lot of these things that we're going to have to buy here." Betty said, "I am going to make them because Gladys has already made them."

They moved the tables together for a discussion. Margaret said, "Let's get this over with so we can cook tomorrow. Be quiet so we can hurry." Patsy A. said, "I believe we need

to be more careful in the serving of our meals." It was decided that they would divide into two groups and give a demonstration of the right and wrong way of serving in order to catch mistakes they had made in table service. The student-teacher gave suggestions on points she could see that they failed to observe.

The student-teacher talked with the class about the cooperation within the class. She asked, "Do you think you could cooperate with anyone?" Their answer was, "Yes." The teacher then suggested that since they had set up as a goal to cook a special meal, that they might draw for partners. They had selected their partners in the beginning. They agreed that they could learn to cooperate with everyone by using this method.

All kinds of problems came up when the groups got into more difficult situations. Joy and Wanda did not allow enough time for their bread to rise. Jimmie worked too much flour into her pie crust. The filling that Martha was making did not get thick. They made a flour and water mixture, and when they added it, the filling became lumpy. Margaret prepared some frozen vegetables and as she opened the boxes, she said, "Let's don't cook these old split beans. They look like weeds." She did cook them, however, and almost everyone liked them better than any of the other vegetables.

The following evaluation was written by Patsy A. after the special occasion meal:

"I learned that planning, especially planning of time, is necessary, because our dishes weren't washed yesterday when the bell rang. This showed us that there was lack of planning somewhere. The vegetables would probably have been better if they had been hot. The texture of the cake was light and fluffy, but the icing was lumpy. It seemed to me that everyone was afraid they would have to wash some extra dishes, but when the bell rang everyone seemed to help each other in order to finish quickly. The dishes were not put in their places, and the laboratory wasn't very clean. In other words, we just didn't plan our time well enough."

Betty said, "Let's make some plans for our field trip." The following procedures and activities were discussed and the class thought that they should keep these in mind during the trip:

1. Buy a balanced lunch at Milam's
2. At the Packing House, watch for following evidences:
 - a. Cleanliness and sanitation
 - b. Handling of meat
 - c. Method of storing
 - d. Stamps - Government inspection (What does it mean?)
3. At the Bakery
 - a. Method of mixing
 - b. Large equipment
4. Remember that people with whom we come in contact will

judge our school and home by our actions. Let's leave a good impression.

The following statements were taken from student evaluations in relation to the field trip:

"They really have to be clean in handling the meat. The guard told us that they have to disinfect the building every day, and the government inspector had to check the building before they began every morning."

"The Cafeteria was so nice. The organ seemed to give it such a pleasant atmosphere. That was my first time to eat in a place like that."

"If we would half try, we could really learn a lot. I have seen books entitled The Story of Bread but I would have never thought about it being very interesting."

The following end test results may be compared with the pretest to show any possible change not hitherto observed:

TABLE 5
SCORE IN PER CENT IN CALIFORNIA
PERSONALITY TESTS

Section B

	Pretest %	End Test %	Gain %
Mary Lou	35	70	35
Joy	70	95	25
Julia	25	45	20
Wanda	80	95	15
Mary	5	20	15
Dorothy S.	85	95	10
Peggy P.	90	95	5
Margaret	70	75	5
Gladys	90	95	5
Dorothy J.	85	85	0
Patsy S.	25	25	0
Betty	35	35	0
Jimmie	90	90	0
Martha	75	75	0
Patsy A.	95	95	0
Estalene	25	15	-10
Average	61	69	8

TABLE 6

SCORE IN PER CENT IN UNIT SCALES OF ATTAINMENT
IN FOODS AND HOUSEHOLD MANAGEMENT

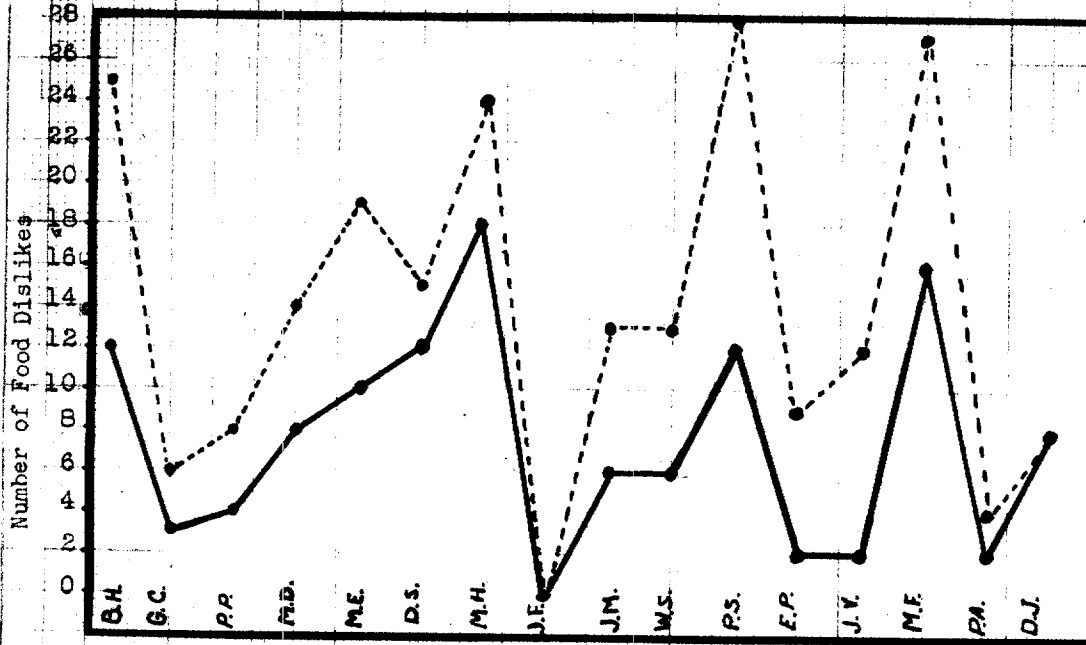
Section B

	Pretest %	End Test %	Gain %
Martha	72	87	15
Estalene	57	71	14
Julia	57	67	10
Joy	74	81	7
Jimmie	75	81	6
Dorothy J.	72	77	5
Gladys	82	87	5
Peggy P.	81	86	5
Betty	71	74	3
Dorothy S.	75	78	3
Patsy A.	82	85	3
Patsy S.	69	71	2
Margaret	81	82	1
Wanda	75	76	1
Mary	71	72	1
Mary Lou	72	72	0
Average	73	78	5

TABLE 7
SCORE IN PER CENT ON TEST OF SOCIAL USAGE
Section B

	Pretest %	End Test %	Gain %
Peggy	64	86	22
Dorothy J.	65	86	21
Dorothy S.	70	86	16
Martha	80	96	16
Joy	77	90	13
Patsy A.	78	88	10
Gladys	78	86	8
Jimmie	66	74	8
Wanda	83	88	5
Mary	72	76	4
Estalene	76	80	4
Margaret	78	80	2
Betty	78	80	2
Patsy S.	72	72	0
Julia	85	78	-7
Mary Lou	74	64	-10
Average	75	81	6

Fig. 3.--Change in attitude of food dislikes, Section B.



Initials indicate names of students.

Fig. 4.--Change in attitude of eating new foods, Section B.

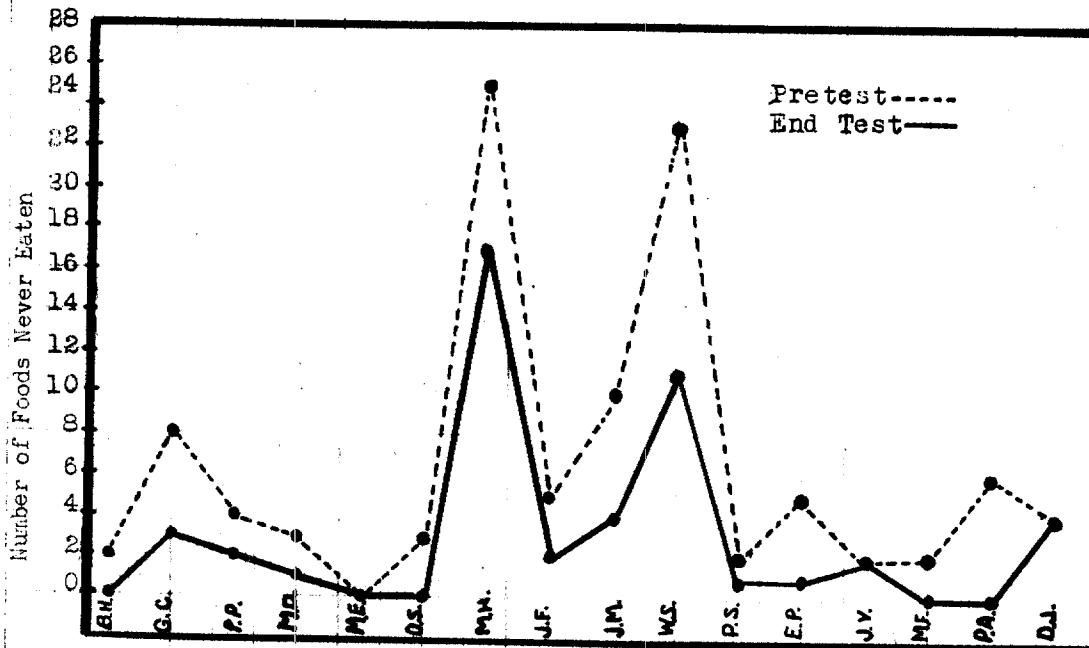


TABLE 8
PER CENT OF STUDENTS IN EACH LEVEL
IN THE HEALTH INVENTORY OF
HIGH SCHOOL STUDENTS

Section B

	Very Low %	Low %	Average %	High %	Very High %
HEALTH STATUS					
Pretest	6	25	50	19	0
End Test	0	31	38	25	6
HEALTH PRACTICE					
Pretest	37	19	44	0	0
End Test	12	19	50	13	6
HEALTH KNOWLEDGE					
Pretest	38	44	18	0	0
End Test	12	12	44	32	0

Section C

(Two Junior girls, two Junior boys, and three Sophomore boys, the girls have had two years of homemaking, but the boys have never had homemaking.)

This is a mixed class made up of students who have had varied amounts of homemaking experience. Three of the boys in the class could not be included in this study because of continued absences.

The teacher talked with the group about the tests and explained why they had been selected. Joe said, "We don't know anything about cooking so what is the use of our taking them?" The teacher explained that they would probably know many of the things because very few of the questions were directly

related to foods. She said, "Wouldn't it be better for you to find out now what you need to learn, rather than wait until the foods unit is over? These tests are related to every day living as well as to cooking and serving meals. It is necessary for you to learn to work with each other in order to cook, is it not? Why narrow your learning to one field?" Joe answered, "Maybe so."

The boys were anxious to know how much they made on the tests and how their grades rated in relation to the girls. They wanted the teacher to score their test as soon as they finished taking it.

The teacher introduced the unit by asking, "Which would you rather have happen, you tell me what you would like to do, or for me to tell you exactly what to do?" "Let us tell you," was Johnnie's answer. The teacher said, "Then if you tell me, what are you going to learn?" They started thinking of different things that they might learn, then Merle said, "Those are really our goals, aren't they?" Teddy Joe said, "I don't see what you mean." Then the teacher tried to help them get an understanding of setting up goals and how evaluation fitted into the picture. This helped each one to think of the following goals and activities:

Goals for Foods Unit

1. Learn to clean up as we go and keep cabinet neat.

2. Consider likes and dislikes of family; cost amount, brand, color, in planning and buying.
3. Learn cuts of meat (tender and tough).
4. Learn to make a balanced day's diet.
5. Learn to prepare different dishes and what dishes go together.
6. Learn to set table and proper methods of serving.
7. Learn to use table manners.
8. Say grace before each meal.
9. Learn to schedule time for preparation in order that hot food would be hot and cold food cold.
10. Learn how to entertain guests.
11. Learn to cooperate in the groups.
12. Learn to follow directions accurately.
13. Whisper when talking to partner.
14. Be courteous to each other.
15. Carry out housekeeping duties without having to be reminded.
16. Find out or learn more about relationship between our diet and world food supplies.
 - a. Food waste
 - b. Balanced diet

**The Class Planned the Following Activities
to Be Carried out during This Unit**

1. Take goals to laboratory.
2. Make a work plan.
3. Carry out work plan.
4. Measure ingredients accurately.

5. Set amount of money to be used. \$1.25 per person for entire unit.
6. Do individual group buying.
7. Try different cuts of meat. Study the cuts and then go to a meat market.
8. Plan a balanced day's diet every meal you prepare, including calories.
9. Plan should include eating, using table manners, saying grace, setting table, and making a center piece.
10. Eat some of everything and have a clean plate.
11. Invite a guest for last meal.
12. Use different types of service.
13. Read newspaper articles about food.
14. Visit
 - a. Swift's Packing House
 - b. Pangburn's Candy Company
 - c. Baird's Bakery
 - d. Waples-Platter Company
 - e. Eat at Milam's Cafeteria and carry out table manners, and order well-balanced meal

While the group was discussing the goals and activities, the question of the amount of money needed for each meal was raised. Joe said, "We'll need about twenty dollars for four meals." Merle said, "No, Joe, we won't need that much." Joe replied, "Well, almost every time I eat in town, it costs me a dollar and a half." Johnnie said, "We can cook it cheaper than we can buy it already prepared."

Johnnie did not pay any attention to anyone, and would not enter into class discussion for two days after the teacher asked him and Joe to make a copy of their goals. He did not

come to class for the following three days.

The class divided into three groups. They were as follows:

Group I - Joe and Quinton

Group II - Teddy Joe, Merle and Juanita

Group III - Johnnie and Max

The student teacher volunteered to make a large chart with their goals printed on it for their bulletin board. Then the question of "how to make plans for the first meal" was discussed. The class decided to set up the following plan to follow:

Plan for Meal Preparation

1. Make menus for three days
2. Check on calorie values
3. Pick out three meals that we want to prepare
4. Make plans
 - a. Market order
 - b. Food costs
 - c. Divide duties in group
 - d. Select recipes
 - e. Make time plan

The boys did not see too much need for all of this planning before cooking. They wanted to use the trial and error method.

Group III worked out their plans and were ready to cook first. Max wrote the following evaluation of their first meal:

"I think our meal was very nice because we had planned it for a few days ahead of time and knew what to do. We cleaned up our dishes as we went. It was a lot easier this way because we didn't have all of it to do when we finished. We planned our market order so that we did not have too much food.

"The next time I would taste the food to see if there was enough salt in it. I think we did well for our first meal, but I hope we do better next time."

While Group I was cooking breakfast, they found that they needed a quart of milk so they went to the lunchroom to get it. When the teacher saw what had happened, she asked them to take it back. They told her the other group had done that the day before. Group III had to pay the lunchroom ten cents a bottle for the milk they had gotten, taking the money out of their meal allowance. Group I had to go to the grocery store for milk. They cooked their cereal a long time before they were ready to eat. The student-teacher suggested they set it in hot water. Quinton wrote the following evaluation:

"We had all kinds of trouble. We didn't have our time schedule worked out well enough. By the time we finished cooking part of our food, the other part was cold. We spilt about a cup of milk on the table. Things just didn't work out like we thought they would. We thought we knew how to

set the table, but we didn't. We need to learn to plan better. I think we could improve on all that we did."

Group II cooked while the other two groups were planning for their next meal. They worked very quietly with only a whisper now and then. Teddy Joe was slow getting started because he was not sure of his procedure and had to ask Merle about it.

In an individual conference with Joe at the end of the class period, he said, "You know, I really learned something today. Those other guys weren't here so I just sat down and found out about this thing. We're really going to have a good meal next time."

The student-teacher discussed with the class ways of cleaning the kitchen and storing food in the refrigerator. They discussed putting things back where they were found.

This made the fourth day that Joe and Quinton failed to buy their groceries so they went to the grocery store at the beginning of class. When they got to the store, they found that they could buy dried beans much cheaper than the canned ones which they had planned to buy, so they bought the dried ones. By the time they got their lunch started, they only had forty-five minutes to cook the dried beans that had not been soaked. It happened that one of the girls in another class had a pressure cooker in the department. This helped to solve their problem.

In an evaluation conference with Joe, the student-teacher asked, "Joe, are you learning anything?" Joe replied, "Shoot, yes, I didn't know how to do anything but light the stove when I came down here."

Things really happened in the laboratory today. Group I cooked a guest meal. Joe was confused about mixing the rolls. He measured everything correctly, but he poured the yeast cake water over the flour mixture and left the milk out. The teacher and student-teacher went to his rescue. They decided that he needed more milk so he heated more milk. After the dough was getting smooth, Joe said, "When do we add this other milk?" There was the other milk over on another stove. The teacher helped him to get it back in dough form again. Later, after he had made the rolls out, he set the table holding a plan he had made in his hand all the time in order to get it just right. Mr. Allen, the superintendent, ate with them as their guest, and his compliments were encouraging to the boys.

In the following day's evaluation conference, Joe and Quinton said, "The meal was perfect." They felt that they had accomplished big things.

In the beginning of the unit when they were setting up their goals, the class had expressed a desire to learn to identify cuts of meat, and the butcher in Sanger promised to give a demonstration for them. The class decided that they

needed to get acquainted with the cuts before the demonstration so they all read and studied the cuts of meat and methods of preparation for each.

The student teacher and students went to the butcher shop. Everyone listened closely and asked questions along as the butcher cut the pieces off and told the uses of each piece. After they left the butcher, they went through the frozen food locker plant. The man explained the preparation for freezing. He showed them the smoke room and smoked meat, and told them how to cure meat and showed them the needle that was used for curing. When they got back to school, they talked about the things they had seen. Johnnie said, "That's really worth something, isn't it?"

The class planned the things that they were going to look for on their field trip. Since they knew a little bit about meat, they decided to find out all they could about bread before going through the bakery. They also discussed what they might choose to eat at Milam's Cafeteria.

The class came in today saying, "We're tired and don't want to work." However, when the points about the field trip were brought up, they joined in a short discussion of the trip, and each student wrote an evaluation of their experiences of the day before. The following statements were taken from these evaluations:

"I like to go on field trips very much. I can learn

more on a field trip than I can from a book, although it's a good idea to read before going to a plant so you will be able to at least ask intelligent questions."

"I enjoyed eating at Milam's most of all. We got to put into practice what we had been learning in class."

"It was fascinating to watch the way they filled those boxes of shortening at the packing house."

"I liked to watch the men kill the cattle and skin them."

The following end test results may be compared with the pretest to show any possible change not hitherto observed:

TABLE 9

SCORE IN PER CENT ON CALIFORNIA
PERSONALITY TEST

Section C

	Pretest %	End Test %	Gain %
Merle	55	80	25
Teddy Joe	50	65	15
Juanita	5	15	10
Quinton	45	50	5
Joe	80	85	5
Max	25	25	0
Johnnie	30	30	0
Average	40	50	10

TABLE 10

SCORE IN PER CENT IN UNIT SCALE OF ATTAINMENT
IN FOODS AND HOUSEHOLD MANAGEMENT

Section C

	Pretest %	End Test %	Gain %
Quinton	16	79	63
Joe	49	79	30
Johnnie	74	83	9
Teddy Joe	77	84	7
Max	73	78	5
Juanita	82	88	6
Merle	81	83	2
Average	65	82	17

TABLE 11

SCORE IN PER CENT ON SOCIAL USAGE TEST

Section C

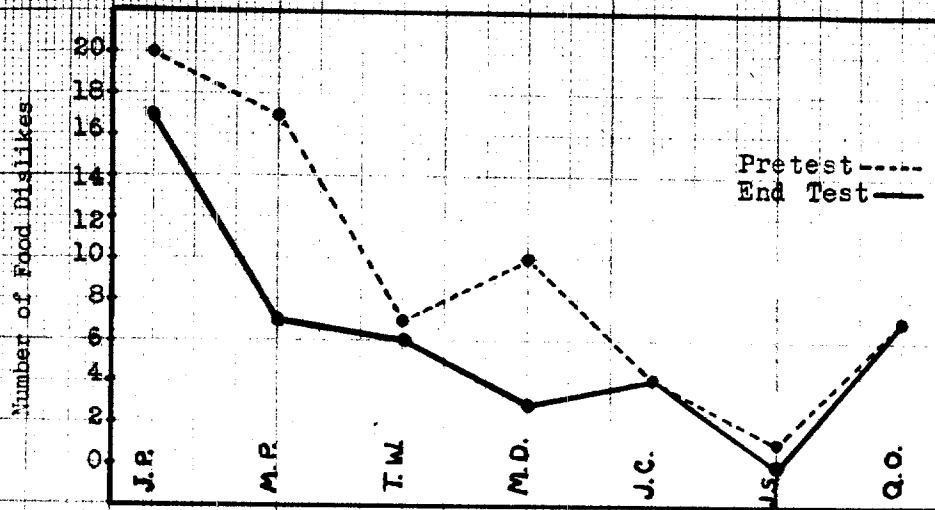
	Pretest %	End Test %	Gain %
Max	76	84	8
Juanita	81	88	7
Joe	71	76	5
Merle	84	86	2
Johnnie	75	76	1
Quinton	80	77	-3
Teddy Joe	82	80	-2
Average	78	81	3

TABLE 12
 PER CENT OF STUDENTS IN EACH LEVEL
 IN THE HEALTH INVENTORY OF
 HIGH SCHOOL STUDENTS

Section C

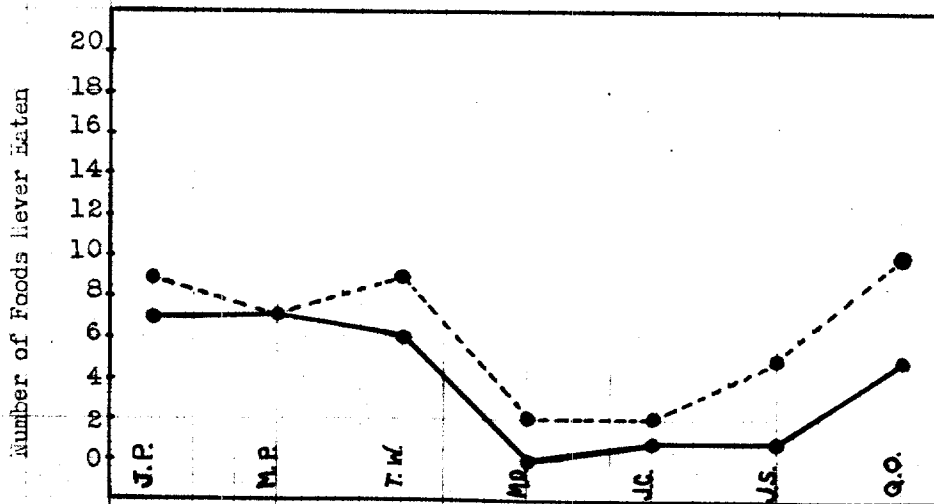
	Very Low %	Low %	Average %	High %	Very High %
HEALTH STATUS					
Pretest	0	43	29	28	0
End Test	0	29	28	29	14
HEALTH PRACTICE					
Pretest	43	29	29	0	0
End Test	14	44	14	14	14
HEALTH KNOWLEDGE					
Pretest	0	71	29	0	0
End Test	28	28	44	0	0

Fig. 5.--Change in attitude of food dislikes, Section C.



Initials indicate names of students.

Fig. 6.--Change in attitude of eating new foods, Section C.



DISCUSSION OF RESULTS

From the teacher's observation of the discussion groups, it seemed that Section A had the best understanding of the goals from the beginning. They showed by their planning that they knew what they were striving toward. For example, they found in their planning that they needed to learn how to read recipes. This need immediately led the class into the study and understanding of recipes.

Comments from the students as well as student evaluations showed that consumer education was a very important factor in the foods unit. In fact, in one of the student evaluations there was a comment which left the impression that the students may have been so conscious of the low cost meals that they failed to see the importance of the daily food requirements. It was found from teacher observation that the students developed a sense of responsibility when they had to bring their own groceries to class, although one group in Section C came to class for three days without buying their groceries. At that time the goals were again stressed since it was understood that no group would prepare meals before all plans were complete and groceries purchased. After that lesson, groceries were bought on time.

From the teacher's home visit report it was evident that some of the students were practicing what they learned in class. One particular student cooked a delicious meal and served it with much poise and pride. It was easy to see that she was getting experience in the home, not using her mother's ideas altogether, but her own.

The homemaking student's evaluations indicated that field trips are valuable teaching devices. Many of the students said that they learned more in that one day than they did in a month at school.

In (1943)⁴ a study was made by Kirkendall using two approaches of measuring pupil's growth; evaluation and testing. In comparing the two methods, it must be remembered that evaluation is concerned with the total personality while testing is limited to the acquisition of information. Testing is a process imposed on the pupil by authorities. Evaluation is a device to facilitating learning; testing, a way of determining whether or not the pupil has memorized the subject matter. The evaluation procedure is hard to set up if the student has been "miseducated" by traditional methods. In the present study it was found that many evidences of total personality growth came from

⁴L. A. Kirkendall, "The Problems of an Evaluation Program," Educational Administration and Supervision, XXIX (1943), pp. 373-377.

evaluation that did not show up in the tests. However, it was impossible to find tests that would fit every individual's needs in the classes.

Evaluation of the present study brought in new ideas that would never have been found in tests, although the differences between the pretest and end test showed some gain in all classes.

The percentage gain, Figure 7, in the California Personality Test shows how the students were adjusting themselves to the problems and conditions which confront them. Section A made a gain of twenty-five per cent while Section B gained eight per cent and Section C nine per cent. The large gain made by Section A may have been due to the fact that all members of Section A had just entered high school, which usually calls for much readjusting. The gain of all of the sections may have been due to the opportunity of working in groups. They learned to get along with each other better than when they worked independently.

The percentage gain in the Unit Scale of Attainment in the Foods and Household Management Test is shown in Figure 8. Section C made a gain of sixteen per cent while Section A showed a gain of eight per cent and Section B a gain of five per cent. The girls had had previous experience in the kitchen while the boys in Section C knew very little of the techniques of food preparation at the beginning of the foods

Fig. 7.--Percentage gain in the California Personality Test.

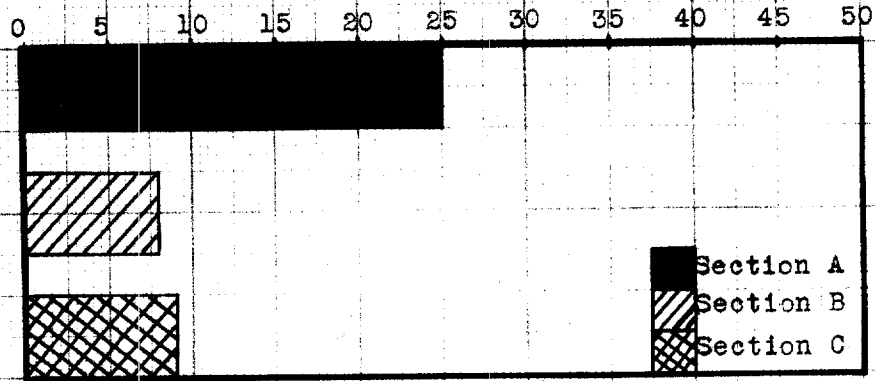


Fig. 8.--Percentage gain in the Unit Scale of Attainment in Foods and Household Management Test.

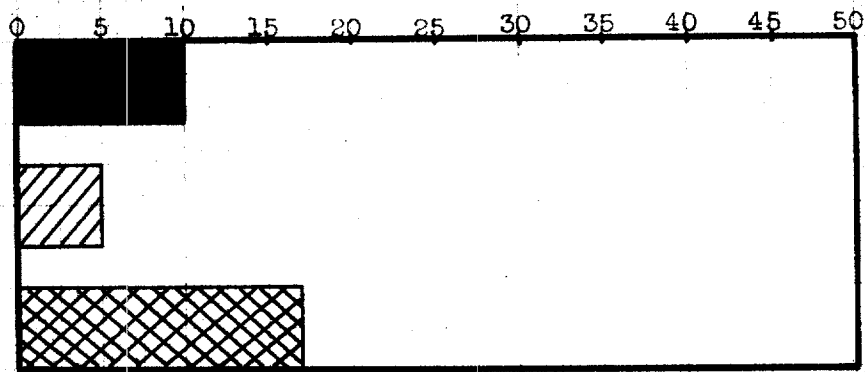
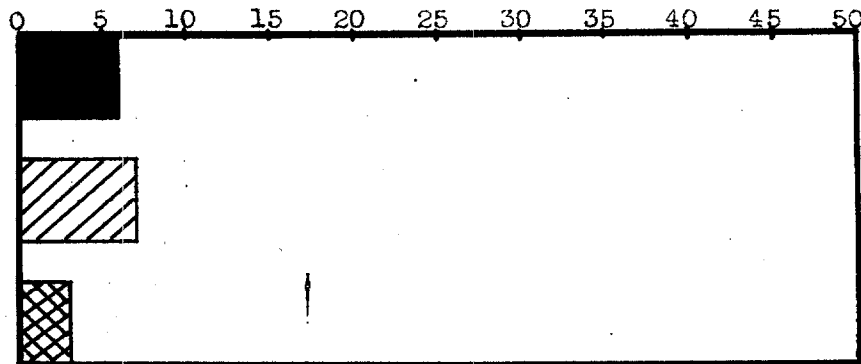


Fig. 9.--Percentage Gain in the Social Usage Test.



unit. Therefore, a greater gain might be expected in the section with the large boy population.

The percentage gain in the Social Usage Test is given in Figure 9. Section B showed a gain of seven per cent while Section A gained six and Section C three. The student evaluations brought out more evidences of growth in social usage than the test. For example, when the group went to Milam's Cafeteria to eat lunch, their evaluations brought in such statements as, "That was my first time to eat in a large cafeteria," or "I won't be embarrassed to go anywhere to eat now."

The Health Inventory for High School Students, Figure 10, shows the position of each student in the pretest as compared with his position in the end test. The "very low" rank under Health Status was not represented in the end test while there were still a number in this rank under Health Practice and Health Knowledge. In the Health Practice division there were none represented in the "high" and "very high" rank of the pretest, but there were seven represented in the end test. The increase toward the higher ranks caused the low and very low to decrease by six. In the Health Knowledge division there were none represented in the "high" rank in the pretest while there were thirteen in the end test. It is difficult to determine which section grew most since there was a definite upward trend for all of them.

The average per cent gain, Figure 11, in the Preference and Acceptance Test shows how each section accepted "all foods". Section B accepted an average of eight per cent more foods in the end test than it did in the pretest. Section A accepted five per cent more while Section C accepted three per cent. However, Section C accepted the highest per cent of the foods in the pretest. Again, this high per cent may have been due to a large number of boys in this class of Section C. Some of the foods which were poorly accepted by all the sections were liver, asparagus, cauliflower, spinach, turnip greens, rhubarb, and buttermilk. It was interesting to learn what foods most high school students enjoyed eating. All of the sections enjoyed eating ice cream, strawberries, and Irish potatoes.

The percentage gain, Figure 12, shows how "new foods" were accepted in the Preference and Acceptance Test. Section B had eaten an average of five per cent more "new foods" during the foods unit than in the beginning. Sections A and C had eaten three per cent more "new foods" than in the beginning. The reason for Section B's higher average could have been due to one of their goals, "learning to like new foods;" they prepared a number of foods that they had never eaten in order to taste them. This section also had the highest per cent of acceptance for "all foods". None of the sections accepted "new foods" as readily as "all foods".

Fig. 11.--The percentage gain in accepting all foods in the Preference and Acceptance Test.

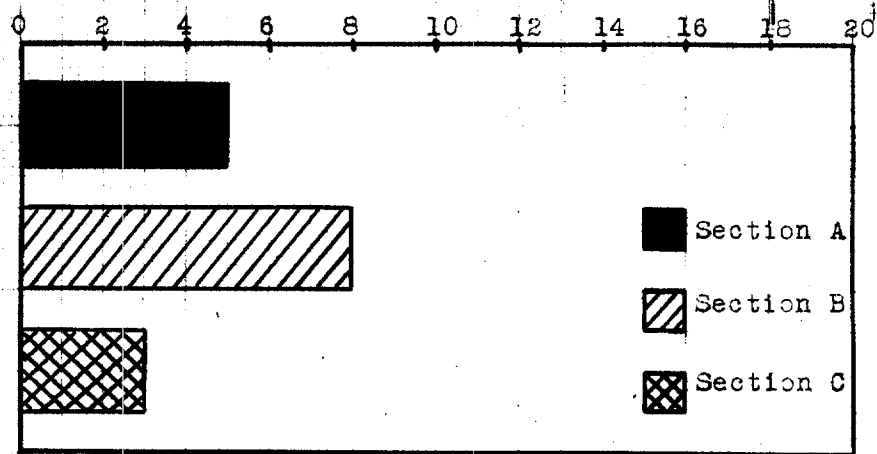
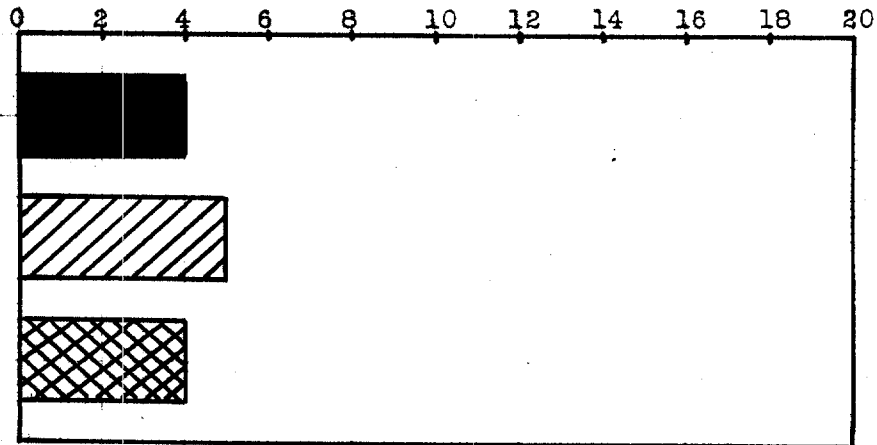


Fig. 12.--The percentage gain in accepting new foods in the Preference and Acceptance Test.



All of the Sections (A, B, and C) made better scores in the end tests than in the pretests. The high percentage gain of Section A in the California Personality Test tends to give this section a higher total gain than that of the other sections.

SUMMARY

Field trips are valuable teaching devices.

Consumer education can be developed in a foods unit with success.

Understanding of the goals at the beginning permitted the students to show more growth during the unit. Goals set up cooperatively between student and teacher serve to answer the students' question, "Why do I have to do this?"

Home visit reports showed that some students practice what they learn in class.

Section B's failure to accept certain foods was due to the fact that they had never eaten the food. The boys accepted all of the foods more readily than the girls, although the percentage gain was less.

The Freshman Group, Section A, gained more in the California Personality Test than the other groups. The total adjustment to high school may have influenced their gain.

Evidences of total personality growth came from evaluation that did not show up in the test.

APPENDIX

A Secondary Series
Grades 9-College

CALIFORNIA TEST OF PERSONALITY—SECONDARY, FORM A

A PROFILE OF PERSONAL AND SOCIAL ADJUSTMENT

Devised by Ernest W. Tiegs, Willis W. Clark, and Louis P. Thorpe

Name Grade Sex: Male—Female

School Age Birthday

Teacher Date

ELEMENTS	Pos- si- ble Score	Stu- dent's Score	Per- cent- ile Rank	PERCENTILE										
				(Chart student's percentile rank here)										
				1	10	20	30	40	50	60	70	80	90	99
PERSONAL ADJ.	90	90	—											
A. S.-rel.	15	15	—											
B. Per. Wth.	15	15	—											
C. Per. Fdm.	15	15	—											
D. Belg.	15	15	—											
E. Wd. Td. (Freedom from)	15	15	—											
F. Ne. S. (Freedom from)	15	15	—											
SOCIAL ADJ.	90	90	—											
A. Soc. St.	15	15	—											
B. Soc. Sk.	15	15	—											
C. A-s. Td. (Freedom from)	15	15	—											
D. Fm. Rel.	15	15	—											
E. Sc. Rel.	15	15	—											
F. Cm. Rel.	15	15	—											
TOTAL ADJ.	180	180	—											

First look at each thing in this test. Make a circle around the L for each thing that you or would very much like to do. Then make a circle around the D for things you really do.

INTERESTS AND ACTIVITIES

- | | | | | | |
|--------|-------------------------|--------|---------------------|----|-----------------------|
| 51. LD | Go to church | 27. LD | Collect coins | LD | Play the radio |
| 52. LD | Go to Sunday School | 28. LD | Collect autographs | LD | Read stories |
| 53. LD | Belong to a club | 29. LD | Collect pictures | LD | Go to movies |
| 54. LD | Belong to YMCA or YWCA | 30. LD | Use a camera | LD | Read comic strips |
| 55. LD | Go to parks | 31. LD | Sew or knit | LD | Work problems |
| 56. LD | Engage in sports | 32. LD | Repair things | LD | Study history |
| 57. LD | Go to a circus | 33. LD | Make boats | LD | Study science |
| 58. LD | Sing in a chorus | 34. LD | Make airplanes | LD | Study literature |
| 59. LD | Sing in a glee club | 35. LD | Make a radio | LD | Do cross-word puzzles |
| 60. LD | Belong to a gang | 36. LD | Work with tools | LD | Study trees |
| 61. LD | Play ping pong | 37. LD | Have a garden | LD | Study birds |
| 62. LD | Play croquet | 38. LD | Drive an automobile | LD | Study animals |
| 63. LD | Play baseball | 39. LD | Play with pets | LD | Study butterflies |
| 64. LD | Play tennis | 40. LD | Raise animals | LD | Draw or paint |
| 65. LD | Go hunting | 41. LD | Go fishing | LD | Work in laboratory |
| 66. LD | Go riding with others | 42. LD | Climb or hike | LD | Model or design |
| 67. LD | Play in band | 43. LD | Skate | LD | Do housework |
| 68. LD | Play in an orchestra | 44. LD | Ride a bicycle | LD | Sing |
| 69. LD | Go to church socials | 45. LD | Ride a horse | LD | Play piano |
| 70. LD | Go to parties | 46. LD | Practice first aid | LD | Make a scrapbook |
| 71. LD | Go to dances | 47. LD | Play cards | LD | Keep a diary |
| 72. LD | Be an officer of a club | 48. LD | Play dominoes | LD | Play an instrument |
| 73. LD | Be a class officer | 49. LD | Play checkers | LD | Visit museums |
| 74. LD | Go camping | 50. LD | Play chess | LD | Collect stamps |

INSTRUCTIONS TO STUDENTS

After each of the following questions, make a circle around the **YES** or **NO**.

For example, if you have a dog at home make a circle around **YES**. Do the other two the same way.

- A. Do you have a dog at home? **YES** **NO**
 B. Can you drive a car? **YES** **NO**
 C. Did you go to school last Friday? **YES** **NO**

On the next pages are more questions.

The answers are not right or wrong, show what you think, how you feel, or what you do about things.

Go right on from one page to another until you have finished all of them.

SECTION 1 A

- Do you usually do something about it if someone steps in front of you in line? YES NO
- Is it easy for you to introduce or be introduced to people? YES NO
- Do you find it hard to keep from being bossed by people? YES NO
- Is it hard for you to continue with your work when it becomes difficult? YES NO
- Do you give considerable thought to your future work or career? YES NO
- Do you usually get upset when things go wrong? YES NO
- Is it hard for you to go on with your work if you do not get enough encouragement? YES NO
- Do you usually do things that are good for you even if you do not like them? YES NO
- Is it hard for you to admit it when you are in the wrong? YES NO
- Is it easier to do things that your friends propose than to make your own plans? YES NO
- Do you feel uncomfortable when you are alone with important people? YES NO
- Do you prefer to keep your feelings to yourself when things go wrong? YES NO
- Do you usually feel uneasy when you are around people you do not know? YES NO
- Do you usually get discouraged when other people disagree with you? YES NO
- Is it natural for you to feel like crying or pitying yourself whenever you get hurt? YES NO

Score Section 1 A.....

SECTION 1 B

16. Are you usually considered brave or courageous? YES NO
17. Do you feel that you are not very good at handling money? YES NO
18. Do people seem to think that you are dependable? YES NO
19. Do you feel that people often treat you rather badly? YES NO
20. Are you often invited to mixed social parties? YES NO
21. Do most of your friends and classmates do nice things for you? YES NO
22. Do your folks seem to think that you are going to amount to something? YES NO
23. Do people seem to think well of your family's social standing? YES NO
24. Do your friends seem to think you have likeable traits? YES NO
25. Do members of the opposite sex seem to like you? YES NO
26. Do people usually seem interested in the things you are doing? YES NO
27. Do your friends seem to think that your ideas are usually poor? YES NO
28. Do you feel that people recognize your social standing as they should? YES NO
29. Are you usually given credit for the good judgment you show? YES NO
30. Are you considered a failure in many of the things you do? YES NO

Score Section 1 B.....

SECTION 1 C

31. Do you have enough time for play or recreation? YES NO
32. Do you have to do what other people tell you to do most of the time? YES NO
33. Do you work to earn part or all of your spending money? YES NO
34. Do your folks give you a reasonable amount of spending money? YES NO
35. Are you scolded for many little things that do not amount to much? YES NO
36. Do you feel that you are given enough liberty in doing what you want to do? YES NO
37. Do you sometimes go out with members of the opposite sex? YES NO
38. Are you allowed to say what you believe about things? YES NO
39. Do your folks often try to stop you from going around with your friends? YES NO
40. Do your parents cause you embarrassment when you associate with the opposite sex? YES NO
41. Do you feel that you are bossed around too much by your folks? YES NO
42. Are you usually allowed freedom to attend the socials or shows that you like? YES NO
43. Are you usually allowed to bring your friends to your home when you wish? YES NO
44. Are you encouraged to help plan your future vocation or career? YES NO
45. Are you free to go to interesting places during your spare time? YES NO

Score Section 1 C.....

SECTION 1 D

46. Do you feel that you are an important part of your school? YES
47. Do your teachers seem to want you in their classes? YES
48. Do you feel that your relatives are as attractive and successful as those of your friends? YES
49. Do your friends and acquaintances seem to have a better time at home than you do? YES
50. Do the people at home make you feel that you are an important part of the family? YES
51. Are you regarded as being as healthy and strong as most of your friends and classmates? YES
52. Have you often wished that you had different parents than you have? YES
53. If you are a young man, are you liked by the young women? If you are a young woman, do the young men like you? YES
54. Have you found it difficult to make as many friends as you wish? YES
55. Are you well enough liked at home so that you feel happy there? YES
56. Are you invited to groups in which both young men and women are present? YES
57. Do you have enough friends to make you feel good? YES
58. Do you feel that you fit well into the community in which you live? YES
59. Do you feel that your classmates are glad to have you as a member of their school? YES
60. Do you feel that people usually think well of you? YES

Score Section 1 D.....

SECTION 1 E

1. Are certain people so unreasonable that you can't help but hate them? YES NO
2. Do you find it more pleasant to think about desired successes than to work for them? YES NO
3. Do you find that many people seem perfectly willing to take advantage of you? YES NO
4. Do you have many problems that cause you a great deal of worry? YES NO
5. Do you find it hard to meet people at social affairs? YES NO
6. Are your responsibilities and problems often such that you cannot help but get discouraged? YES NO
7. Do you often feel lonesome even when you are with people? YES NO
8. Do you think that most people are out to cheat or "put it over" their associates? YES NO
9. Do you find many people inclined to say and do things that hurt your feelings? YES NO
70. Are you sorry that you are continually growing older? YES NO
71. Do you find it difficult to overcome the feeling that you are inferior to others? YES NO
72. Do you find it difficult to associate with the opposite sex? YES NO
73. Does it seem to you that younger persons have an easier and more enjoyable life than you do? YES NO
74. Do you often feel that people do not appreciate you or treat you as they should? YES NO
75. Are people frequently so unkind or unfair to you that you feel like crying? YES NO

Score Section 1 E.....

SECTION 1 F

76. Are you likely to stutter when you get worried or excited? YES NO
77. Do your muscles twitch some of the time? YES NO
78. Do you have the habit of biting your fingernails often? YES NO
79. Do you sometimes have nightmares? YES NO
80. Do you sometimes walk or talk in your sleep? YES NO
81. Do you suffer often from annoying eyestrain? YES NO
82. Is it hard for you to sit still? YES NO
83. Are you more restless than most people? YES NO
84. Are you inclined to drum restlessly with your fingers on tables, desks, and chairs? YES NO
85. Do people frequently speak so indistinctly that you have to ask them to repeat their questions? YES NO
86. Do you frequently find that you read several sentences without realizing what they are about? YES NO
87. Do you find that you are tired a great deal of the time? YES NO
88. Do you often have considerable difficulty in going to sleep? YES NO
89. Do you have frequent headaches for which there seems to be no cause? YES NO
90. Are you bothered by periodic dizzy spells? YES NO

Score Section 1 F.....

SECTION 2 A

91. Is it right to create a scene in order to get your own way? YES NO
92. Is it all right to avoid responsibility or work if you are not required to do it? YES NO
93. Is it necessary to be especially friendly to new students? YES NO
94. If they look funny enough, is it all right to laugh at people who are in trouble? YES NO
95. Should students follow their parents' instructions even though their friends advise differently? YES NO
96. Is it always necessary to express appreciation for help or favors? YES NO
97. Does finding an article give a person the right to keep or sell it? YES NO
98. Is it all right to ignore teachers' requests if they appear to be unfair? YES NO
99. If you need something badly enough and cannot buy it, are there times when it is all right to take it? YES NO
100. Is it all right to cheat in a game when you will not get caught? YES NO
101. Do rich people deserve better treatment than poor ones? YES NO
102. Should a person be courteous to disagreeable people? YES NO
103. Are the beliefs of some people so absurd that it is all right to make fun of them? YES NO
104. Do older or elderly people deserve any special help not given others? YES NO
105. Is it necessary to obey "No Trespassing" signs? YES NO

Score Section 2. A.....

SECTION 2 B

106. Do you often introduce people to each other? YES
107. Is it hard for you to lead in enlivening a dull party? YES
108. Is it easy for you to talk with people as soon as you meet them? YES
109. Is it difficult for you to compliment people when they do something well? YES
110. Do you often assist in planning parties? YES
111. Do you usually remember the names of people you meet? YES
112. Do you keep from letting people know when they irritate you? YES
113. Do you frequently find it necessary to interrupt a conversation? YES
114. Do you find that it causes you trouble when you help others? YES
115. Do you attempt new games at parties even when you haven't played them before? YES
116. Do you have many friends rather than just a few? YES
117. Do you find that members of the opposite sex appear at ease when chatting with you? YES
118. Do you like to have parties at your home? YES
119. Do you find it hard to help others have a good time at parties? YES
120. Do you find that many people are easily offended by you? YES

Score Section 2. B.....

SECTION 2 C

1. Are you justified in taking things that are denied you by unreasonable people? YES NO
2. Do you have to stand up for your rights? YES NO
3. Are you often forced to show some temper in order to get what is coming to you? YES NO
4. Do you often have to make your classmates do things that they don't want to do? YES NO
5. Are people often so stubborn that you have to call them bad names? YES NO
6. Do you find it easy to get out of troubles by telling "white fibs"? YES NO
7. Do you sometimes think that it serves the school right if you break a few of their things? YES NO
8. Do you have to talk about yourself and your abilities in order to get recognition? YES NO
9. Are things frequently so bad at school that you just naturally stay away? YES NO
10. Are teachers and other people often so unfair that you do not obey them? YES NO
11. Do you often have to fight or quarrel in order to get your rights? YES NO
12. Are people often so thoughtless of you that you have a right to be spiteful to them? YES NO
13. Do little "kids" often get in your way so that you have to push or frighten them? YES NO
14. Are people at home or at school always bothering you so that you just have to quarrel? YES NO
15. Have things been so bad at home that you have had to run away? YES NO

Score Section 2 C.....

SECTION 2 D

136. Are you troubled because your parents are not congenial? YES NO
137. Do the members of your family frequently have good times together? YES NO
138. Do your folks seem to believe that you are not thoughtful of them? YES NO
139. Are there things about one or both of your folks that annoy you? YES NO
140. Are things difficult for you because your folks are usually short of money? YES NO
141. Are you troubled because your folks differ from you regarding the things you like? YES NO
142. Do your folks appear to doubt whether you will be successful? YES NO
143. Does someone at your home quarrel with you too much of the time? YES NO
144. Do you like your parents about equally? YES NO
145. Do the members of your family seem to criticize you a lot? YES NO
146. Do you usually like to be somewhere else than at home? YES NO
147. Do you avoid inviting others to your home because it is not as nice as theirs? YES NO
148. Do some of those at home seem to think they are better than you? YES NO
149. Are your folks reasonable to you when they demand obedience? YES NO
150. Do you sometimes feel like leaving your home for good? YES NO

Score Section 2 D.....

SECTION 2 E

151. Are some of your subjects so difficult that you may be in danger of failing? YES NO
152. Do you find that you can confide in at least one of your teachers? YES NO
153. Would you like to be chosen more often to take part in games and other activities? YES NO
154. If it were right would you stay away from school as often as possible? YES NO
155. Would you and your classmates like school better if teachers were not so strict? YES NO
156. Would you be happier if your classmates liked you better? YES NO
157. Does it seem to you that many of your teachers are nervous? YES NO
158. Do many of the teachers seem to be unfair or unreasonable to their students? YES NO
159. Do you like to go to school affairs with members of the opposite sex? YES NO
160. Do you find that classmates of the opposite sex are as nice as those of your own sex? YES NO
161. Do you enjoy being alone more than being with your classmates? YES NO
162. Are your classmates usually friendly to you? YES NO
163. Do your classmates seem to approve of the way you treat them? YES NO
164. Are many of your classmates so unkind or unfriendly that you avoid them? YES NO
165. Does your school discourage young men and women from enjoying each other's company? YES NO

Score Section 2 E.....

SECTION 2 F

166. Do you dislike to take responsibility for the welfare or safety of children or old persons? YES NO
167. Do you like to take care of your own or some neighbor's pets? YES NO
168. Are there any attractive members of the opposite sex in your neighborhood? YES NO
169. Do you know people who are so annoying that you would like to molest them? YES NO
170. Do you often play games with friends in your neighborhood? YES NO
171. Does it make you happy to know that your neighbors are getting along well? YES NO
172. Are there people of certain races that one should not be expected to tolerate? YES NO
173. Do you live in a rather uninteresting neighborhood? YES NO
174. Are the police officers of such a character that you would like to help them? YES NO
175. Do you visit with several young men and women in your neighborhood? YES NO
176. Do you sometimes go to neighborhood affairs with members of the opposite sex? YES NO
177. Do you ever do anything to improve the appearance of your home surroundings? YES NO
178. Are many of your neighbors the kind of people you dislike? YES NO
179. Do you usually speak to both young men and young women in your neighborhood? YES NO
180. Are most of the people in your community the kind you refrain from visiting? YES NO

Score Section 2 F.....

UNIT SCALES OF ATTAINMENT IN FOODS AND HOUSEHOLD MANAGEMENT

Developed by

Ethel B. Reeve
Minneapolis Public Schools

Clara M. Brown
University of Minnesota

Form A

Grades VII-IX

Scales 1 and 2

NAME Boy or Girl.....
Last First Middle

CITY GRADE.....

DATE 19..... SCHOOL.....
Year Month Day

Date of Birth 19..... TEACHER.....
Year Month Day

Age C-SCORES.....
Years Months Days Scale 1

In which Grades have you studied foods and cookery or household management?
Scale 2

Final (Average)

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SCALE 1

Directions for Scale 1: At the end of each statement several ways of completing it are given. Only one of these is right. Pick out the right way, draw a line under it, and write the number that is in front of it in the space at the end of the line, as in the following illustration:

- A. We should eat vegetables 1. once a week 2. twice a week 3. every day 4. only in spring and summer A.....3

In the next sentence the right answer is "preventing certain diseases." Find it, draw a line under it and put the number in front of it "2" in the space at the end of the line.

- B. Vitamins are useful for 1. producing heat and energy 2. preventing certain diseases 3. making food easier to digest 4. making food taste good B.....2

Begin with number 1 and do the exercises on this and the following page in the same way.

1. A budget is a 1. list of bills to be paid 2. plan for using one's income 3. list of things wanted 4. record of personal expenditures 1.
2. The spoons should be placed 1. at the top of the plate 2. at the left of the fork 3. in the spoon holder on the table 4. at the right of the knife 2.
3. The homemaker finds that in the long run it is 1. a saving of time to plan ahead even though some changes have to be made in plans 2. a waste of time to plan ahead because so many things upset the plans 3. important to plan only when the family is large 4. important to plan ahead when the income is small but not so important when the income is large 3.
4. In using a dinner napkin it should be 1. unfolded and tucked in at the neck 2. unfolded, laid on the lap 3. half unfolded and laid in the lap, folded edge toward the body 4. laid on the lap without unfolding 4.
5. In selecting fruit for jelly making without the use of commercial pectin such as Certo, the most important thing to think of is 1. flavor 2. ripeness 3. color 4. size 5.
6. Tapioca is largely composed of 1. starch 2. sugar 3. fat 4. mineral 6.
7. Minerals are best supplied by 1. a single food 2. limited foods 3. a large variety of foods every day 4. plenty of fruits and vegetables 7.
8. The knife should be placed 1. at the top of the plate 2. at the left of the plate with the sharp edge turned in 3. at the right of the plate with the sharp edge turned in 4. at the right of the plate with sharp edge turned out 8.
9. The best time for a three year old child's main meal is 1. in the evening 2. at noon 3. in the morning 4. in the afternoon 9.
10. The following food is high in iron 1. rice 2. veal 3. white bread 4. spinach 10.
11. The best breakfast for a three year old child is 1. prune pulp, oatmeal, milk, toast 2. prune pulp, oatmeal, coffee, toast 3. candy, oatmeal, milk, toast 4. toast, orange, cocoa, oatmeal 11.
12. The main reason why many women fail in planning color schemes even though the income is adequate is 1. because they have not taken a course in Interior Decorating 2. because the members of the family differ in their tastes 3. because of a lack of true appreciation of color 4. because one must hire an expert to insure a good color scheme 12.
13. A girl should introduce a school friend to her mother in this way 1. "Mother, I want you to meet my friend, John" 2. "John, I want you to meet my mother" 3. Mother, let me make you acquainted with my friend, John" 4. "Mother, this is my boy friend, John" 13.
14. If you are a guest for dinner at the home of a friend the napkin, after using should be 1. folded and placed on the table 2. carelessly thrown on the table 3. held below the top of the table, partly folded and laid on the table 4. left on the table without folding 14.
15. The principal leavening used in sponge cake is 1. carbon dioxide gas 2. water 3. steam 4. air 15.
16. A custard should be 1. cooked at boiling point 2. cooked just below boiling point 3. boiled a few minutes 4. boiled a long time 16.
17. The cause of spoilage of canned fruit is 1. not enough sugar in the syrup 2. storing the jars in a dark place 3. keeping the jars in a light place 4. the growth of micro-organisms in the jar 17.
18. To thicken one cup of liquid to a medium thickness use 1. 2 tbsp. flour 2. 3 tbsp. flour 3. 4 tbsp. flour 4. 5 tbsp. flour 18.
19. A calorie is 1. body regulating food 2. mineral matter 3. unit for measuring heat 4. growth promoting food 5. one of the foodstuffs 19.
20. A cheap source of protein in the winter season is 1. lamb chops 2. milk 3. fresh peas 4. oysters 20.

21. If your muffins are tough and have "tunnels" in them when they are done, you probably
 1. beat them too much 2. did not add enough eggs 3. did not measure the flour carefully
 4. used water instead of milk in your mixture - - - - - 21.
22. For every cup of milk in muffins, it is necessary to use 1. 1 cup of flour 2. 2 cups of flour
 3. 3 cups of flour 4. 4 cups of flour - - - - - 22.
23. The proper temperature to use for layer cake is 1. 250 (quite slow) 2. 300-350 (slow)
 3. 360-400 (moderately hot) 4. 425 (hot) 5. 450 (quick) - - - - - 23.
24. When a waitress is offering food from which one is to help himself, the serving dish should
 be held 1. at the right, eight inches from the table 2. at the right, three inches above the table
 3. at the left, eight inches above the table 4. at the left, three inches above the table - - - - - 24.
25. To have a stew well flavored and the meat tender
 1. cut meat in small pieces, brown, place in boiling water, let simmer until tender, finish by thickening gravy
 2. place meat in boiling water, boil until tender, cut in small pieces, return to water and finish by
 thickening gravy 3. cut meat in small pieces, start cooking in cold water, heat quickly to boiling point,
 let simmer until tender, finish by thickening gravy 4. cut meat in small pieces, place in cold water,
 simmer until tender - - - - - 25.
26. To obtain a delicate flavor in cabbage 1. boil in a covered saucepan 2. boil in very little water
 3. steam 4. boil in an uncovered saucepan - - - - - 26.
27. To make jelly without the aid of commercial pectin (as certo) fruit juices must contain
 1. pectin 2. strong flavor 3. acid and pectin 4. acid - - - - - 27.
28. Eggs, milk, and cheese are called meat substitutes because they
 1. are served instead of meat 2. contain similar foodstuffs 3. are generally less expensive
 4. are exactly the same as meat in food value - - - - - 28.
29. The best method of making cocoa is 1. adding cocoa to sweetened milk and heating
 2. mixing sugar and cocoa, and adding hot milk 3. mixing sugar and cocoa, adding water and boiling,
 then adding paste to hot milk 4. mixing sugar and cocoa, adding hot water and hot milk, and boiling - - - - - 29.
30. In making a time schedule for a Sunday morning breakfast consisting of cantaloupe, corn
 flakes, cream, soft cooked eggs, buttered toast, bacon, and coffee, for a family of four
 with three guests, the time should be divided as follows
 1. 30 minutes preparation, 40 minutes serving, 25 minutes clearing up 2. 20 minutes for each
 3. 60 minutes preparation, 25 minutes serving, 30 minutes clearing up 4. 45 minutes for each - - - - - 30.
31. Select the cut of meat best suited to use for a pot roast 1. neck 2. round steak
 3. T-bone steak 4. chuck 5. heel of round - - - - - 31.
32. For potato chips the fat should brown a cube of bread in 1. 30 sec. 2. 20 sec. 3. 40 sec. 4. 60 sec. - - - - - 32.
33. Select the best cleaning agent for greasy articles 1. whiting 2. steel wool 3. dutch cleanser
 4. soap - - - - - 33.
34. To retain the flavor and color of mild flavored vegetables such as carrots, put on to cook
 1. in a covered sauce pan with a large amount of cold water
 2. in a covered sauce pan with a large amount of boiling water
 3. in a covered sauce pan with a small amount of boiling water
 4. in an uncovered sauce pan with a large amount of boiling water - - - - - 34.
35. In preparing cauliflower for cooking, invert in salted water 1. to improve the flavor
 2. to draw out insects 3. to soften the cellulose 4. to shorten the time required for cooking - - - - - 35.
36. In order to have a steak, chop or roast juicy and brown when cooked with a gas stove
 1. start with intense heat, decrease after it is well seared
 2. start with very little heat and increase gradually until brown
 3. cook the entire time with moderate heat 4. cook the entire time with intense heat - - - - - 36.
37. An excellent source of calcium is 1. cereals 2. prunes 3. potatoes 4. milk - - - - - 37.
38. The proper temperature to use for sponge cake is 1. 250 (quite slow) 2. 300-350 (slow)
 3. 360-400 (moderately hot) 4. 425 (hot) 5. 450 (quick) - - - - - 38.
39. The best cut to buy for meat loaf considering cost, supply and demand is 1. heel of round
 2. sirloin 3. porterhouse 4. round steak - - - - - 39.
40. We get the most calories per pound from 1. proteins 2. carbohydrates 3. fats 4. mineral matter
 5. vitamins - - - - - 40.

Number right.....

SCALE 2

Directions for Scale 2: In this Scale there are two kinds of questions. In one kind there are blank spaces to be filled in as in sample A.

A. The colors of the flag are _____, _____, and _____.

In this you would write red, white, and blue in the three blank spaces.

In the second kind you have several answers just as in the first test, but in this one, more than one answer may be right.

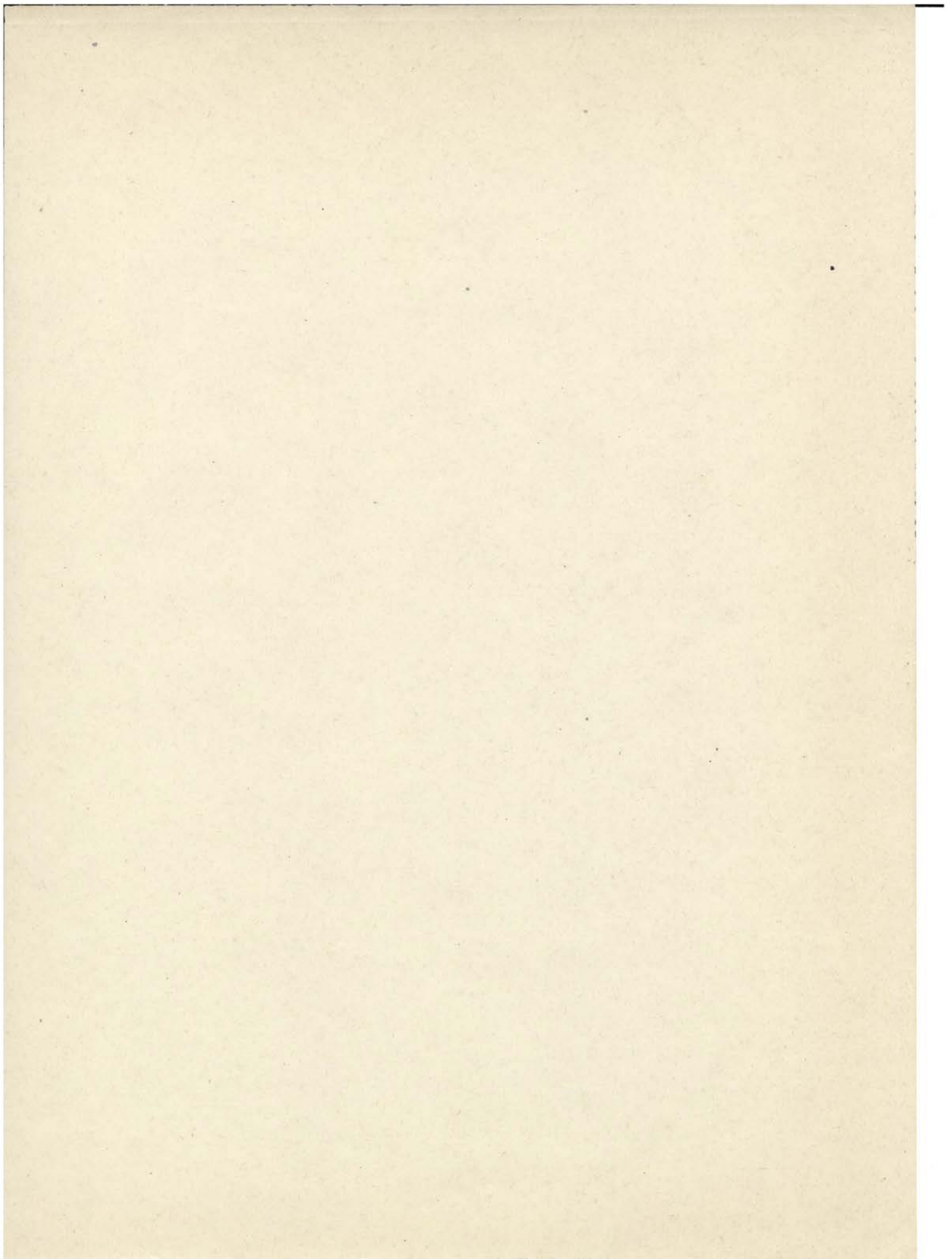
B. Standard jelly should 1. be opaque 2. be very firm 3. keep its shape when removed from container 4. be almost transparent B....3, 4

In sample B, 3. keep its shape when removed from the container and 4. be almost transparent, are underlined and have the numbers in front of them, "3" and "4," put in the space at the end of the line.

To omit a correct answer or to give an answer that is not right, is an error.

Read all of each question carefully before starting to answer it. Begin with question 1 and do those on this and the following page.

1. Strong flavored vegetables should be cooked.....a cover. 1.
2. The following things are necessary to the proper planning of meals 1 a large income
2. a knowledge of food nutrients 3. practice of planning meals ahead 2.
4. small family so that there are not so many tastes to consider - - - - -
3. A standard salad is one which is 1. colorful 2. easy to eat 3. usually made of fruit 3.
4. made of left-overs - - - - -
4. It seems convenient to do most of the serving from the.....side. 4.
5. "Ready to eat" cereals are.....expensive for the large family than cooked cereals,
such as rolled oats. 5.
6. An electric refrigerator is 1. difficult to operate 2. convenient 3. expensive to install 6.
4. noisy - - - - -
7. A budget is a of future 7.
8. Two things to remember in the cooking of meat and eggs are
1. cooking below the boiling point makes protein tough 2. slow baking in oven roaster makes protein
tough 3. dry heat makes protein tough 4. moist heat whether high or low makes prote n tough 8.
5. hard boiling makes protein tough - - - - -
9. Check the requisites of a well-planned bedroom for a girl 1. easy to clean 9.
2. southern exposure 3. closet space 4. box springs - - - - -
10. Check the things that determine one's choice of color in a bedroom 1. size and use of room 10.
2. preference 3. what your neighbor has 4. lighting 5. what color is used in living room - - - - -
11. Water in which green vegetables have been cooked should be 1. thrown away 11.
2. put in bread 3. put in soup 4. used in white sauce to be served with vegetables
5. used as a beverage - - - - -
12. One half teaspoon of baking soda neutralizes of sour milk. 12.
13. Meat is valuable because of the it contains. This foodstuff is used mainly for
.....tissues. 13.
14. Foods rich in ash are 1. cabbage 2. potatoes 3. spinach 4. lettuce 5. tapioca 14.
15. When a dining room and a living room are thrown together with a large opening, the
following conditions would be approved
1. the paper or other wall finish alike or very similar in color and design
2. strikingly contrasting colors in the two rooms
3. highly polished furniture in the living room and dull finish for the dining room
4. mahogany furniture in the living room and walnut furniture in the dining room 15.
5. oriental rugs in the living room and a grass or fibre rug in the dining room -



HEALTH INVENTORY FOR HIGH SCHOOL STUDENTS

Devised by Gerwin Neher

Name..... Sex: M—F
Last First Middle

School..... Grade..... Age.....

Teacher..... Date.....

TO THE STUDENT: You are invited to help in a study of the health conditions and health information of students in your high school. The study is in two parts. Part I includes what you *do* about your health. Part II deals with what you *know* about health. If you will answer each item sincerely and to the best of your ability, this investigation should result in better health training for you and other students.

	Student's Score	Percentile Rank	PERCENTILE (Chart student's percentile rank here)										Rating	
			1	10	20	30	40	50	60	70	80	90	99	
Part I - Health Conditions			----- ----- ----- ----- ----- ----- ----- ----- ----- -----											
A. Status	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
B. Practice	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
Part II - Health Information			----- ----- ----- ----- ----- ----- ----- ----- ----- -----											
A. Public Health	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
B. First Aid	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
C. Disease Prevention	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
D. Habits	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
E. Diet	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
F. Mental Hygiene	_____	_____	----- ----- ----- ----- ----- ----- ----- ----- ----- -----											_____
			1	10	20	30	40	50	60	70	80	90	99	
			PERCENTILE											

PART I. WHAT YOU DO ABOUT HEALTH

TO THE STUDENT: Underline your choice of the answers given for each question in Part I. Write the number of your answer on the line to the right.

SAMPLE: A. Do you have toothache?

1 Frequently 2 Occasionally 3 Never 2

A. HEALTH STATUS

1. How many times have you been sick in bed during the past twelve months?
1 None 2 One time 3 Two times or more 1
2. Do you have stomach trouble or indigestion?
1 All the time 2 Occasionally 3 Never 3
3. Do you have colds?
1 Frequently 2 Seldom 3 Never 2
4. Do you have headaches?
1 Frequently 2 Seldom 3 Never 2
5. At the end of the day do you usually feel more tired than other people?
1 Yes 2 No 2
6. Do you wake up in the morning feeling tired?
1 Frequently 2 Occasionally 3 Never 3
7. Do you notice that your eyes give you trouble when doing school work?
1 Frequently 2 Occasionally 3 Never 1
8. Do your teeth hurt because of decay?
1 Frequently 2 Occasionally 3 Never 3
9. Are you bothered with any skin difficulty such as athletes' foot?
1 Frequently 2 Occasionally 3 Never 3
10. Do you find it necessary to use laxatives?
1 Frequently 2 Occasionally 3 Never 3

B. HEALTH PRACTICE

Score Part I A. 25
(See Manual)

11. How many hours of sleep do you average per night?
1 7 hours 2 8 hours 3 9 hours 4 10 hours 9
12. How often do you visit the dentist for cleaning and a check-up on the condition of your teeth?
1 Every six months 2 Once a year 3 Only when my teeth ache 4 Never 3
13. Do you ever eat candy or other sweets just before meals?
1 Frequently 2 Occasionally 3 Never 2
14. Do you eat meals that are well-balanced containing the proper vitamins, fats, carbohydrates, and proteins?
1 Usually 2 Sometimes 3 Never 1
15. Do you go to bed to cure a cold?
1 Yes 2 Sometimes 3 No 1

Have you ever been vaccinated for smallpox?

1 Yes 2 No

2 16 1

If you knew your tonsils were infected, would you have them removed?

1 Yes 2 I don't know 3 No

2 17 2

Do you use patent medicines for cure of ailments such as colds, indigestion, constipation etc.?

1 Frequently 2 Occasionally 3 Never

3 18 3

Do you have daily outdoor exercise in the form of games, sports, etc., other than what you get in your physical education class?

1 Frequently 2 Occasionally 3 Never

1 19 3

Do you drink at least one pint of milk each day?

1 Yes 2 Occasionally 3 Never

1 20 3

Do you brush your teeth at least once each day?

1 Yes 2 No

1 21 2

Do you sleep at night with the windows closed?

1 Yes 2 Sometimes 3 No

2 22 3

Do you control your emotions or feelings in moments of fear, anger, disappointment, etc.?

1 Yes 2 Sometimes 3 No

2 23 2

Do you maintain a correct posture?

1 At all times 2 Sometimes 3 Never

2 24 2

Do you use drugs such as aspirin, bromides, etc., for cure of headaches?

1 Frequently 2 Occasionally 3 Never

2 25 2

Do you have a complete physical examination by a physician other than the school doctor once a year?

1 Yes 2 No

1 26 2

Have you formed the habit of daily bowel action?

1 Yes 2 No

2 27 1

Are you cheerful as you go about your daily tasks?

1 Yes 2 Sometimes 3 No

1 28 3

Do you avoid people who have colds and other communicable diseases?

1 Yes 2 Sometimes 3 No

2 29 2

Do you wash your hands before eating?

1 Usually 2 Occasionally 3 Never

1 30 3

Score Part I B
(See Manual)

40

Do not turn the page until you are told to do so.

PART II. WHAT YOU KNOW ABOUT HEALTH

TO THE STUDENT: This part of the inventory is made up of statements (numbered from 31 to 99) based upon information about health. Each statement may be completed correctly by one of the five answers supplied. Read carefully each statement and its answers; then select the one answer that seems best. Underline the answer you choose and write its number on the line to the right, just as you did in Part I.

A. PUBLIC HEALTH

31. Large cities are very much affected by the extent of slum areas. A slum district is one in which
- 1 People live only in piano boxes and shacks.
 - 2 All people with very small incomes live.
 - 3 Many people live in places unfit for human beings.
 - 4 Only the laboring class live.
 - 5 Only criminals and gangsters stay. 3³¹
32. Responsibility for examining immigrants to see if suffering from contagious diseases rests with
- 1 City departments of health.
 - 2 County health officers.
 - 3 State departments.
 - 4 The Federal Government.
 - 5 Consuls in American cities. 1³²
33. The Federal Government renders an important regular service by
- 1 Issuing bulletins that give health information and recommendations.
 - 2 Preventing the spread of disease within various states.
 - 3 Preparing weather and climatic reports.
 - 4 Counteracting the health efforts of our state department.
 - 5 Fighting the boll weevil in the south. 1³³
34. Danger of impure food is so great that
- 1 The Federal Government has taken complete charge of all food inspection.
 - 2 Federal, state and local governments cooperate to protect us from it.
 - 3 Little can be done to protect the average consumer.
 - 4 The consumer should make laboratory tests of all foods purchased before eating.
 - 5 There are only a very few foods fit to eat today. 2
35. An important reason for meat inspection by the government is to prevent
- 1 Indigestion.
 - 2 Tapeworm.
 - 3 Hookworm.
 - 4 Rickets.
 - 5 Lockjaw. 4
36. The Federal Food, Drug and Cosmetic Act effective in 1939
- 1 Prohibits false advertising in newspapers.
 - 2 Is no more effective than the former law.
 - 3 Makes all drugs and cosmetics safe to use.
 - 4 Affects the labeling of food and drug products, outlaws certain cosmetics.
 - 5 Controls all advertising of foods, drugs, and cosmetics. 3
37. People who know consider health advertising over the radio to be
- 1 Reliable and accurate because of Federal Food and Drug Act.
 - 2 Reliable, as it is censored before being broadcast.
 - 3 Reliable because all health advertising is censored by the government.
 - 4 Always in the best interests of the public.
 - 5 Of questionable reliability. 4
38. Venereal diseases
- 1 Are of little consequence.
 - 2 Are rarely transmitted from mother to child.
 - 3 Are a punishment for immorality.
 - 4 Are a cause of much suffering and many deaths.
 - 5 Are rarely a cause of sterility. 3

B. FIRST AID

The proper first aid for a person with a broken bone is usually to

- 1 Try to set the bone.
- 2 Elevate the injured part.
- 3 Carry the person to a bed.
- 4 Have the person remain quiet until you can get a doctor.
- 5 Carry the person to a doctor. 4³⁹

The first thing to do if you feel faint is to

- 1 Close your eyes.
- 2 Stand up quickly.
- 3 Hold your breath.
- 4 Massage your temples. 3
- 5 Lower your head. 3⁴⁰

To give artificial respiration have the patient lie

- 1 With head resting on a pillow.
- 2 On his right side.
- 3 On his back.
- 4 On his stomach.
- 5 On his left side. 4⁴¹

To stop bleeding in a cut artery the first thing to do is to

- 1 Apply pressure to appropriate pressure point.
- 2 Elevate the part of the body where the cut is.
- 3 Put warm water on the cut.
- 4 Put on iodine.
- 5 Cover the cut with a handkerchief. 1⁴²

43. After sending for a physician the first thing to do for a person who has swallowed a poison is to

- 1 Give him artificial respiration.
- 2 Make him vomit.
- 3 Go to the druggist for an antidote.
- 4 Put him to bed.
- 5 Give him a strong laxative. 2⁴³

44. The proper first aid for a turned ankle is

- 1 To walk lightly on it.
- 2 To massage it briskly.
- 3 Complete rest and elevation.
- 4 To rub it with liniment.
- 5 To paint it with iodine. 3⁴⁴

45. Acid spilled on the skin or clothing can be neutralized by

- 1 A weak acid such as vinegar.
- 2 A weak hydroxide such as lime water.
- 3 Any salt solution.
- 4 Butter.
- 5 Sugar. 1⁴⁵

Score Part II B.....

C. PREVENTION OF DISEASE

46. Milk is pasteurized

- 1 To remove dirt.
- 2 To increase vitamin content.
- 3 To make it more digestible.
- 4 To improve its color.
- 5 To destroy bacteria.

5 46

47. Diseases like diphtheria are caused by

- 1 Breathing bad air.
- 2 Germs.
- 3 One's state of mind.
- 4 An aching throat.
- 5 Indigestion.

2 47

48. A communicable disease is one which

- 1 Is never dangerous.
- 2 Cannot be given to another person.
- 3 Is always incurable.
- 4 Is spread from sick people to well people.
- 5 Cannot be avoided.

4 48

49. In recovering from tuberculosis the most important factor is

- 1 Vigorous exercise.
- 2 Injection of tuberculin.
- 3 Diet.
- 4 Rest.
- 5 Freedom from worry.

4 49

50. The normal temperature of a healthy body is

- 1 96 degrees.
- 2 100 degrees.
- 3 72.8 degrees.
- 4 68 degrees.
- 5 98.6 degrees.

1 50

51. Of the many kinds of bacteria

- 1 All are harmful.
- 2 All are useful.
- 3 Some are harmful and some are useful.
- 4 All are useless.
- 5 Some cause disease and the rest cure disease.

3

52. Communicable diseases may be spread

- 1 Only by actual contact with the sick person.
- 2 By being related to the sick person.
- 3 By failure to drink sufficient milk.
- 4 By one who has the disease or is a "carrier."
- 5 By lack of sufficient sunshine.

1

53. When a person suffering from a communicable disease is kept away from others the protective health measure is called

- 1 Immunity.
- 2 Vaccine.
- 3 Neutralization.
- 4 Isolation.
- 5 Sanitation.

5

54. One of the best ways to avoid a communicable disease is to

- 1 Keep out of touch with those showing its symptoms.
- 2 Gargle frequently.
- 3 Take a daily shower.
- 4 Take patent medicines.
- 5 Take a laxative every few days.

1 5

55. Solid particles of dirt can be removed from water by

- 1 Boiling.
- 2 Filtering.
- 3 Stirring.
- 4 Adding soap.
- 5 Treating with chlorine.

1 5

Many cities have to filter the community's water supply before it is fit for drinking purposes. Filtration is a process of

- 1 Aerating the water.
- 2 Mixing chemical purifiers with the water.
- 3 Causing the water to pass through a substance, usually sand, which draws out impurities.
- 4 Boiling the water to kill all germs.
- 5 Pasteurization. 2 56

Milk turns sour because of

- 1 The temperature of the air.
- 2 Dust in the air.
- 3 Electricity in the air.
- 4 The action of bacteria.
- 5 The cream separating from the milk. 4 57

Smallpox or diphtheria can best be controlled by

- 1 Having all people who are ill with it quarantined.
- 2 Destroying all germ-carrying mosquitoes.
- 3 Having all people, who have never had the disease, vaccinated or inoculated.
- 4 Building up muscular strength.
- 5 Calling the doctor as soon as the disease is discovered. 3 58

The path by which most disease germs come into the bodies of young people is

- 1 Cuts.
- 2 Bites from mosquitoes or other insects.
- 3 Nose and throat.
- 4 Eyes and ears.
- 5 Improperly cooked food. 3 59

60. Measles is most contagious
 - 1 Before the rash appears.
 - 2 When the rash is most noticeable.
 - 3 When the skin begins to peel.
 - 4 After the skin has peeled.
 - 5 When the rash is disappearing. 3 60

Score Part II C.....

D. PROPER HEALTH HABITS

61. When you are physically tired the best thing to do is to
 - 1 Lie down and relax.
 - 2 Exercise more.
 - 3 Drink a cup of coffee.
 - 4 Take a bath.
 - 5 Go to a movie. 1 61
62. If tonsils are infected, they
 - 1 Should not be removed because nature put them there for a purpose.
 - 2 Should be treated by diet.
 - 3 Should be left alone because removal might be dangerous.
 - 4 Should be removed.
 - 5 Should be sterilized. 6 62
63. Breathing through the nose is best for health because
 - 1 More air can be drawn in through the nose than through the mouth.
 - 2 Decayed food in the mouth would poison air.
 - 3 Breathing through the mouth furnishes more air than the lungs can handle.
 - 4 The nose is directly connected to the lungs.
 - 5 Many disease germs are filtered out in the nose. 5 63

64. The ability of the human body to resist germs is lowered by
- 1 Lack of sleep.
 - 2 Over-abundance of vitamins.
 - 3 Exercise.
 - 4 Reading.
 - 5 Bathing. 2₆₄
65. If one had a fever and were scheduled to play in a football game, he should
- 1 Play only a few minutes.
 - 2 Play the game anyway.
 - 3 Take an aspirin tablet.
 - 4 Go home and go to bed.
 - 5 Stay out of the game but sit on a bench. 4₆₅
66. The correct amount of sleep for an active high school boy or girl to get each night is
- 1 Just enough to "keep going."
 - 2 Just enough to keep from being sleepy in daytime.
 - 3 Six or seven hours.
 - 4 Nine or ten hours.
 - 5 Just as much as there seems time for after other duties are completed. 4₆₆
67. Usually the best treatment for acne (pimples) is
- 1 Skin lotions.
 - 2 Proper diet and cleanliness.
 - 3 Special soap.
 - 4 Frequent laxatives.
 - 5 Exercise. 2₆₇
68. One should be concerned about dead teeth because they may
- 1 Become dark.
 - 2 Become painful.
 - 3 Cause trench mouth.
 - 4 Look bad.
 - 5 Cause infections in the body. 3₆₈
69. The habitual use of laxatives to cure constipation will tend to
- 1 Remove the cause.
 - 2 Increase constipation.
 - 3 Make a person feel healthier.
 - 4 Build up the muscle tone of the intestines. 5
 - 5 Prevent constipation. 6
70. Dentists now believe that the chief cause of tooth decay is
- 1 Improper diet.
 - 2 Failure to visit the dentist frequently.
 - 3 Failure to brush teeth daily.
 - 4 Biting hard substances.
 - 5 Having many child diseases. 1
71. When one has a cold coming on the main thing to do is to
- 1 Go to bed.
 - 2 Gargle the throat.
 - 3 Take a laxative.
 - 4 Take a hot bath.
 - 5 Drink water containing soda. 3₇₁
72. When tired and nervous the best type of bath is a
- 1 Cold shower.
 - 2 Cold tub bath.
 - 3 Sponge bath.
 - 4 Warm tub bath.
 - 5 Hot and cold shower. 3₇₂
- Score Part II D.....
- E. DIET**
73. The food containing the most mineral is
- 1 Lettuce.
 - 2 Coffee.
 - 3 White bread.
 - 4 Candy.
 - 5 Pickles. 3₇₃

- A substance may be considered food if it
- 1 Tastes good.
 - 2 Supplies material for bodily growth.
 - 3 Doesn't harm the body.
 - 4 Is soluble in water.
 - 5 Contains carbon, hydrogen, and oxygen. 2₇₄
6. The best way to help prevent constipation is to
- 1 Take a cathartic or laxative frequently.
 - 2 Get plenty of rest.
 - 3 Drink a quart of milk daily.
 - 4 Eat a balanced diet containing some raw food.
 - 5 Keep a cheerful outlook on life. 4₇₅
5. Sugar is used in the body to
- 1 Regulate the blood supply.
 - 2 Build tissue cells.
 - 3 Furnish energy.
 - 4 Increase resistance to infection.
 - 5 Reduce weight. 3₇₆
7. The food value of meat depends chiefly on
- 1 Its vitamin content.
 - 2 The minerals it contains.
 - 3 Its energy value.
 - 4 Its function in keeping us warm.
 - 5 Its protein or body-building qualities. 3₇₇
8. Protein foods are used mainly for
- 1 Growth and repair.
 - 2 Stimulation.
 - 3 Protection from disease.
 - 4 Energy. 1₇₈
 - 5 Warmth.
79. If you feel the need of eating between meals, the kind of food best for you at that time is
- 1 Bread and jam.
 - 2 Fruit or milk.
 - 3 Candy.
 - 4 Ice cream.
 - 5 Cake or cookies. 2₇₉
80. The classes of food which are used mainly as a source of energy are
- 1 Proteins.
 - 2 Vitamins and hormones.
 - 3 Carbohydrates and fats.
 - 4 Minerals.
 - 5 Water. 3₈₀
81. The amount of heat necessary to raise one gram of water one degree centigrade is called a
- 1 Vitamin.
 - 2 B. T. U.
 - 3 Hormone.
 - 4 Enzyme.
 - 5 Calorie. 3₈₁
82. Of the following methods of preparing food, the least desirable for good digestion is
- 1 Boiling.
 - 2 Steaming.
 - 3 Baking or roasting.
 - 4 Broiling.
 - 5 Frying. 4₈₂
83. Of the following foods the one which should always be cooked very thoroughly before eating is
- 1 Tomatoes.
 - 2 Pork.
 - 3 Eggs.
 - 4 Potatoes.
 - 5 Apples. 4₈₃

84. Vitamin C is important in preventing tooth decay. It is found principally in

- 1 Oranges, lemons, raw cabbage, tomatoes.
- 2 Bread, dried beans, rice.
- 3 Meat, fish, poultry, nuts.
- 4 Eggs, butter, oils.
- 5 Sugar, carrots, beets, cooked cabbage.

1 84

85. Of the following breakfast menus the best for young people is

- 1 Fruit, toast, marmalade, coffee.
- 2 Fruit, poached eggs, toast, milk.
- 3 Sausage, hot cakes, milk.
- 4 Fruit, coffee cake, chocolate.
- 5 Doughnuts, fried eggs, toast, coffee.

2 85

86. Two important substances essential for building strong teeth and bones are

- 1 Calcium and phosphorus.
- 2 Iron and sulphur.
- 3 Dentine and iodine.
- 4 Sugars and starches.
- 5 Magnesium and glucose.

1 86

87. The food which contains nearly all essentials of a complete diet is

- 1 Milk.
- 2 Bread.
- 3 Meat.
- 4 Fruit.
- 5 Eggs.

2 87

88. Which of the following is the best balanced meal?

- 1 Roast pork, apple sauce, potatoes, cake.
- 2 Macaroni and cheese, corn, bread and butter, coffee, rice pudding.
- 3 Lamb chop, baked potato, peas, ice cream.
- 4 Fruit salad, sliced tomatoes, melon, jello.
- 5 Fish, cottage cheese, deviled eggs, milk.

3 88

89. Besides sufficient amounts of proteins, fats, and carbohydrates the well-balanced diet should include particularly

- 1 Salt and pepper.
- 2 Starch and sugar.
- 3 Vitamins and minerals.
- 4 Carbon and cellulose.
- 5 Oxygen and oils.

1

90. A good substitute for meat is

- 1 Potatoes.
- 2 Bread.
- 3 Spinach.
- 4 Cheese.
- 5 Tomatoes.

4

Score Part II E.....

F. MENTAL HYGIENE

91. Worry may affect health because it

- 1 Affects the heart.
- 2 Stunts the growth.
- 3 Causes gray hair.
- 4 Injuriously affects the nervous system.
- 5 Reduces vitamin content.

4

92. Mental health depends above all else upon

- 1 Facing life as it is.
- 2 Day-dreaming.
- 3 Making yourself do things the hard way.
- 4 Refusing to face unpleasant situations.
- 5 Always wanting things you don't have.

1 92

Parents should

- 1 Leave child training entirely to the school.
- 2 Discuss financial problems before the children.
- 3 Allow the children to have "children's diseases" early.
- 4 Expect all their children to be alike.
- 5 Respect the child's individuality. 3.93

It is desirable to know our inherited characteristics so that we can

- 1 Strengthen our good characteristics and guard against our weak ones.
- 2 Keep our children from having the same characteristics.
- 3 Change them.
- 4 Tell others about them.
- 5 Keep them a secret. 2.94

Adults achieve happiness most often by

- 1 Being useful to society.
- 2 Not having to work.
- 3 Having plenty of money.
- 4 Succeeding at the expense of others.
- 5 Following their impulses. 4.95

To make people appreciate us we should

- 1 Keep still.
- 2 Tell of our strong points.
- 3 Repeat what others say about us.
- 4 Knock our competitors.
- 5 Help others to be their best when with us. 2.96

97. An active and healthy mind is best attained by

- 1 Spending much time thinking of one's welfare.
- 2 Living alone.
- 3 Not doing hard physical work.
- 4 Keeping a balance between serious studies and recreational hobbies.
- 5 Attending movies frequently. 4.97

98. Poise is largely due to

- 1 Heredity.
- 2 Nutrition.
- 3 A feeling of superiority.
- 4 Good posture.
- 5 Emotional balance. 4.98

99. A person's health and growth is determined

- 1 Entirely by heredity.
- 2 Entirely by environment.
- 3 By both heredity and environment.
- 4 By the amount of one's intelligence.
- 5 By the strength of one's muscles. 3.99

Score Part II F.....

Test of Knowledge of Social Usage

FOR JUNIOR AND SENIOR HIGH SCHOOLS

By RUTH STRANG, PH.D., MARION A. BROWN, PH.D.
and DOROTHY C. STRATTON, PH.D.

EDITION OF 1942

Name Boy Girl
first name last name

Class Age Date
years months

Teacher School

Have you ever felt out of place, ill at ease, or embarrassed in a social situation by not knowing what was the best thing to do, or how to do it? Unintentional discourtesy is often a cause of unhappiness and discomfort. Good manners are an advantage to anyone in business, social, and family life.

On the following pages are different ways of acting, or conducting yourself. Some of them are generally approved; some are not. Read each statement. If you think that it is generally the correct way to act, put a plus (+) in the parentheses after it. If you think it is the wrong way to act in most situations, put a zero (0) after it.

A few of the sentences have the word (Boys) in front of them. These apply particularly to boys, but should be answered by *both boys and girls*. A few of the sentences have the word (Girls) in front of them. These apply particularly to girls, but should be answered by *both boys and girls*. Now mark these two samples.

- A. Eat slowly and carefully ()
- B. Leave your spoon in the cup after you have stirred your
tea or coffee ()

Sample A is usually the correct way to act, so you should put a plus (+) sign in the parentheses after it. Sample B is usually the wrong way to act, so you should put a zero (0) in the parentheses. In the same way answer all the statements on the following pages. *Be sure to mark every statement.*

Do not ask any questions once the test has begun. If your pencil breaks, raise your hand and you will be given another pencil. Now turn to the next page and begin.

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Column 1

Column 2

1. Wash your hands before you go to the table (+)
2. In the lunchroom or cafeteria, leave orange peels or paper bags on the table. (0)
3. At the dining table amuse yourself by playing with table decorations or with silverware (0)
4. Rest your elbows on the dining table whenever you feel like doing so. (0)
5. When you want food which is some distance from you on the table, reach in front of another person for it. (0)
6. After you are served, wait until the hostess begins to eat (+)
7. During mealtime, discuss such topics as operations, illnesses, or deaths. (0)
8. Help yourself from the serving dish with your own knife, fork, or spoon. (0)
9. When you do not know which knife, fork, or spoon to use, follow the lead of the host or hostess (+)
10. When you are invited to dinner, leave as soon as dinner is over. (0)
11. At private dinners or luncheons, remain seated at the table until all have finished, unless you have asked the hostess to excuse you. . (+)
12. (Boys) Seat the girl you have brought in to dinner and wait for all the other girls at the table to be seated before you sit down. . . . (+)
13. Break bread or crackers into your soup. . . . (0)
14. If someone asks you to pass the bread, do so, but first help yourself. (0)
15. If you are seated next to a stranger at a luncheon or a dinner, introduce yourself and try to find an interesting topic of conversation (+)
16. If you drop your spoon or your napkin or spill something on the table, explain to the others how it happened. (0)
17. If you are entertaining guests at dinner, make them feel that you are going to a great deal of trouble to give them a good time. (0)
18. When you have finished using your knife and fork, place them side by side on your plate. . (+)
19. When you are eating, bend over the table to meet your food halfway. (0)
20. When setting the table, place knives at the right of the plate. (+)
21. When setting the table, place the napkin at the right of the plate. (0)
22. Butter the whole slice of bread before you eat it (+)
23. If your soup is hot, take some in your spoon and blow on it gently. (0)
24. When passing your plate for a second helping, hold your knife and fork in your hand. . (0)
25. At a restaurant or hotel where tips are given, leave a tip of at least ten per cent of your bill for the waiter or waitress. (+)
26. Wear only shoes and hats which are appropriate to the rest of your costume. (+)
27. If you are in doubt about what to wear, dress simply (+)
28. Dress in such a way as to call attention to the clothes you are wearing. (0)
29. (Girls) If you enjoy jewelry, wear a great deal of it in public places. (0)
30. (Girls) Put on make-up in the classroom and in public places. (0)
31. (Girls) Wear an afternoon dress, hat, and gloves to a formal afternoon tea. (+)
32. (Boys) Wear a coat and tie when you are invited out to dinner. (+)
33. Accompany your guests to the door of the house or the living room when they are leaving (+)
34. If a visitor comes into the classroom and you are seated near the door, quietly offer him a chair (+)
35. When you enter the room in which your hostess is, greet her before greeting the other persons (+)
36. If you are bored at a party, find a book to read or go off by yourself or with a friend. . . (0)
37. Change place cards if you do not like the hostess's seating plan and wish to sit next to an old friend. (0)
38. Express appreciation by saying "Thanks" rather than "Thank you" (0)
39. If one of your guests enters late, let her find her own place at the table. (0)
40. Answer invitations promptly, repeating the time of arrival so that there will be no misunderstanding (+)

Column 3

11. Speak to new pupils in the school only if you are a member of a welcoming committee ... (0)
12. Before leaving a party at school, say good-night to the teachers and parents who are serving as hostesses or chaperons..... (+)
13. Although you have thanked your hostess at the end of your week-end visit, write her a letter of appreciation..... (+)
14. When invited to dinner, arrive at your hostess's home a few minutes before the hour set for dinner..... (+)
15. When you are spending a week end with a friend who does her own work, offer to share household duties (+)
16. When inviting a person to spend a few days at your home, indicate the length of time you wish him to stay..... (X)
17. (Boys) When walking with a girl on the sidewalk, walk on the side next to the curb.... (+)
18. (Boys) When you go out of a room with a girl or older person, open the door and allow the girl or older person to go ahead of you.. (+)
19. (Girls) Walk hand in hand with a boy along the street or in the halls at school..... (0)
20. Wherever you are, follow the rules of social usage exactly as they are stated in books of etiquette..... (X)
21. Because you have paid your fare on the streetcar, keep your seat even though an elderly person is standing..... (0)
22. Have long conversations with your friends over the telephone..... (0)
23. Laugh at personal peculiarities of others... (0)
24. Cover your nose and mouth with your handkerchief when you sneeze or cough..... (+)
25. (Boys) Leave your partner in the middle of the floor after dancing with her..... (0)
26. When the door to a private room or office is closed, enter without knocking..... (0)
27. Open personal letters if they are addressed to a member of your family..... (0)
28. Offer to help a teacher or pupil who is carrying heavy books or other burdens..... (+)
29. Wait for a sign of recognition before you interrupt a person who is busy..... (+)

Column 4

60. Think of social usage as a means to an end, not an end in itself..... (X)
61. When you are in doubt as to the correct thing to do, do the kindest thing..... (+)
62. In reply to a question say, "Yes, Mrs. Blank" rather than "O. K." or "Yes, ma'am."..... (+)
63. Always keep your mind on the correct thing to do, even though it makes you feel stiff and embarrassed..... (+)
64. If your car is held up by heavy traffic, sound your horn again and again..... (0)
65. (Boys) If you wish to send a gift to a girl, give a book, candy, flowers, or some other impersonal article (+)
66. Gifts, notes, or flowers expressing congratulations or sympathy should be acknowledged with a personal note..... (+)
67. If you think a conversation is interesting, listen to it even though it is not intended for you (0)
68. If you are calling for someone in your car, stay in the car and blow the horn..... (0)
69. Break a rule of etiquette or good manners rather than hurt another person's feelings.. (+)
70. If you bring a visitor to school, introduce him to each of your teachers before class begins.. (+)
71. Even if you do not like to shake hands, do so if another person holds out his hand..... (+)
72. If you are waiting for a person, rise and greet him when he enters..... (+)
73. If your mother comes into the room, rise and introduce your friends to her..... (+)
74. If a stranger joins a group of young people, bring him into the conversation..... (+)
75. (Boys) Rise when a girl or a woman enters the room (+)
76. (Girls) Remain seated when you are introduced to an older woman..... (0)
77. When one person does not know another, introduce her by saying, "Meet Miss Blank" (0)
78. When introducing two people, say something that they can use to start a conversation, such as "Mary, this is Dick Smith, the track captain at Claremont."..... (+)
79. (Girls) Stand up when a boy is introduced to you (0)

80. In introducing a younger person to an older one, mention the name of the older person first, saying, "Dr. Smith, may I introduce Jack Bayley?" (+)
81. In introducing a man to a woman, mention the woman's name first, saying, "Mrs. Black, may I introduce Mr. Williams?" (+)
82. (Boys) Remain seated if any friends come to your table in a public restaurant..... (0)
83. When you are on a bus or a streetcar, or in any other public place, do nothing which will attract attention to yourself..... (+)
84. In a meeting carried on according to parliamentary law, do not speak until you are recognized by the chairman..... (+)
85. If you are doing interesting things, talk about yourself every chance you get..... (0)
86. Manicure your nails in public if you find they need manicuring (0)
87. If you hear a familiar joke, say, "Oh, I've heard that before."..... (0)
88. In the lunchroom and other public places speak just loud enough to be heard by your companion..... (+)
89. Turn down the corner of the page of a library book to mark the place..... (0)
90. Make marks in a library book to show others what you think is important..... (0)
91. If you have damaged borrowed property, replace it promptly, if possible..... (+)
92. When you stay at a hotel on the "American plan," expect to have the cost of your meals as well as the room included in the bill..... (+)
93. Help yourself to your friends' books, papers, or other possessions without asking permission (0)
94. Care for public property at least as well as you would care for your own..... (+)
95. If you do not agree with the decision of the judges or referees at a game or assembly, express your feeling by "booing" or shouting.. (0)
96. Give the same courteous attention to musicians that you should give to a speaker..... (+)

97. (Boys) When you take a girl to the theater, walk down the aisle ahead of her if there is no usher to lead the way..... (+)
98. On all occasions behave in such a manner as to make others feel as comfortable and successful as possible..... (+)
99. When the presiding officer steps before the audience, give immediate attention without waiting for a signal..... (+)
100. When you have lost a game, tell everyone the reasons why you did not win..... (0)

Number right 100

Number wrong 0

Number omitted 0

TOTAL 100

Score: Number right minus number wrong 100

Note: A few books on etiquette are listed below.

SELECTED BOOKS ON SOCIAL USAGE

ALLEN, BETTY AND BRIGGS, MITCHELL PIRIE. *Behave Yourself! Etiquette for American youth.* Philadelphia, J. B. Lippincott and Co., 1937. 163 p.

BLACK, KATHLEEN. *Manners for Moderns.* Boston, Allyn and Bacon, c1938. 117 p.

BOYKIN, ELEANOR. *This Way, Please.* A book of manners. New York, The Macmillan Co., 1940. 280 p.

BROCKMAN, MARY. *What Is She Like?* A personality book for girls. New York, Charles Scribner's Sons, c1936. 210 p.

GOODRICH, LAURENCE B. *Living with Others.* A book on social conduct. New York, American Book Co., c1939. 294 p.

PIERCE, BEATRICE. *The Young Hostess.* New York, Farrar and Rinehart, c1938. 341 p.

REID, LILLIAN N. *Personality and Etiquette.* Boston, Little, Brown and Co., 1940. 280 p.

STRATTON, DOROTHY CONSTANCE AND SCHLEMAN, HELEN B. *Your Best Foot Forward.* Social usage for young moderns. New York, McGraw-Hill Book Co., c1940. 264 p.

VAN ARSDALE, MARY B. AND LINGENFELTER, MARY REBECCA. *Manners Now and Then.* New York, Harcourt, Brace and Co., c1940. 226 p.

VOGUE. *Vogue's Book of Etiquette.* Present-day customs of social intercourse with the rules for their correct observance. Garden City, N. Y., Doubleday, Doran and Co., 1935. 334 p.

WOODWARD, ELIZABETH. *Personality Preferred! How to grow up gracefully.* New York, Harper and Brothers, 1935. 209 p.

PREFERENCE AND ACCEPTANCE TEST *

Read the following list of foods and check under the heading that expresses your feeling toward that particular food.

	Never Eaten	Enjoy Eating	Willing to Try	Dislike		Never Eaten	Enjoy Eating	Willing to Try	Dislike
Milk, whole					English Peas				
Buttermilk					Green Pepper				
Cocoa					White Potatoes				
Butter					Spinach				
Ice Cream					Sweet Potatoes				
Post Toasties					Tomatoes				
Post Bran					Turnips				
Hominy					Turnip Greens				
Macaroni					Apples				
Oatmeal					Apricots				
Rice					Bananas				
Bread, white					Blackberries				
Bran Muffins					Cantaloupe				
Veal Cutlets					Cherries				
Beef Liver					Dates				
Bacon					Figs				
Ham					Grapefruit				
Pork Chops					Grapefruit Ju.				
Chicken					Grapes				
Salmon					Lemon Juice				
Oysters					Oranges				
Eggs					Peaches				
Asparagus					Pears				
Green Beans					Pineapple				
Lima Beans					Plums				
Beets					Prunes				
Beet Greens					Raisins				
Broccoli					Rhubarb				
Brussel Sprouts					Strawberries				
Cabbage					Watermelon				
Carrots					Almonds				
Cauliflower					Cocoanut				
Celery					Peanuts				
Chard					Pecans				
Corn					Walnuts				
Cucumbers					Margarine				
Lettuce					Corn Syrup				
Onions					Honey				
Parsnips					Molasses				

* This test was compiled by the writer.

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- Kirkendall, L. A., "The Problem of an Evaluation Program," Educational Administration and Supervision, XXIX (1943), pp. 373-377.
- Sunderlin, Edith, "A Technique of Evaluation Learning," Journal of Home Economics, XXXIX (1947), 321-323.

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