FOOD SELECTION and PREPARATION

FOR

NORTH CAROLINA HOME DEMONSTRATION CLUB MEMBERS



FIRST STEPS IN FOOD PREPARATION

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING AND U. S. DEPARTMENT OF AGRICULTURE, CO-OPERATING

N. C. AGRICULTURAL EXTENSION SERVICE 1. O. SCHAUB, DIRECTOR STATE COLLEGE STATION RALEIGH

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FOREWORD

This bulletin comprises nine assignments in food selection and preparation and is intended primarily for Home Demonstration club members as a part of the four-year plan of work. It is one of a series written to encourage better food selection and preparation, as well as good nutrition. It is hoped that improved food and health habits for the farm family will result.

> JANE S. MCKIMMON, Assistant Director of Extension.

CONTENTS

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	PAGE
Introduction	
I. Nutrition and Health	10
II. Cereal Foods	13
III. Fruits	
IV. Vegetables	
V. Milk	
VI. Eggs	
VII. Quick Breads	
VIII. Table Service	
IX. Achievement Day	

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Extension and State College Bulletins.

Height-Weight Charts. American Child Health Association.

Boston Cooking School Cook Book. Farmer.

Text-Book on Cooking. Greer.

The Newer Knowledge of Nutrition. McCollum.

Table Setting and Service. Allen.

FOOD SELECTION AND PREPARATION

By MISS MARY B. THOMAS, Specialist in Nutrition

THE AIM of this circular is to explain the principles of food selection from the point of view of health and to make clear the various methods by which food is prepared, thereby improving home practices that will aid in increasing the well-being of the family.

To be well-fed means more than having a certain quantity of food. In selecting food or planning the menu for the family, the person should understand the function of the various foods in the body, should know how to prepare them to conserve their food value, and also how to serve them in an attractive way.

Cereals, fruits, vegetables, milk, and eggs will be the foods studied in this publication. The formation of good food and good health habits is emphasized.

The planning, cooking, and serving of a breakfast or supper to the whole family at the end of the course will reveal the degree of understanding and efficiency the club member has achieved.

REQUIREMENTS

Each club member must-

1. Follow the assignments under the direction of the Home Agent or the Local Leader.

2. Carry out home practices listed under each assignment.

3. Keep a record of cooking done and submit to Agent or Local Leader upon request.

4. Check food selection and health habits score at intervals as suggested under Home Work.

5. Plot height-weight chart and keep record of monthly gain.

6. Plan, prepare, and serve breakfast or supper for the family.

FOOD CONSTITUENTS

Food is one of the most important factors in bringing about a condition of good health, but in order to have the right kind of food for growth and health we must find out just what food is needed and what the different foods are used for.

Food is divided into various classes according to the work it does. If it builds bone it is put into one class; if it builds flesh it is put into another class. Some foods keep us warm and give us energy, some regulate the body processes, and others promote growth and health and help us to keep well. There are six of these classes of food—Water, mineral matter, protein, fats, carbohydrates, and vitamins.

Water is needed to regulate the body temperature, to aid in digestion, and to carry off waste.

Mineral matter helps to build certain parts of the body, as bones and teeth, and helps to keep the body in good running order. Milk, fruit, and vegetables supply these necessary minerals. Protein builds muscle. Many foods contain protein, but milk, lean meats, eggs, fish, peas, and beans are called protein foods because they contain larger proportions than do other foods.

Fats give heat and energy. They are obtained from butter, cream, oils, fat meats, and nuts.

Carbohydrates—sugar and starches—also supply heat and energy. They are obtained from sugar, bread, cereals, and potatoes.

In addition to the above mentioned foods, there are important substances called vitamins. Vitamins promote growth and protect our bodies from disease. Certain foods rich in vitamins, such as milk, butter, fruits, leafy vegetables, and whole-grain cereals, are called protective foods and are essential in our daily diet.

Food is cooked to develop new flavors, to make it more digestible, to kill bacteria, and in some cases to improve the appearance.

METHODS OF COOKING FOOD

1. Boiling—Cooking in water actually boiling (bubbling hard).

2. Simmering—Cooking in hot water below the boiling point.

3. Stewing—Cooking slowly in little water.

4. Steaming—Cooking in the steam from boiling water.

5. Broiling-Cooking in direct contact with fire.

6. Frying—Cooking in deep, hot fat which covers the food being cooked.

7. Sautéing-Cooking in a very little fat.

8. Baking and Roasting-Cooking in an oven.

MEASUREMENTS

All measurements should be level, using the back of a case-knife to smooth off the spoon or cup. A standard measuring cup (costing 10 cents) holds' $\frac{1}{2}$ pint. If $\frac{1}{2}$ teaspoon or tablespoon of dry material is measured, divide lengthwise.

TABLE OF ABBREVIATIONS

T. stand	s for tablespoon.	pt. stands fo	or pint.
t. stand	s for teaspoon.	qt. stands fo	or quart.
c. stand	s for cup.	oz. stands fo	or ounce.
pkg. stand	s for package.	lb. stands for	or pound.

TABLE OF WEIGHTS AND MEASURES

2	c.	sugar	=	1	lb.	3	t.		=	1	т.	
4	c.	flour	=	1	1b.	16	т.	(dry)	=	1	c.	
3	c.	meal	=	1	1b.	12	т.	(liquid)	=	1	c.	
2	c.	liquid	=	1	1b.	2	c.		=	1	.pt.	
2	c.	butter	=	1	1b.	2	pt.		=	1	qt.	

COOKING AND HOUSEKEEPING SUGGESTIONS

Success in cooking depends on following the rules carefully. Always wear a large apron while cooking and have clean hands and finger nails. Cleanliness is one of the first requirements of good housekeeping.

FOOD SELECTION AND PREPARATION

In tasting, pour from the stirring spoon to the tasting spoon, using a different spoon for tasting than for stirring.

Use holders instead of towels for handling hot dishes.

Clean the various dishes and utensils as you go.

DISHWASHING:

- 1. Bring dishes from dining-room.
- 2. Scrape and stack dishes according to type and place at right of dish-pan in the order to be washed.
- 3. Have hot suds and plenty of scalding water. Do not waste soap by allowing it to remain in the water throughout the time the dishes are being washed.
- 4. Wash dishes in following order:
 - a. Glasses.
 - b. Milk pitchers and bottles.
 - c. Silver.
 - d. Saucers.
 - e. Cups.
 - f. Plates.

a string that over hor tot is it.

- g. Bowls and platters.
- h. Cooking utensils.
- 5. Scald the dishes and leave them to drain, or dry thoroughly with clean towels.
- 6. Wipe off the kitchen table and stove.
- 7. Wash out dish towels with soap, rinse, and hang up to dry.

CARE OF THE STOVE.—Keep the stove clean by wiping it off with old newspapers. If it is very greasy, wash with hot water and soap. Polish frequently to keep from rusting.

CARE OF SINK.—A strainer will keep the sink free from particles of food. Wash the sink and strainer with hot soapy water after washing the dishes. If drainage is slow, a cup of household lye may be put on the drain and boiling water poured slowly over it. This will remove the grease, which usually causes the stoppage.

ALC: NO.

ASSIGNMENT I Nutrition and Health

Weigh and measure each club member. Have girls prepare weight charts and make first record of their weight.

Weight-Height-Age Table for Girls of School Age By Dr. Bird. T. Baldwin and Dr. Thomas D. Wood

i Yu Yu	Height (In.)	Av. Wt. for Ht. (Lbs.)	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs.	Height (In.)
38		33	33	33					:				is d				
39		34	34	34													
40		36	36	36	36												
41		37	37	37	37				1.00	0.00	1.1.1	0.001		1. 190			
		39	39	39	39									1			42
		41	41	41	41	41				1000						1.	43
		42	42	42	42	42											
45		45	45	45	45	45	45		11.7					1.00	19.	1	45
46		47	47	47	47	48	48				1111		1	0150	net.		
		50	49	50	50	50	50	50		1			1				47
		52		52	52	52	52	53	53					1.200		-8-1	• 48
		55		54	54	55	55	56	56			10.2					
50		58		56	56	57	58	59	61	62						101	
51		61			59	60	61	61	63	65	1.00		21.0		18.		
		64			63	64	64	64	65	67							
		68	100	0.000	66	67	67	68	68	69	71	1	112.60		1	1.1.1	53
		71		1.11	00	69	70	70	71	71	73		a diad			10.0	54
0.000		75				72	74	74	74	75	77	78					55
		79			100		76	78	78	79	81	83					56
		84					80	82	82	82	84	88	92			17	
		89					00	84	86	86	88	93	96	101			
		95						87	90	90	92	96	100	101	104		
60		101			-		-	91	95	95	97	101	105	108	109	111	60
		108							99	100	101	105	108	112	113	116	
		114	1000						104	105	106	109	113	115	117	118	
		111							101	110	110	112	116	117	119	120	
		110								114	115	117	119	120	122	123	64
65		125	7							118	120	121	122	123	125	126	
		129									124	124	125	128	129	130	
		123									124	130	131	133	133	135	
		133									131	133	135	136	138	138	
		138										135	135	138	140	142	
70		144										136	138	140	142	144	70
		144										138	140		144	145	
11		140										100	140	144	144	140	(1

When taking measurements remove outdoor clothing and shoes. Secure the best scale available. See that it is balanced. Weigh on same scale each time and as near the same hour of the day as possible.

To take height: While subject is standing in erect position with heels and shoulders against the wall upon which an accurate measure has been marked or pasted, place an empty chalk box or some similar object on her head in

FOOD SELECTION AND PREPARATION

such a way that one side of it is parallel with the tape line. The lower back edge of the box will indicate the exact height. Age is taken at nearest birthday, height at nearest inch, and weight at nearest pound.

Weight-He	eight-Age	Table	for 1	Boys of	School Age	
By DR.	BIRD T. BA	LDWIN A	ND DR	. THOMAS	D. WOOD	

Height (Inches)	Av. Wt. for Ht. (Lbs.)	5 Yrs.	6 Yrs.	7 Yrs.	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	17 Yrs.	18 Yrs.	19 Yrs.	Height (Inches)
38	34	34	34														
39	35	35	35														
40	36	36	36											1.000			40
41	38	38	38	38													41
42	39	39	39	39	39												42
43	41	41	41	41	41												43
44	44	44	44	44	44												44
45	46	46	46	46	46	46											
46	48	47	48	48	48	48											46
47	50	49	50	50	50	50	50			-93			0200				
48	53		52	53	53	53	53							197		1.10	
49	55		55	55	55	55	55	55									49
50	58		57	58	58	58	58	58	58	hob	1. 180	alat	ou-l	5.17	30.3	an	50
51	61		01	61	61	61	61	61	61				0				
52	64			63	64	64	64	64	64	64							52
				66	67	67	67	67	68	68		51.21					53
53	68			12.0	70	70	70	70	71	71	72			1210			
54	71				10						14						
55	. 74				72	72	73	73	74	74	74						55
56	. 78				75	76	77	77	77	78	78	80				1	56
57	. 82					79	80	81	81	82	83	83					57
58						83	84	84	85	85	86	87					58
59	. 89						87	88	89	89	90	90	90				
60	. 94						91	92	92	93	94	95	96				60
61	. 99							95	96	97	99	100	103	106			61
62	104							100	101	102	103	104	107	111	116		62
63	. 111							105	106	107	108	110	113	118	123	127	63
64	. 117								109	111	113	115	117	121	126	130	64
65	123								114	117	118	120	122	127	131	134	
66										119	122	125	128	132	136	139	
67										124	128	130	134	136	139	142	
68	139										134	134	137	141	143	147	
69	100										137	139	143	146	149	152	
	1.17				1						143	144	145	148	151	155	70
70											143	144	1.	148	151	155	71
71											148	150	151 155	152	154	163	72
72														150		167	78
73												157	160		164		74
74	169											160	164	168	170	171	74

Suggestions to Underweights

A person around 10 per cent underweight should have a thorough physical examination. Defects should be corrected. Vigorous exercise should not be taken. This means track, athletics, playing ball, swimming, riding bicycles, and the like.

N. C. AGRICULTURAL EXPERIMENT STATION

The usual three meals a day should be eaten slowly.

Extra milk may be taken between meals if it does not take the appetite for the meals.

Have a rest period of at least one-half hour during the day. Lie flat and sleep, or relax completely.

Daily Essentials

Investigators have found by experiment that by following a few simple rules the daily food requirements will be met. The daily diet should include—

One-half to one quart of milk daily.

At least two servings of vegetables other than potatoes and dried beans each day; a leafy vegetable if possible.

At least two servings of fruit each day, one raw if possible.

Tomatoes (fresh or canned) or oranges twice a week.

Whole-grain cereal or bread daily.

One egg daily.

One serving of meat daily.

Water-6 to 8 glasses daily.

On the Food Selection score-card have each club member score her food habits for one week.

Right food alone does not assure good nutrition and good health. To make the best use of well-selected food, the body requires cleanliness, fresh air, sunshine, exercise, rest, good posture, and happiness.

On the Health Habit score-card have each member score her health habits, placing the scores in the first column. Second and third scorings will be made later in the course.

All score-cards and weight cards should be filed, at the end of each scoring, with the secretary of the club.

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A reteor around 14 per cent underweight chronic mere a thorough physical variation. Deficits should be corrected. Clarrous exercise statuli not be shou. This means track, athletics, physica, ball, awimming, riding thereis,

ASSIGNMENT II Cereal Foods

There are many cereals or grains, but those most commonly used for food are wheat, rice, corn, oats, rye, and barley. From these are prepared the various breakfast foods and the flours and meals that are made into bread, rolls, crackers, and cakes.

Starch is the leading food material in cereals. Nearly three-fourths of most grains is starch, which furnishes the body with energy. Cereals also contain some protein and in many countries the greater part of the protein of the diet is furnished by cereals and not by meat. The protein in cereals is a good muscle-building material, especially when eaten with milk. The coarse, outside covering (cellulose) of grains is needed by the body for bulk and roughage and tends to cleanse the digestive tract and prevent constipation.

Iron, phosphorus, calcium (lime) and other minerals, needed for body building, and also vitamin B, needed for growth and health, are found in or near the outer covering, and when this is removed these substances are lost.

The whole-grain cereals are the most nutritious because all the food elements are retained. The use of one whole-grain cereal product each day is recommended by all health authorities. Water-ground meal and unpolished rice may be used as the breakfast cereal. The whole-grain cereals require long, slow cooking to soften the cellulose to make the starch more digestible and to develop the flavor. There is no danger of overcooking.

The ready-to-serve breakfast cereals are palatable, but are lower in food value and more expensive than the raw cereals. When serving cereals use little or no sugar. Use fresh fruits, such as strawberries and peaches, with the ready-to-serve cereals, and with the cooked cereals use dried fruits that have been slightly cooked in the cereal. These, with the addition of milk, eggs, fruits, and vegetables, form an adequate and economical diet.

GENERAL RULES FOR COOKING CEREALS

Pour cereal slowly into boiling salted water. Cook directly over the flame for about 10 minutes, then place over boiling water and cook from a half to six hours, depending on the cereal. Usually one teaspoonful of salt is used for each cupful of cereal. The quantity of water depends on the kind of cereal. The fireless cooker solves the problem for breakfast, as the cereal can be put into it the night before and reheated next morning.

KIND	QUANTITY	WATER	TIME
Steam cooked and rolled oats Rice (steamed) Oatmeal (coarse) Whole wheat Hominy (fine)	1 c. 1 c. 1 c. 1 c. 1 c. 1 c.	1 ³ / ₄ c. 4 c6 c. 6 c. 6 c. 4 c.	30 minutes 45-60 minutes 3-6 hours 4-6 hours 1-2 hours

Table ;	for	Cooking	Cereals
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Oatmeal in Fireless Cooker

6 c. water 2 t. salt 2 c. oatmeal

Add oatmeal gradually to boiling water, cook rapidly over the flame for 10 minutes, stirring constantly. Place in fireless cooker overnight. Reheat by placing cooker vessel in a pan of hot water over the fire.

N. C. AGRICULTURAL EXPERIMENT STATION

Corn-meal Mush

4 c. boiling water 1 t. salt 1 c. corn meal

Prepare according to the general rule as given above and cook for at least three hours over boiling water or place in a fireless cooker overnight.

Rice

Add 1 c. rice to 6 c. boiling water to which has been added 2 t. salt. Cook until tender. Pour into colander and drain thoroughly. Place in warm oven to allow moisture to escape.

Hominy

1 c. grits 2 t. salt 4 c. water

Wash grits and add slowly to boiling salted water. Cook ten minutes, then place in double boiler and cook two hours. Stir to prevent lumping.

Left-over Cereals

Never throw away any cooked cereal. It may be used in a number of ways.

1. Mold in small cups with raisins, dates, or other fruits, and serve with sugar and cream.

2. Rice or hominy may be mixed with egg, molded into small cakes, and browned either in the frying-pan or the oven. Serve with sugar or syrup.

3. Corn-meal mush may be cut into slices and browned in a frying-pan. Serve with syrup.

Toast

Bread is perfectly toasted when it is dried out thoroughly and then browned on the outside. Both the crumb and the crust of the toast are thus made crisp, which is easily digested. Fresh bread contains much moisture. When it is toasted quickly the moisture is enclosed in the interior of the slice and the resulting toast is very soft and does not break into bits when masticated, but remains in a solid mass, making it difficult to digest.

Good Combination

Fruit (fresh) Oat meal Milk

Demonstration: 1. Effect of cold water on starch.

- 2. Effect of heat on starch.
 - 3. Cereal Cookery-Fireless cooker.
 - 4. Compare long cooking for cereal with short cooking.
 - 5. Compare ready-to-serve cereal with raw cereal.

6. Prepare dry toast.

Records: Check Food Selection score-card on which an accurate daily score for one week has been kept. Check weight charts and note gain.

Explain the use of Foods Record Book.

Home Work: Prepare and serve at least twice:

Oatmeal Rice Toast

ASSIGNMENT III Fruits

Fruits should be included in the diet twice a day. It may be the same fruit served twice, or two varieties. Fresh fruits are best, and for most of the year some fresh fruits are available on North Carolina farms. Strawberries, blackberries, huckleberries, dewberries, raspberries, figs, cherries, plums, peaches, apples, pears, grapes, and melons, all contain valuable food properties and should be used extensively in the diet. Drying and canning of the surplus provides the fruits for the winter months.

Fruits contain relatively large amounts of mineral elements, such as iron, lime, and phosphorus, which are essential in building bones and teeth, in keeping the blood and other body fluids in good condition and in giving tone to the muscles. Apples, grapes, raisins, plums, and prunes are especially rich in iron. The acids in fruits stimulate the appetite and with the bulk supplied by the fiber and peeling of the fruit aid in the elimination of body waste.

Fruits are rich in vitamins that make for growth and health. Since all fruits do not contain the same vitamins, it is best to use a variety. Oranges, raspberries, strawberries, peaches, and tomatoes are rich in vitamin C. Some fruits contain considerable sugar, which supplies energy to the body. They also lend attractiveness and variety of flavor to the diet.

Fruits are at their best when thoroughly ripe, and only ripe fruits should be eaten raw. Be careful to wash thoroughly all raw fruits before peeling or eating. These should be chilled before serving, to make them more palatable and refreshing. They should be eaten with little or no sugar added, as too much sugar destroys the distinctive flavor of the fruit. Tomatoes, canned or fresh, may be substituted occasionally in place of fruit, as they are similar in food value.

Fresh fruits may be baked, steamed, stewed, or cooked in combination with other foods. Dried fruits should be soaked for several hours and then cooked in the water in which they were standing.

Baked Apples

Wash and core apples. Place apples in baking dish, put one tablespoonful of sugar in the cavity of each apple and a slice of lemon on top. Add enough water to cover the bottom of the baking dish. Cover, bake in a slow oven until soft. Serve cold, with cream. If apples are very sour, more sugar may be added, and a few gratings of nutmeg may be used instead of lemon for seasoning.

Baked pears may also be prepared in the same way.

Apple Sauce

Wash, cut into quarters, remove core, and peel. Cook fruit in enough boiling water to keep it from scorching. When fruit is tender, remove it from the fire, stir or beat until smooth or press through a colander. Add the sugar at once and stir until the sugar is dissolved. Use $\frac{1}{6}$ to $\frac{1}{4}$ cupful of sugar for each cupful of cooked fruit. If the fruit is lacking in flavor, add nutmeg, cinnamon, or lemon juice.

N. C. AGRICULTURAL EXPERIMENT STATION

Stewed Fruit

Make a syrup of sugar and water, using one cupful of water and ¾ cupful of sugar. When syrup is boiling add the fruit that has been quartered, cored, and peeled, and cook gently until tender. If the syrup is not thick enough, when the fruit is tender, remove the fruit from the syrup until of the proper consistency and then pour over the fruit.

Prunes (and Other Dried Fruits)

Wash prunes carefully. Place in the saucepan in which they are to be cooked and pour enough cold water over the fruit to cover it. Cover the saucepan and allow the fruit to soak for several hours or overnight. Then cook the fruit at simmering temperature in the water in which it was soaked. When the fruit is tender, remove saucepan from the fire, add sugar ($\frac{1}{4}$ cup for each cup prunes), if desired, and stir until the sugar is dissolved. Serve cold.

Apple Float

Whites of 3 eggs 3/4 c. apple pulp Sugar

Peel, quarter, and core four sour apples. Cook until soft, rub through sieve; there should be $\frac{3}{4}$ cup of apple pulp. Beat whites of eggs until stiff, add gradually apple pulp sweetened to taste, and continue to beat. Pile lightly on glass dish, chill and serve with boiled custard.

Good Combinations

(1) Fresh fruit (peaches) Ready-to-serve cereal Cream (2) Apple Sauce Toast Milk

Demonstration: Preparation and serving of fruits:

Fresh Cooked Dried

Records: Check weight chart and note gain.

Record in Foods Record Book practices carried out since last meeting.

Home Work: Prepare and serve six or more fruits. Make second score on Health Habits chart.

on Apple Same

Wash, on this quarters remove core, and peet. Opti Light in emotion from ing wave to beep it from noordinate. When finds in leader, remove it from the fire, stir or tent until smeath or press through a colunder. Add the angut at once and stir until the signir is dissolved. Use 's to 's coupled' of regar for each entried in the digit. Mithe fullt is looking to flavor add unitaries, an entried of cooled in the light is heating to flavor add unitaries.

ASSIGNMENT IV Vegetables

Two vegetables each day, other than potatoes, should be included in the diet. A leafy vegetable eaten three times a week throughout the year is essential, while one every day is ideal.

Vegetables contain mineral substances, like iron, lime, phosphorus, and others that are needed to build bones and teeth, and to keep the blood and other body fluids in good condition.

Vitamins, the growth-promoting substances, are found in vegetables, and because some of the vitamins are destroyed by heat it is advisable to eat one raw vegetable or fruit each day. Many vegetables, like greens (turnip tops, mustard, collards, kale), celery, string beans, cabbage, carrots, beets, and turnips, contain fiber called cellulose, which gives bulk to one's food and tends to prevent constipation. Some of the vegetables, as potatoes, contain starch and some sugar, which furnish strength for work and play. A few vegetables—dried peas and beans—contain considerable protein, and when served no meat is necessary at that meal.

The all-year garden supplemented by tomatoes, okra, beans, and corn canned during the summer, the dried beans and peas and the stored roots, provide a variety of vegetables for the winter months.

In selecting vegetables to cook see that they are young, tender, and fresh. Wash them in cold water, and if they are wilted let them stand in water until freshened.

Cooking vegetables in a large amount of water drains out many of the mineral substances and much of the flavor. To prevent this, cook them in as little water as possible, and serve what is left with the vegetables or use it for soup.

Cook vegetables only until tender. Over-cooking causes a loss of flavor and vitamins, toughens the fiber, and changes the color. Baking and steaming are the best ways of cooking vegetables to preserve their food values. Greens are best steamed, or cooked in the water which clings to the leaves. Dried vegetables should be soaked for several hours before cooking. When canned vegetables are used the can should be opened at least an hour before cooking or serving. By pouring the contents of the can into an open dish, fresh air combines with the food, which helps to bring back the original flavor of the food.

To encourage the eating of more vegetables they should be prepared in a variety of appetizing ways. The addition of butter, milk, eggs, or cheese in the form of good sauces often makes them more palatable and gives added food value.

The frequent use of cabbage as a part of the diet is urged. It is particularly rich in vitamins and minerals, furnishes bulk, and is available at all seasons. It is most wholesome when eaten raw, hence should be served often.

Cole Slaw

Chop or shred cabbage. To 1 quart of cabbage add teaspoonful of salt, 1 tablespoonful sugar, 4 tablespoonfuls vinegar, 1 pimento. Mix well and serve. Cole slaw may be served with boiled dressing.

Cabbage (Boiled)

Cut into quarters and let stand for half an hour in cold water to which a tablespoonful of salt has been added. This will draw out any insects that may be hidden in the leaves. Remove cabbage from water, cut into slices and cook in an uncovered vessel in a small amount of boiling salted water until tender (20 to 25 minutes). Put in a bowl, add seasonings of butter, salt, and pepper and cut in small pieces. Cabbage may be served with white sauce or cheese sauce.

Spinach and Other Greens

After spinach or any other tender greens have been washed, put them into a kettle without adding any water. Enough water will cling to the leaves. Cook for 15 to 20 minutes. Season with butter and salt. Garnish the dish with slices of hard-cooked egg or crisp slices of bacon. Any liquid left should be served with the vegetables or saved and made into soup.

Snap Beans

String the beans and cut in two-inch lengths. Cook in small amount of boiling water until tender. Season with butter, salt, and pepper or serve with medium white sauce.

Vegetables Cooked With Meat

Boil one-quarter pound of mixed salt pork in a small amount of water for two hours. Prepare leafy vegetable or string beans as for cooking in salt water. Add vegetable to the pork and boil rapidly until tender (20 to 30 minutes). Season with salt and pepper. Serve the pork with the vegetable.

Beets

Select small tender beets. Cut off tops one inch from beet. Do not break skin or roots. Cook until tender in boiling salt water. Drain, cover with cold water, and rub off skin. Cut into slices. Season with butter, salt, and pepper. Vinegar may be added if desired.

Carrots

Select small tender carrots. Wash, cook in boiling salt water until tender. Peel, cut into cubes or slice. Season with butter, salt, and pepper or serve with white sauce.

Corn on the Cob

Select fresh, tender corn. Free corn of husks and silks. Have a kettle of water boiling hard, drop the corn into the water and boil ten minutes. Re move from water. Season with salt and pepper and butter. Serve at once.

Green Peas and Lima Beans

Remove from shell and cook in small amount of boiling water until tender. Season with butter, salt, and pepper.

Okra

Select tender pods of okra. Wash and trim off stem end without cutting into seed pod. Cook in boiling salt water until tender. Season with salt, pepper, and butter. Okra may be cut and cooked with tomatoes.

Dried Vegetables

Look over and discard bad vegetables. Wash well, soak overnight in cold water.

In the morning cook slowly until tender, removing the cover during the last half-hour to let the water evaporate. Season with salt, pepper, and butter.

Baked Potatoes

Select smooth, medium-sized potatoes. Wash with a vegetable brush and place on the grate of a hot oven. Bake until they are soft (about 40 minutes). Remove from the oven. Break the skin to allow the steam to escape. Serve at once in an uncovered dish.

Properly baked potatoes are more digestible than potatoes cooked any other way. The steam which is held under pressure by the skin becomes hotter than boiling water, hence a baked potato is cooked at a higher temperature than a boiled potato and the starch is more thoroughly cooked. When the potato is baked no food value is lost.

Boiled Potatoes

Wash, drop into boiling salt water and cook until tender (about 30 minutes). Drain off every drop of water and put uncovered vessel on back of stove to allow steam to escape, thus making the potatoes as mealy as possible. Serve in the jackets. (If to be served without the jackets, peel as soon as water is drained off.)

Mashed Potatoes

Remove jackets of potatoes that have just been boiled. Mash until smooth or put through a potato ricer. To one pint of potatoes add one tablespoonful butter, one-half teaspoonful salt, a little white pepper, and hot milk to moisten. Beat until creamy and free from lumps. Pile lightly in a dish and serve.

Good Combinations

(2)
String Beans
Beets
Boiled Potatoes

(1)

Demonstration: Prepare and serve three vegetables of different types. Record: Check weight chart and note gain.

Record in Foods Record Book practices carried out at home. Check second score on Health Habits chart. Note improvement.

(9)

Home Work: Prepare and serve at least six vegetables. Make second score for one week on Food Selection score-card.

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ASSIGNMENT V

Milk

Milk stands out in value beyond all other foods, for it contains some of all the food classes. It contains more lime for bone and tooth building than any other food and the protein is the best kind of protein for muscle building.

It contains fuel in the form of butter-fat and milk sugar. It also contains the vitamins that promote growth and help to keep one physically fit. The fat of milk is especially rich in vitamin A, which has to do with growth. Although more than four-fifths of milk is water, it contains valuable nutritive substances and must be considered a food rather than a mere beverage.

Every child should have a quart of milk every day, for milk is the best food for the proper growth and development of children.

Keep milk clean, cool, and covered.

Milk may be used as a drink, on cereals, or it may be made into palatable, healthful dishes. Even those persons who do not like the taste of milk like it when it is served in the form of cream soups, cream dishes, and milk desserts. The taste is changed by heating it to a high temperature. Less change, however, is produced by scalding than by boiling. It is also apt to scorch if cooked at boiling temperature.

Milk Dishes

Everyone should know how to make a good smooth white sauce, as it forms the basis of all cream soups and creamed dishes.

SAUCE	LIQUID	THICKENING	BUTTER	SEASONING	USE
Thin Medium	1 c. milk 1 c. milk		1 T. butter 2 T. butter	1/4 t. salt 1/4 t. salt	Cream soups Cream dishes Scalloped dishes
Thick	1 c. milk	4 T. flour	3 T. butter	1/4 t. salt	Croquettes

White Sauce

Use double boiler so milk will not scorch. Melt butter, add flour and salt, stir until smooth. Add milk gradually, stir constantly. Cook until thick.

Creamed Dishes

Vegetables to be served with white sauce should be cooked in boiling salt water, drained and covered with sauce. One cup of medium white sauce will cover two cups of vegetables.

Asparagus, onions, potatoes, green peas, carrots, cabbage, and salsify are good examples of vegetables to be served in this way. Asparagus is more attractive if it is arranged on slices of toast and then covered with the sauce.

Potatoes should be cut into cubes.

Green peas are frequently served in timbals or in cubes of bread hollowed out and toasted.

Left-over chicken or fish can be cut into small pieces and reheated in white sauce, making a delicious supper dish.

Hard-cooked eggs, oysters, sweet breads, and chipped beef are suggested as good supper dishes or luncheon dishes when combined with white sauce.

CREAM SOUPS

Cream soups depend entirely on the sauce for thickening, and more flour must be used than in purees, since the latter are partially thickened by the starch in the vegetables. The flour "binds" the mixture in purees.

CREAM OF TOMATO SOUP

1 can tomatoes 1 quart milk 1/3 c. flour

¹/₄ cup of butter 1 T. salt ¹/₄ t. soda

1/8 t. cayenne pepper

Cook tomatoes in covered saucepan until soft. Press through a colander and add soda to neutralize the acid. Make a white sauce of the flour, butter, milk, and seasonings, and place on back of range in double boiler. When ready to serve, add the hot tomato juice slowly to the white sauce, stirring constantly. Serve at once, as the soup will curdle if it is reheated.

POTATO PUREE

1 c. cooked mashed potatoes	1 T. butter
1 qt. milk	2 t. salt
1 T. flour	1 T. chopped onion
1/2 t. pepper	

Heat the milk in a double boiler with the onion. Add one-half of the milk to the mashed potatoes, beat thoroughly and reheat in double boiler. Make a white sauce of the remainder of the milk and the other ingredients and combine with the potato mixture. Cook in double boiler for ten minutes. Strain and serve with bits of parsley.

Note the difference in the amount of flour used in the tomato soup and in the puree. The potatoes in the puree furnish a large amount of starch, so very little flour is needed for thickening.

A variety of palatable and nourishing cream soups may be made—corn, asparagus, green pea, carrot, and others—by adding the vegetable pulp to thin white sauce in the proportion of $1\frac{1}{2}$ cups of pulp to 4 cups of sauce.

COCOA

 $1\frac{1}{2}$ T. cocoa 2 T. sugar 1 c. boiling water 3 c. milk

Few grains salt

Mix cocoa and sugar thoroughly. Add boiling water and allow to boil until dark and shiny. (Cocoa contains starch and must be thoroughly cooked to bring out the flavor.) Add milk. Stir until well mixed. Bring quickly to the boiling point. Beat with Dover egg-beater to prevent formation of scum.

Good Combinations

(1) (2)

Crackers Cocoa

Cream of Tomato Soup Creamed Chicken on Toast

Demonstration: White sauce for creamed vegetable. Cream of tomato soup. Introduction with the standard below in Cocoa.

Records: Check daily score on Food Selection score-card that has been kept for one week since last meeting.

Check weight charts.

Record in Foods Record Book practices carried out since last meeting.

Home Work: Prepare and serve at least twice:

1. Creamed vegetable.

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- 2. Cream soup.
- 3. Cocoa. and and the second second second share a state of the second second second second second second second second s

ASSIGNMENT VI

Eggs

Eggs are a valuable food, for, like milk, they contain the elements so necessary for the support of the body. The egg yolk is one of our richest sources of iron, and of vitamin A, while the white yields a good supply of protein of excellent quality. Phosphorus and sulphur are two other valuable elements of which eggs are good sources. Milk is lacking in iron, but rich in lime, hence the combination of milk and eggs makes an excellent food. Eggs may be used in place of meats. Select them as a part of your diet at least four times a week.

Eggs are more easily digested if they are cooked below the boiling point, as boiling them makes the albumin (white) tough. Eggs may be soft or hard cooked in the shell, coddled, poached, scrambled, or served with cereals, vegetables, milk, or in combination with other foods.

Soft Cooked Eggs

Have a saucepan nearly full of boiling water, add eggs carefully, cover and remove pan to back of stove, where water cannot boil. For very soft eggs let stand 5 minutes, medium 8 to 10 minutes.

Hard Cooked Eggs

Follow above directions, allowing eggs to stand 30 minutes, being careful to keep water just below the boiling point. The shells are more easily removed if eggs are plunged into cold water after they are taken from the fire.

Poached Eggs

Fill a shallow pan about two-thirds full of boiling water. Add one-half teaspoonful of salt for each pint of water. Break each egg separately into a saucer and carefully slip it into the water. Cover the pan and place where the water will keep hot, but not boil. Let stand (about 5 minutes) until the white is coagulated and a film covers the yolk. Take up carefully, drain, place on slice of toast and serve at once.

Scrambled Eggs

4 eggs.		1/8 t. pepper.
$\frac{1}{2}$ c. milk.	i curso h	1 T. butter.
1 t. salt.	and the second	

Beat eggs, add milk and seasonings. Pour into hot pan in which the butter has been melted. Stir constantly until the mixture is of the right consistency. In serving scrambled eggs, several slices of crisp breakfast bacon will make the dish more appetizing.

Creamed Eggs

6 hard-cooked eggs. 1 c. medium white sauce. Salt and pepper.

Peel eggs and cut in halves lengthwise. Place on buttered toast. Pour white sauce over them and serve.

N. C. AGRICULTURAL EXPERIMENT STATION

Combinations of Milk and Eggs

BOILED CUSTARD

1 qt. milk (sweet). $\frac{1}{2}$ c. sugar. 4 eggs.

1 t. vanilla.

1/8 t. salt.

Beat the yolk and add sugar gradually; pour the scalded milk into the eggs and sugar, beating all the time. Pour the mixture back into the double boiler and cook until it is thick enough to coat the spoon. Remove from the fire immediately. Cool slightly and cut in the whites of the eggs; add salt, cool and flavor to taste.

ICE CREAM

The custard given in the above recipe may be frozen for ice cream. In freezing the mixture use three parts ice to one part salt if a smooth texture is desired. In serving a frozen custard vary the appearance of it by using a few fresh strawberries or sliced peaches as a garnish. When fresh fruits are out of season a spoonful of preserved pineapple or a small amount of chocolate sauce with each serving will give variety and interest to an otherwise plain dish.

CUP CUSTARD

Use the recipe for boiled custard, but instead of cooking the mixture in the double boiler, pour it into custard cups and dust with nutmeg. Set the cups in a pan of hot water and bake in a slow oven until set. Garnish with whipped cream when ready to serve.

Good Combinations

(1)	(2)	(3)
Fruit.	Poached egg on toast.	Potato puree.
Soft-cooked egg.	Cocoa.	Croutons.
Toast.		Cup custard.

Demonstration: Egg cookery.

Records: Check weight chart and note gain.

Record in Foods Record Book practices carried out since last meeting.

Home Work: Prepare and serve at least twice:

Soft-cooked eggs. Scrambled eggs. Creamed eggs.

Plan and bring to next meeting breakfast menu that you would be able to prepare and serve to your family.

ASSIGNMENT VII Quick Breads

Owing to the large amount of starch contained, bread is one of our chief sources of heat and energy. Breads made from whole-grained cereals have a much higher food value than those made from refined flours, as the whole-grain flour contains cellulose, minerals, vitamins, and other food elements that are so necessary to keep the body in good condition.

Bread, however, is not always wholesome, due to poor ingredients, wrong methods of preparation, and poor baking.

Quick breads are those that are prepared in a very short time and are intended to be served at once while they are fresh and hot. They are classified according to the amount of flour and liquid used.

CLASS	LIQUID	FLOUR	EXAMPLE
1. Pour batter 2. Drop batter 3. Soft dough 4. Stiff dough	1 c. milk 1 c. milk 1 c. milk 1 c. milk 1 c. milk	1 c. 2 c. 3 c. 4 c.	Popovers Muffins—Cake Biscuits Pastry

When flour is moistened and baked to make bread, other ingredients are usually added to improve the flavor and texture. The flavor is improved by the addition of fat, salt, sugar, spices. To improve the texture a leavening agent is needed to make the bread rise.

The following are the leavening agents used for quick breads:

1. Steampopovers

2. Carbon dioxide gas-

- a. Baking powder and sweet milk.....biscuit, cake
- b. Soda and sour milk.....biscuit, corn bread
- c. Soda and molasses.....ginger-bread
- 3. Air (incorporated into egg by beating)......cake

In preparing all quick bread mixtures the flour should be sifted before measuring. Usually any other powdered ingredients, such as baking powder, soda, or spices, are added to the flour and mixed thoroughly in the sifting.

Oven Temperatures—Quick breads require a hot oven (425 degrees F. to 450 degrees F). Oven temperatures may be estimated as follows: (a) note number of minutes required to change white paper, flour, or bread to a light brown or to a golden brown; (b) note the number of counts (one count per second) that the hand may be held in the oven.

Tests for Sufficient Baking of Quick Breads

Quick bread is usually sufficiently baked (a) when it is a golden brown in color; (b) when the mixture shrinks from the pan; (c) when the crust springs back into place if pressed gently with the fingers.

N. C. AGRICULTURAL EXPERIMENT STATION

Popovers

1 egg. $\frac{1}{2}$ t. salt.

1 c. milk. 1 c. flour.

$\frac{1}{2}$ t. butter (melted).

Grease iron muffin pans, place them in the oven and heat until very hot. Put all popover ingredients in a mixing bowl and beat the mixture with a Dover egg-beater. Pour into the hot pans and place in a hot oven. Bake 30 to 35 minutes. Decrease the heat after ten minutes.

Plain Muffins

2 c. flour.	1 T. sugar.
3½ t. baking powder.	1 egg.
1/2 t. salt.	1 c. milk.
2 T. fat	a the those this of

Break the egg into a mixing bowl, beat it. Add milk. Mix the dry ingredients thoroughly and sift them into the egg mixture. Add melted fat, mix and drop into buttered muffin pans. Bake in a hot oven about 25 minutes.

Whole-Wheat Muffins

1 c. whole wheat flour.	$3\frac{1}{2}$ t. baking powder.
1 c. white flour.	1 egg.
1 T. sugar.	1 c. milk.
$\frac{1}{2}$ t. salt.	2 T. fat.

Mix and bake as Plain Muffins.

Corn Bread

2 c. corn meal.	1 egg.
¾ t. soda.	2 T. shortening (melted).
¾ t. salt.	$1\frac{1}{2}$ to 2 c. buttermilk.

Beat the egg until light, add a portion of the liquid and all the meal which has been sifted with the soda and salt. Add as much of the remaining liquid as is needed to make a smooth batter. Add the melted shortening and beat well. Pour into greased and sizzling hot pans and bake in rather quick oven about 25 minutes.

Ginger Bread (Without Eggs)

2 t. ginger.
1 t. soda.
2½ c. flour.
2 T. fat.

Mix all dry ingredients. Put the sour milk and molasses in a mixing bowl. Add the dry ingredients (through a sifter) to the milk and molasses. Melt the fat and turn at once into a shallow oiled pan or into muffin tins. Bake in a moderate oven 20 to 30 minutes.

Baking Powder Biscuits

1 t. salt.

2 c. sifted flour.

4 t. baking powder.

About 3/4 c. milk.

2 T. fat.

26

FOOD SELECTION AND PREPARATION

Mix the dry ingredients and sift. Cut the shortening into the flour with two knives until well distributed. Add just enough milk to make a soft dough that can be handled on the board, mixing with a tablespoon. Place on floured board, pat and roll lightly $\frac{1}{2}$ inch in thickness. Cut out and bake in hot oven about 12 minutes.

Buttermilk Biscuits

2 c. sifted flour.

¹/₄ t. soda. 3 T. fat.

1 t. salt.

2 t. baking powder. About % c. buttermilk.

Mix as in Baking Powder Biscuits.

Demonstration: Corn bread. Biscuit.

Records: Check weight chart and note gain.

Record in Foods Record Book practices carried out since last meeting.

Check and discuss breakfast menus submitted by club members.

Home Work: Prepare and serve at least twice:

Biscuits.

Corn bread.

Ginger bread.

Plan and bring to next meeting a supper menu you would be able to prepare and serve to your family.

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ASSIGNMENT VIII

Table Service

Factors which contribute to the well-served meal are a clean, well-lighted, well-ventilated room, a carefully set table, and the observance of a few simple, common-sense table courtesies.

Table-Setting

Before setting the table, see that it is the right size or length for the number of people to be served. About 20 inches should be allowed for each person. A pad of heavy cloth, called the silence cloth, is first placed on the table. It protects the table, lessens the noise, and gives a better appearance to the table. Spread the tablecloth smoothly and evenly, with the central crease at the center of the table. A centerpiece of fresh flowers, arranged in a low vase or bowl, so as not to obstruct the view across the table, will add much to the attractiveness.

The silver and dishes needed for the service of each person is called "a cover." Place the plate in the center of the cover one-half inch from the edge of the table. The knife should be on the right of the plate with sharp edge turned toward it. Spoons are on the right of the knife and the fork is placed at the left of the plate, with the tines up. Place all silver with lower edge one inch from the edge of the table. The napkin is placed at the left of the fork with the open corner toward the lower end of the fork, or, it may be in the center of the place, if plates are piled before the one who will serve. The water glass should be at the tip of the knife. If bread and butter plate is used it should be put at the left of the plate, beyond the end of the fork.

If the beverage is to be poured at the table, cups and saucers may be piled in twos if necessary because of lack of space. Arrange all dishes and platters so that the table will look orderly and not crowded.

Table Service

When waiting on the table, do so as quietly and quickly as possible. Just before the meal is served fill the glasses three-fourths full of fresh, cold water and put butter, bread, and cream on the table.

When waiting on the table, pass to the left any dish from which a person helps himself, holding it low and so it can be easily reached—such as breads, gravy, sugar, etc. All dishes served in individual portions should be placed from the right, as coffee, tea, dessert. Remove dishes from the right.

The table may be kept more attractive and less crowded if the first course is removed before the second is served. To clear the table, remove all dishes containing food; first, the platter or principal dish, vegetable dishes, smaller dishes containing food; next remove the soiled plates and silver, and last of all the clean dishes or silver which have not been used. Do not stack dishes while removing them.

Table Courtesies

To be comfortable at meal time one must feel at ease. In order to feel at ease one must be familiar with certain accepted table courtesies. These are based upon convenience and upon consideration of others. In seating oneself and rising from the table do so from the left of the chair. Unfold the napkin below the edge of the table. Dinner napkins may be only half unfolded, but small lunch napkins should be entirely unfolded. Place napkin on the lap. Do not begin eating until everyone has been served. When the knife or fork is not being used it should be placed across the side of the plate and not tilted against the edge.

When eating soup, dip the spoon away from you. Sip the soup from the edge of spoon, not from the tip. Do not tip the plate or break bread or crackers into the soup. In eating bread or rolls, break off a small piece at a time and butter it. It is not permissible to butter a whole slice of bread at one time.

Do not cut all meat on the plate or mash all of the potato at one time, but prepare as you eat.

Do not attempt to talk while chewing food.

After stirring a hot drink, the spoon should be laid on the saucer and not left in the cup. Do not blow into the cup to cool the drink. It is never correct to pour the drink into the saucer.

Elbows should not rest upon the table or interfere with the person seated nearest.

Eat slowly. Hurried eating causes indigestion. Sit straight while eating. No loud or unpleasant noises should be made while chewing or drinking.

Use knife only to cut food; never to carry it to the mouth. Forks and spoons are used for this.

A special spoon should be used for the sugar bowl and a special knife for the butter-plate.

When passing the plate for a second helping, the knife and fork may be laid together on the right-hand side of the plate. This prevents soiling the table cloth.

It is impolite and inconsiderate to criticise the food.

Playing with the silverware or drinking glass is unnecessary and in bad form.

At the close of the meal place the knife and fork, side by side, across the center of the plate.

If the next meal is to be eaten at the same place, fold the napkin; otherwise leave it unfolded at the left of the plate.

Demonstration: Table setting and service.

Records: Check weight chart and note gain.

Record in Foods Record Book practices carried out since last meeting.

Check and discuss supper menus submitted by club members.

Home Work: Prepare and serve breakfast or supper to family.

Set table at least four times.

Make third score for one week on Food Selection score-card.

Make third score of Health Habits on score-card.

Write Achievement Story in Foods Record Book.

Complete records and have ready to submit to Home Agent or Local Leader at next meeting.

ASSIGNMENT IX Achievement Day

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Complete and check all records. Invite the community to attend the meeting.

Suggested program:

the hole of any of home moves the other that and 1. Reports of outstanding records in-Food Selections. Health Habits. Food Preparation.

2. An interesting Achievement Story.

3. Demonstration by club member.

4. Health Play-Club.