

# UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

THOMAS P. COOPER Dean and Director

---

CIRCULAR NO. 132

---

FOODS PROJECT, COURSE NO. 1

---

By the

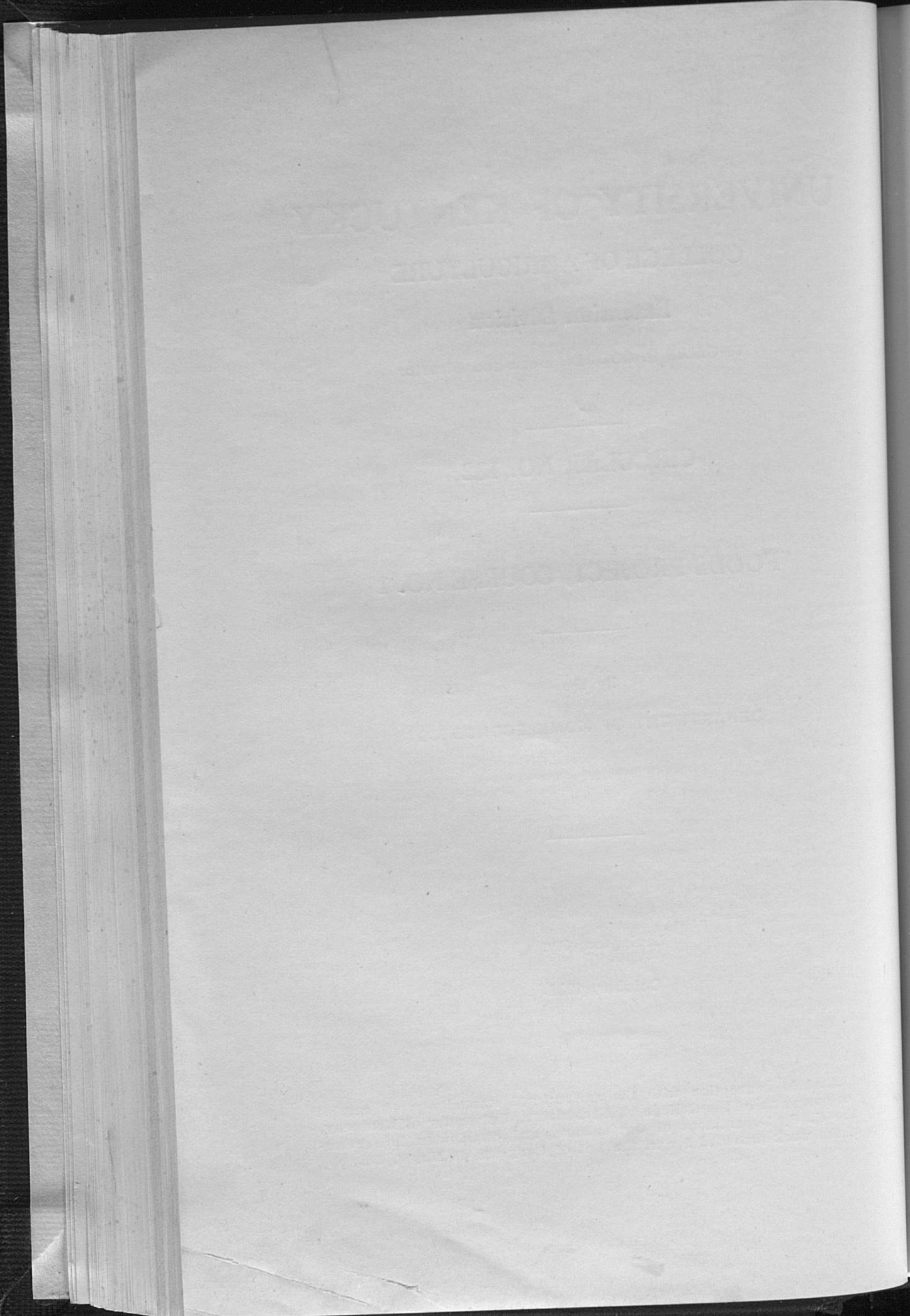
DEPARTMENT OF HOME ECONOMICS

---

Lexington, Ky.

October, 1922

Published in connection with the agricultural extension work carried on by co-operation of the College of Agriculture, University of Kentucky, with the U. S. Department of Agriculture, and distributed in furtherance of the work provided for in the Act of Congress of May 8, 1914.



## CIRCULAR NO. 132

### FOODS PROJECT, COURSE NO. 1

#### FOOD AND ITS USES IN THE BODY

Food is needed by the body to build and repair tissue, to produce heat and energy, to regulate the body processes and to supply substances which cause growth and help to preserve health. Food substances are divided into six groups; protein which builds or repairs muscle, fat which may be used to supply heat and energy or to build fatty tissue, carbohydrates (sugars and starches) which may be used like fat by the body, water, mineral substances and vitamins, the last three being necessary to keep the body in a healthy, normal condition.

The table on the next page lists the most important foods in each group.

For ease in selecting foods suitable to combine for a meal they may be classed in the following groups:\*

Group I. Fruits and vegetables

Group II. Meat and meat substitutes

Group III. Starchy foods, cereals and their products, flour, meal, potatoes, etc.

Group IV. Sugar, syrups, honey

Group V. Fats

#### REASONS FOR COOKING FOOD

Foods are cooked:

- a. To develop or change the flavor.
- b. To make the foods easier to chew or to improve the texture.
- c. To make them easier to digest.
- d. To make them more attractive.
- e. To increase variety in ways of serving.
- f. To destroy disease germs which may be present.
- g. To prevent some foods from spoiling quickly.

\*Adapted from "How to Select Foods"—Farmers' Bulletin 808, U. S. Department of Agriculture, Washington, D. C.

FOODS GROUPED ACCORDING TO THEIR USE IN THE BODY

BUILD TISSUE	PRODUCE HEAT AND ENERGY, FORM FAT	BUILD BONE AND REGULATE THE BODY	PROMOTE HEALTH AND GROWTH
	Fat	Carbohydrates	Mineral Substances
Protein		Mineral Substances	Water
Meat (lean)	Butter	Potates, Irish and sweet	Milk
Fish	Cream	Turnips	Cocoa
Eggs	Meat (fat)	Carrots	Fresh fruit
Milk	Bacon	Corn and its products (corn meal, hominy, etc.)	Green vegetables
Cheese	Oils	Wheat and its products (flour, bread, etc.)	
Nuts	Nuts	Rice	
Beans	Chocolate	Sugar, syrup, molasses	
Peas		Honey	
Chocolate		Bananas	
Cocoa		Prunes	
		Dates	
		Raisins	
			Mineral Substances
			(See fourth column)
			Vitamines
			Milk
			Butter
			Egg yolk
			Spinach
			Lettuce
			Cabbage
			Tomatoes
			Apples
			Oranges
			Yellow turnips
			Potatoes
			Carrots
			Legumes
			Yeast
			Whole cereal grains

**GENERAL DIRECTIONS FOR WORK**

Plan to wear a clean wash dress or waist, if possible.

Have fire ready for use when needed.

Pin or tie the hair back or cover it with a cap.

Remove any rings or bracelets.

Put on a clean apron large enough to cover the dress

Keep a hand towel near and always wipe the hands on it.

Have a holder at hand for lifting hot utensils and always use it for that purpose instead of towel or dishcloth.

Wash the hands thoroly and clean the nails.

Read the recipe thru carefully and plan necessary utensils, ingredients and order of work.

Collect utensils and materials needed before starting to work, with as few trips around the room as possible. "Let your head save your heels."

Keep the table neat as you work, piling soiled dishes together at one side, avoiding spilling materials and putting unused food materials away as soon as work is finished.

When testing food always put a little into another spoon with the mixing spoon.

Avoid waste of material by scraping mixing bowl, spoon and cooking utensils with knife or spoon.

*Fire Building.* To have fire we must have some fuel, a plentiful supply of oxygen, and something to heat the fuel to its kindling point, the point at which it begins to burn. The oxygen is supplied by the air, but to secure enough the fire must constantly have a fresh supply of air. Before laying a fire, remove all ashes from the grate in the fire-box. Lay in it crumpled paper first, then some small pine wood or other kindling, placing it crosswise so as not to fit close together, but let the air pass thru easily. Finally place on top larger sticks of pine or hard wood or a little coal. Open the drafts below the fire-box and the draft into the chimney, apply a match to the paper under the fire and place the covers on the stove.

When the fuel is well kindled, add coal or wood to fill the fire-box and when this is burning well close the draft into the

chimney and at least partly close the other drafts. To cool the stove quickly and to check the fire, open the dampers letting cold air on top of the fire.

*Care of Kerosene Stoves.* To avoid an unpleasant odor when in use the kerosene stove should be wiped off frequently to keep it free from oil. Unless a wickless stove is used, the wicks should be wiped every day or two so that the flame will be clear and hot. As the method of lighting varies with the different kinds of stoves, the directions which come with the stove should be followed.

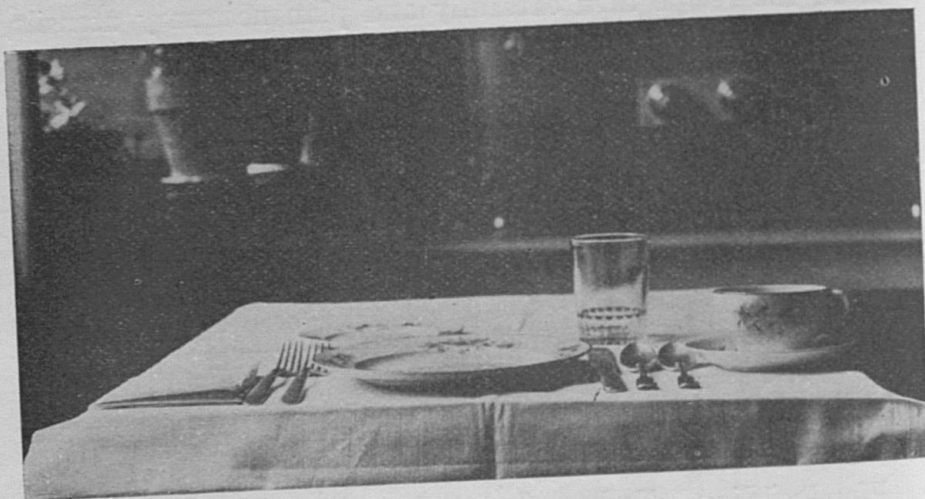


Fig. 1. Table Setting.

*Simple Rules for Table Setting.* Before setting the table see that the dining room is clean and a comfortable temperature. A pad of heavy cloth, very little larger than the table, placed under the tablecloth lessens noise and gives a better appearance. 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 its attractiveness. Place all silver with lower end one inch from the edge of the table. Knives should be on the right of the plate, with sharp edge turned toward it. Spoons are on the right of the knives. Forks are placed at the left of the plate, with the tines up. The napkin may be placed at the left of the forks, with the open corner to-

ward 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 plates are used, they should be put at the left of the plate, beyond the end of the fork. See Fig. 1.

Cups and saucers may be piled in twos if necessary because of lack of space. Arrange all dishes and platters so as to make the table look orderly and to avoid crowding.

*Table Service.* When waiting on the table always do so as quietly and quickly as possible. Just before the meal is served the glasses should be filled  $\frac{3}{4}$  full with fresh, cold water and the butter, bread, cream, etc., placed on the table. When waiting on the table, pass to the left any dish from which each helps himself, holding it low and so it can be easily reached. Plates and other dishes may be placed from the left with the left hand. The table may be kept more attractive and less crowded if the first course is removed before the next is served. Take off first the platters and large dishes and then the plates and smaller dishes.

*Dishwashing.* Scrape food from all dishes and pile them according to kind. Rinse in cold water dishes which have been used for milk, eggs, or starchy food. Soak sticky dishes in hot water and wipe greasy dishes out well with paper before washing. Prepare a dish pan with hot, soapy water and a rinsing pan with hot, clear water. Wash glassware first, then silver and then other dishes according to their cleanliness, washing the cooking utensils last. After drying all the dishes, wash the dish towels and cloths, rinse well and hang straight and even to dry in the sun, if possible.

*Table Customs.* Hands should always be well washed and the hair made neat just before going to the table. The chair should be placed so that one can comfortably sit up straight at the table. All unnecessary noise in eating and handling the dishes at the table and in the kitchen should be avoided. The knife should be used only for cutting food and the fork or spoon for carrying it to the mouth. When not in use the knife and fork should be beside each other across the plate a little one side of the middle, with the tines of the fork up. The spoon should

be placed in the saucer when not in use. A fork or spoon should be provided for serving each food and should always be used instead of one's own fork or spoon.

#### DIRECTIONS FOR MEASURING

The success of a recipe often depends upon accuracy in measurement. For dry materials, fill measure to overflowing, then level off with the straight edge of knife. Pack butter and other solid fats and brown sugar. For liquids just fill the measure. Flour should be sifted once before measuring and put lightly into the measure. To get one-half a spoonful, fill, level off and divide in half lengthwise of the spoon. Fig. 4 shows how to measure  $\frac{1}{4}$  teaspoonful.

#### TABLE OF ABBREVIATIONS

t. ....	teaspoon	pt. ....	pint
tb. ....	tablespoon	qt. ....	quart
c. ....	cup	lb. ....	pound
hr. ....	hour	oz. ....	ounce

#### TABLE OF MEASUREMENTS

3 t. ....	1 tb.	2 c. water or other liquid.....	1 lb.
16 tb. ....	1 c.	2 c. sugar .....	1 lb.
2 c. ....	1 pt.	2 c. butter or other solid fat.....	1 lb.
2 pt. ....	1 qt.	4 c. flour .....	1 lb.



Fig. 2. Measuring No. 1.



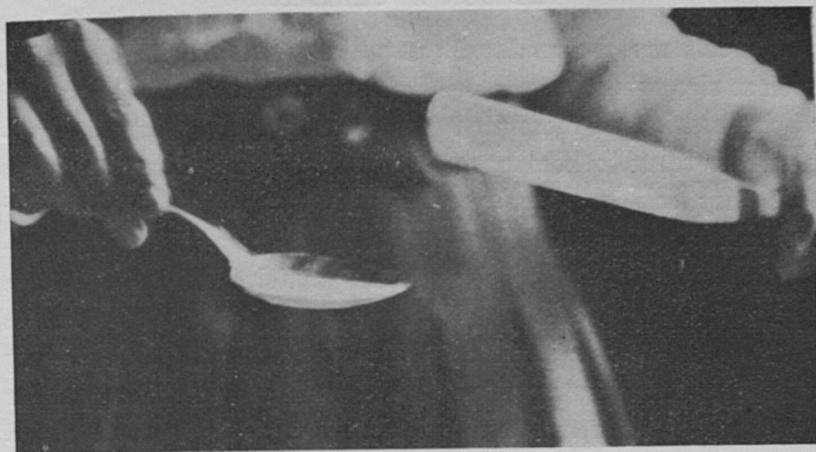


Fig. 3. Measuring No. 2.



Fig. 4. Measuring No. 3.

**LESSON I. CEREALS**

Cereals are the seeds of grass-like plants known as grains, such as rice, wheat, oats, etc. In America there is a wide variety of preparations of these used for breakfast foods. Some are prepared to serve, others partly cooked and rolled or ground so that they can be more quickly prepared, and others simply cleaned. The amount of water needed to be added to them depends largely upon the size of the particles of grain. Whole grains like wheat, oats, rice, etc., are prepared in the proportion of 1 c. cereal to 3 c. water. For coarse ground, like hominy grits, cracked wheat, etc., use 1 c. cereal to 5 c. water; and for fine cereals like cream of wheat, corn meal, etc., 1 c. to 4 or 5 c. of water.

The kernel of grain consists very largely of starch in the form of fine, white powder, held in little cells of woody fiber called cellulose. The bran or dark outer layers covering the grain contains valuable mineral salt substances and vitamins, and the germ contains some fat and protein. From this we can see that the meal or flour made of the whole grain supplies a wider variety of nourishment than that made from the white, starchy part only.

When eaten with milk or cream and a little or no sugar, well prepared cereals make an attractive dish for breakfast or supper and are nourishing and usually easily digested. They are an especially valuable food for growing children.

Make a list of all the kinds of cereals you can think of and check those you know you have at home.

**General Directions for Cooking Cereals:**

Measure water, add salt, and bring to boiling. Pour cereal in slowly, stirring constantly, let boil three minutes and set in double boiler or pan of boiling water for 20 minutes to one or two hours according to the kind of cereal. To prevent lumping, fine corn-meal or other cereal may be mixed first with a little cold water. Cereals may be made more nourishing by cooking them in milk.

**Oatmeal**

1 c. rolled oats

3 c. water

1 t. salt

Add salt to water and when it is boiling stir oats in slowly. Let boil 3 min., cover, set over boiling water and let cook for  $\frac{1}{2}$  hr. or more.

**Hominy Grits**

1 c. hominy grits

5 c. water

1 t. salt

If necessary, wash the hominy grits, cook like rolled oats, allowing it to steam 1 hr. or more.

*Reference.* How to select Foods, Cereal Foods, Farmers' Bulletin 817.

**LESSON II. BAKED APPLES AND BROWNE CRACKERS**

*Food Value of Fruits.* Altho nature supplies us with a very great variety of fruits which are good to eat, many people eat much less of them than they need. Beside acids and other attractive flavors, fruits are valuable for important mineral substances, water, sugar, and some of them, especially oranges and prunes, for vitamins. The rather large amount of cellulose which they contain as well as the acids, make them valuable in keeping the body free from waste material which would injure it. Apples are one of our most valuable fruits because of their acids and minerals, because they grow almost everywhere in the temperate zone and because they keep well and can be easily preserved by drying as well as by canning or jelly-making.

List all the ways of which you can think in which apples may be served.

**Baked Apples**

6 apples

6 tb. sugar

water

Select apples of as nearly the same size as possible. Wash well, cut out core with a corer or knife and place in a pie or baking pan. Fill the centers of the apples with the sugar, pour enough water around them to cover the bottom of the pan and bake in a moderate oven for 20 to 30 min. or till soft thruout.

6 crackers	Browned Crackers	3 t. butter
	Salt	

Spread  $\frac{1}{2}$  t. butter on each cracker and sprinkle with salt. Place crackers in baking pan and brown in a moderate oven.

*Reference.* Fresh Fruit and Vegetables as Conservers of Other Staple Foods. Farmers' Bulletin 871.

### LESSON III. Corn Battercakes

*Use of Left-over Cereals.* Left-over cooked cereals may be used in many ways and are usually too good for the chickens or pigs which can just as well eat cheaper materials that people cannot eat. If much cereal is left it can be warmed over in a double boiler, or be poured into a bowl or cups and chilled and served cold with cream or milk. This is a very nice way for hot weather, especially if fruit is mixed with it before pouring out, or is served with it. The chilled cereal may be sliced, covered with a little flour and browned in a hot pan with a very little fat and served with meats or eggs or with syrup. If only a little is left, it may be used in place of some of the flour in making muffins, battercakes, or waffles. It may be added to soups, made into croquettes, or combined with eggs, milk, sugar and flavoring to make puddings.

What else do you know about cereals?

#### Cornmeal Mush Battercakes

1 c. mush	$\frac{1}{2}$ c. flour
1 c. buttermilk	$\frac{1}{2}$ t. soda
1 egg	$\frac{1}{4}$ t. salt

Add salt and soda to flour after measuring it. Sift all together. Mix mush and milk, add the flour slowly, then the egg well beaten. Drop at once in spoonfuls on a hot, greasy griddle or frying pan. When the edges begin to look cooked, turn the cakes and let brown on the other side. If many bubbles rise and break before the cake is ready to turn, the batter is too thin and a little flour should be added. If no bubbles appear when it is ready to turn, the batter is too thick and needs more milk

er water. The cakes should be turned only once. A small piece of fat salt pork rubbed over the hot pan with a fork greases it well.

*Reference.* How to Select Foods, Cereal Foods, Farmers' Bulletin 817.

#### LESSON IV. SCRAMBLED EGGS—CORN BREAD

*Food Value of Eggs.* The egg contains protein and most of the mineral substances for building the body. It also contains fat, found in the yolk, and the vitamins which stimulate growth, but it does not contain any carbohydrate and is nearly three-fourths water.

*Selection of Eggs.* To determine the freshness of eggs, notice the shell. A fresh egg usually has a rough surface. An egg may be tested for freshness by putting it into a pan of cold water. If heavy enough to sink to the bottom, it is very fresh. If it floats on top, it may be too stale for use. This is because the shell is porous so moisture evaporates thru it on standing for any length of time and air comes in to take its place, making the egg constantly lighter. A fresh egg rattles very little, if at all, when shaken gently, close to the ear. When stale, it can be heard and felt to shake about because it has lost water and so does not entirely fill the shell as at first. Hold egg between the eye and a bright light. If fresh, it looks clear.

##### Scrambled Eggs

6 eggs	2 tb. butter or meat fat
6 tb. milk or water	1 t. salt

Break eggs into a bowl, add salt and milk and beat with a spoon just enough to break up the yolks. Melt the fat in a pan, add the eggs and cook over hot water or very slowly if over direct fire stirring gently until eggs are firm but not hard. Serve at once in a hot dish.

##### Corn Bread

2 c. corn-meal	1 c. sour milk
$\frac{1}{2}$ t. soda	2 tb. shortening
1 t. salt	1 egg

Mix dry materials, add milk and mix. Melt shortening, add to mixture and, lastly, add beaten egg. Bake in a hot oven about 20 min.

*Reference.* Use and Preparation of Food, Bulletin 35, Fed Board of Vocational Education, Washington, D. C. Price 20 cents. Pp. 63, 66.

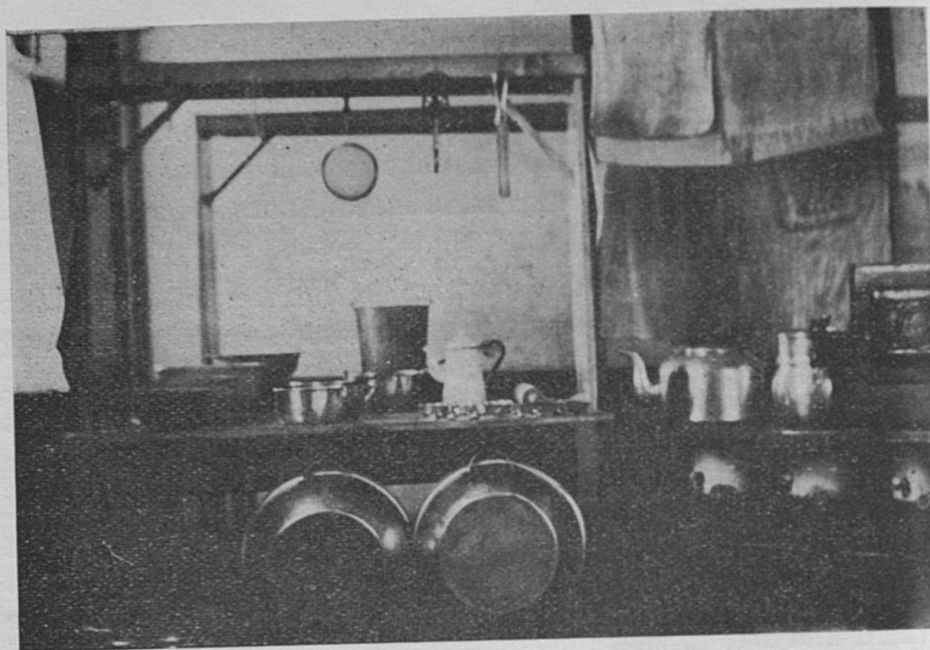


Fig. 5. Equipment for a Food Club.

#### LESSON V. BEVERAGES, MUFFINS.

*Value of Beverages.* Water is a substance so necessary to the body that one would die sooner from lack of it than from lack of food. Nearly all the foods we eat contain water, but in addition most people should drink at least six glasses of good, safe water each day. The chief value of tea and coffee consists in the fact that they increase the supply of water.

Milk is not only a beverage, but a very valuable food as well. Most children should have at least a quart of milk a day if they wish to be strong and to grow as they should. Grown people usually should have at least a pint of milk either to drink or combined with other foods in their preparation or serving.

Cocoa and chocolate are made from the seeds of the chocolate tree growing in tropical countries, especially Mexico and Central America. Chocolate is very nourishing, containing a large amount of fat and protein, besides starch. Cocoa differs from chocolate in having had about half the fat removed. When made with milk and a little sugar, it is a very good food for most people including growing children.

Tea is made from the dried leaves of the tea bush growing in semi-tropical countries. Coffee is the seed of a small red berry which grows on a tropical tree. The seed is first dried and then roasted to develop the flavor and then ground. The beverages made from these contain only color, flavor, stimulant and tannin, a substance which is injurious to the linings of the digestive organs. The stimulant is injurious to all young people and some adults. The only food value comes from the milk or sugar which may be added.

	<b>Cocoa</b>	
2 tb. cocoa		½ c. water
3 tb. sugar		1 qt. milk
	Pinch Salt	

Mix cocoa, sugar and salt, add water. Boil 2 min., stirring constantly. Add milk and let come to a boil. To prevent scum forming on top when it stands, the cocoa may be beaten till foamy and be kept covered.

	<b>Tea</b>	
5 t. tea leaves		5 c. boiling water

Scald the teapot, put the leaves in and stand where it will keep hot. Heat fresh water to boiling and pour at once over the leaves. Cover and keep warm for 3 min. before serving. Do not use tea that has stood more than 5 min. after the water was added.

	<b>Coffee</b>	
¾ c. coffee		½ c. cold water
½ egg		6 c. boiling water

Wash the egg, break and slightly beat it, add the cold water and crushed shell. Mix with coffee in coffee pot, add the boiling water, and stir thoroly. Let boil 3 min. and serve.

## Muffins

2 c. flour	1 c. sweet milk
3 t. baking powder	1 tb. melted fat
$\frac{1}{2}$ t. salt	1 egg

*Method of Mixing Batter.* Sift dry materials. Add milk and stir till well mixed, then melted fat and egg beaten light and stir only enough to mix. Fill greased muffin pans about half full of the batter and bake at once in a hot oven for about 20 min.

How did you mix the corn bread?

## LESSON VI. SERVE SIMPLE BREAKFAST

Baked Apple  
Cereal                      Milk  
Scrambled Eggs  
Muffins, Corn bread or Batter cakes  
Cocoa

Suggest some changes which might be made in this breakfast for summer time, for spring time, for cold weather.

*Reference.* How to Select Foods, What the Body Needs, Farmers' Bulletin 808.

A Week's Food for an Average Family, Farmers Bulletin 1228.

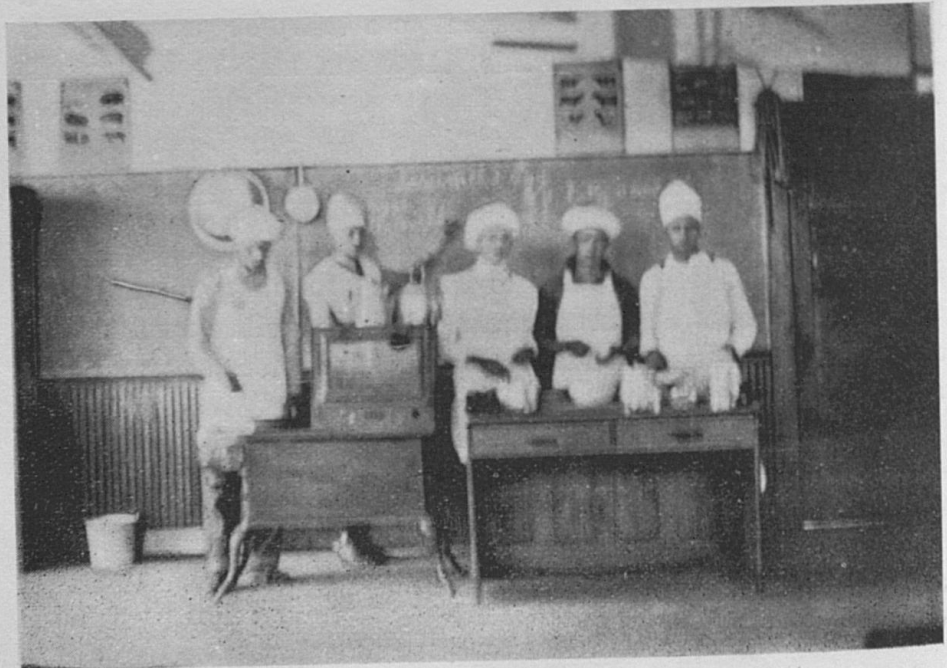


Fig. 6. A boys' cooking club.



## LESSON VII. CREAM TOAST

*Directions for Slicing Bread.* Lay the loaf on one side on a bread board or clean table top and cut even slices with a large knife. For toast they should be about 1/3" thick. Many persons like bread cut very thin when it is to be eaten cold.

*Uses for Stale Bread.* Left-over slices of bread may be toasted or may be made like fresh by placing in a steamer and steaming over boiling water for five minutes and serving at once. Broken pieces of bread may be cut into squares or strips and toasted to serve with soups. Small pieces may be used, also, to put into stewed or stuffed tomato or other vegetables or for puddings and poultry dressing, or may be dried and ground and used for covering croquettes, baked dishes, etc.

*Making Toast.* Slice evenly bread which is at least a day old. If possible, make toast by browning bread by exposure to the direct heat of a glowing fire. If soft wood, oil or gas is used, bread may be toasted by placing it on a toaster on the stove, or placing in a hot oven. If it is to be eaten dry, toast should be served as soon as browned.

## White Sauce

	Butter	Flour	Milk	Salt
Thin .....	1 tb.	1 tb.	1 pt.	½ t.
Medium .....	2 tb.	2 tb.	1 pt.	½ t.
Thick .....	4 tb.	4 tb.	1 pt.	½ t.

Melt butter in a saucepan, add flour and let cook 1 min., stirring constantly. Add cold milk and salt and stir gently till it boils.

## Cream Toast

6 slices toast

2 c. medium white sauce

Add toast to white sauce and let stand a few min. or pour white sauce over toast just before serving. Hard-boiled egg may be cut in small pieces and added to the white sauce or the whites may be added to it and the yolks grated over the top after pouring the sauce on the toast.

*Cooking Eggs in the Shell.* Eggs cooked in the shell may be boiled for the desired length of time, allowing 3 minutes for soft, 4 to 5 minutes for medium and 10 minutes for a hard egg. If it

is desired to keep the white tender and yet have the yolk cooked, the eggs may be put into boiling water and then set at once on the back of the stove where the water will not boil, or into the double boiler, and allowed to stand twice as long for soft, medium or hard eggs, as when cooked by boiling. Allow 1 c. water for each egg to be cooked or enough water to cover.

*Reference.* How to Select Foods, Farmers' Bulletin 808, pp. 17, 18.

#### LESSON VIII. CREAM SOUPS

Cream soups are made by combining a cooked and strained vegetable pulp with white sauce and seasoning.

*Uses for White Sauce.* White sauce may be used for creamed toast, vegetables, fish or meats, for cream soups, for escalloped dishes and in croquettes.

*General Directions for Boiling Vegetables.* Wash vegetables clean using a small brush if possible. Scrape or peel the vegetables, except beets, to remove the outer skin. Put into boiling water to which 1 t. salt has been added for each quart of water. Let boil gently until the vegetable is soft enough to be easily pierced with a fork. Drain the water off of the vegetable immediately. Unless potatoes are very old or of poor quality, it is better to cook them in their skins.

##### Cream of Tomato Soup

2 c. strained tomato  
 1/8 t. soda

2 c. thin white sauce  
 dash of pepper

Cook the tomato till quite soft, and strain. Add soda and mix with white sauce just before serving. Add more salt if necessary. Can you explain why we use soda?

##### Cream of Potato Soup

1 c. mashed potato  
 2 t. chopped onion  
 dash pepper

2 t. parsley  
 2 c. thin white sauce  
 1 c. milk

1 t. salt

Boil the potato and mash thru a sieve. Cook onion and parsley in white sauce, add potato, milk, pepper and salt and let come to boil and serve.

*Reference.* Use and Preparation of Food, Bulletin 35, Federal Board Vocational Education, Washington, D. C. Price 20 cents. Pp. 17, 18.

### LESSON IX. CANDY MAKING

*Food Value of Sugar.* Sugar in its natural form in plant and fruit juices, in such vegetables as beets, carrots and squash, and in milk and cannot be taken in too large amounts. It is one of the best and most easily used sources of heat and energy. Pure sugar is 100% carbohydrate and so is a very concentrated food. If eaten in large amounts it cannot all be absorbed and used by the body at once, and so is almost sure to ferment, causing digestive disturbances. It is also likely to satisfy the appetite before sufficient other food has been eaten to supply the body's needs.

#### Fudge

2 c. sugar	1 tb. butter
$\frac{3}{4}$ c. sweet milk	2 oz. or squares unsweetened chocolate
1 t. vanilla	

Cut chocolate in small pieces and add to other ingredients. Set on stove, stirring occasionally till sugar is dissolved, and let boil till it gives the soft ball test. This is made by taking a little in a spoon and chilling by dipping into cold water. When the cold sample of candy mixture can be shaped into a little ball that flattens only at the bottom the candy is done. Remove from fire, let cool 5 minutes, add vanilla and let stand till cold. Stir till soft and creamy, spread on a buttered pan and cool.

#### Panocha

2 c. (packed) brown sugar	1 tb. butter
$\frac{1}{2}$ c. sweet milk	1 c. chopped or broken nut meats

Make like fudge

#### Molasses Taffy

3 c. brown sugar	1 tb. butter
$\frac{1}{2}$ c. molasses	$\frac{1}{2}$ t. soda
1 c. water	2 tb. vanilla

Cook all but soda and vanilla till the mixture cracks when dropped into cold water. Beat in soda and vanilla and pour on a buttered dish or pan. Draw edges toward center till cold enough to handle. Pull till light and smooth and cut into inch pieces with sharp scissors.

#### LESSON X. BROILED BACON, BOILED POTATO

*Value of Meats.* Meats supply protein and fats in quite large amounts and also some mineral salts, but do not contain carbohydrates; therefore, it is good to serve them with some starchy food as potatoes or bread of some kind. Meat from the hog is so rich in fat that it is hard to digest by little children and people who do not have strong digestions. In cooking meat care must be taken not to toughen it by too long cooking.

*Cooking of Bacon.* Bacon should be sliced quite thin with a sharp knife and cooked in a hot pan. Drain fat off from time to time and keep it for making gravies, frying potatoes, etc. Turn occasionally and cook till crisp and golden brown on each side.

##### Milk Gravy

2 tb. bacon or other meat	1 pt. milk
fat	½ t. salt
2 tb. flour	

Make like white sauce

##### Boiled Potato

Wash potatoes, using a small brush if possible. They may be boiled in their skins unless old or of poor quality. Cover with cold water if potatoes must stand after paring before cooking. To cook, put into boiling water in which about ½ t. salt has been added for each pint of water and let boil gently about ½ hour or till soft. Drain away the water immediately. Heat gently to dry.

#### LESSON XI. STEWED PRUNES AND SODA BISCUIT

*Value of Dried Fruit.* During the winter months when fresh fruits are scarce, dried as well as canned fruits may be used to take their place. Peaches and apples which have been dried

carefully at home and kept in a clean dry place protected from insects may be used in many ways. Dried apricots and prunes usually may be bought at the store or may be obtained from the city and kept for use. Dates or figs also, are valuable as foods and should not be used just as sweetmeats. Prunes are especially valuable because of necessary mineral substances which they contain, especially iron, and because they contain an important vitamine, and also have sugar and some protein in amounts unusual in fruits. An additional advantage in them is the fact that, because of their own sugar, little or none need be added when cooking them. They are also good as a mild laxative.

Before cooking, dried fruits should be washed clean in several waters and then put to soak over night or longer, after which they cook in a very short time.

#### Stewed Prunes

1 lb. dried prunes

1 qt. water

Wash prunes carefully, add water and let soak 10 or more hours. Cook in same water very slowly on the stove or in the oven for 15 minutes or till the prunes leave their stones easily. A little sugar may be added, if necessary, after cooking. If cooked too long, a rank flavor is developed.

#### Soda Biscuit

2 c. flour

3 tb. shortening

$\frac{1}{4}$  t. soda

$\frac{3}{4}$  c. sour milk or buttermilk

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

*Dough Method of Mixing.* Sift dry materials together and rub shortening in with the finger tips or a spoon. Add milk and mix. Place dough on a lightly floured board and turn over several times with a floured knife to coat it lightly with flour. Roll or pat till  $\frac{1}{2}$  inch thick and cut with a small cutter and bake.

*Baking of Biscuits.* Baking of biscuits is very important. They should be baked in a very hot oven for about 15 minutes or long enough to cook the center well and turn the crusts a light brown. If cut too thick they will either have to bake so slowly as not to be very light, or will not be cooked in the centers.

Leftover biscuit may be split open, toasted, and buttered before serving.

*Reference.* Use and Preparation of Food, Bulletin 35, Federal Board of Vocational Education, Washington, D. C. Price 20 cents. Pp. 36, 38.

#### LESSON XII. CREAMED FISH AND BAKED POTATOES

*Food Value of Fish.* Fish is one of the chief meat substitutes in those parts of the country which are near a body of water. It contains about as much protein as meat but does not contain most of the valuable mineral substances, and most kinds are very lacking in fat. Usually it is more easily digested than meat. Where it is not possible to obtain much fresh fish, salt or dried fish can be used in many attractive ways. Canned fish should be opened, drained, placed in another vessel immediately and allowed to air before using. Salt fish should be washed and soaked to soften it and remove some of the salt.

##### Creamed Codfish or Salmon

2 c. medium white sauce	1 c. fish
	1 egg

Wash salt fish and soak it for an hour or more; then shred and add to the white sauce. Let come to a boil, add egg beaten slightly and remove at once from the fire and serve. Small amounts of left-over fish may be used in this way.

##### BAKED POTATOES

Select medium sized potatoes with a smooth skin and wash them well, using a small brush if possible. Place them in a moderate oven and bake for 30 to 40 minutes or till they feel soft thruout when pinched. Pierce the skin with a fork as soon as removed from the oven to prevent them from becoming soggy.

*Reference.* Fish as Food, Farmers' Bulletin 85.  
Use and Preparation of Food, Bulletin 35, Federal Board of Vocational Education, Washington, D. C. Price 20 cents. Pp. 116, 118.

**LESSON XIII. SERVE SUPPER**

*Simple Rules for Good Combination of Foods.* The healthy normal person needs some of each of the food groups at each meal. Since the amount of heat and energy giving materials needed by the body is much greater than of the tissues-building materials, about three times as much fat, sugar and starches as protein-supplying food should be used. If too much of one kind of food is eaten it is likely to overwork the digestive organs, so it would not be wise to depend entirely upon starchy food for heat and energy nor entirely upon fats.

In planning a meal, first see that a food from each of the columns of foods on page 4 is supplied; then consider the suitability of each with the other foods chosen, whether they "go together" well. Care must be taken not to have too many highly flavored foods together and yet not to have the meal lacking in sufficient flavor. The amount of work required in preparing the meal also should be considered. Finally, arrangements should be made for any member of the family who needs some special food, as milk for children to drink.

*Reference.* How to Select Foods, What the Body Needs, Farmers' Bulletin 808.

A Week's Food for an Average Family, Farmers' Bulletin 1228.

**LESSON XIV. JUNKET, COTTAGE CHEESE, BAKING POWDER BISCUIT**

*Food Value of Milk.* Milk is one of the most valuable foods we have, because it supplies protein, fat and sugar in a readily usable form, most of the necessary mineral salts, and important vitamins. The fact that it is nearly nine-tenths water makes it impossible for active people to live upon milk alone without drinking an almost impossible amount, but it is very desirable as a part of the food supply for everyone. The chief protein in milk is casein and is the solid substance in cheese, or the curd of sour milk. It may be separated from the milk by adding rennet, a substance found in the digestive juices of most animals, or by acid. The lactic acid which develops in milk that has stood for

some time is what causes the clabbering of milk. If casein is heated much it becomes tough and like rubber. Cottage cheese has very little fat but is very rich in casein. It may be made in either of the following ways, but great care should be taken to keep the milk clean if it stands to sour.

*Care of Milk.* Because most kinds of bacteria grow very rapidly in milk, it should be protected as far as possible from them. The cows, the place where they are milked, and the milker all should be clean. The utensils in which the milk is kept should be washed as clean as possible, scalded and sunned in a clean place. As warmth helps the bacteria to grow rapidly, the milk should be cooled as quickly as possible after milking and should be kept cool and in a clean place, protected from flies and dirt. It is especially important that milk to be used without cooking and particularly that for babies, children or sick people should be kept very clean.

#### Junket

1 qt. milk	$\frac{1}{2}$ t. vanilla
$\frac{1}{4}$ c. sugar	1 junket tablet
$\frac{1}{8}$ t. salt	2 tb. cold water

Break up junket tablet and dissolve it in the cold water. Warm the milk to body temperature. To test for this, let a drop fall on the inside of the wrist over the pulse. If it feels neither hot nor cold, it is the right temperature. Add sugar and vanilla and mix, and then stir in the dissolved junket tablet. Pour at once into a glass dish or bowl and set in a warm place till it becomes firm, then set where it will become cold. Use care not to shake it when moving it. Serve with crushed fruits or cream.

#### Cottage Cheese (Junket or Rennet Method)

1 gal. milk	1 tb. cold water
$\frac{1}{8}$ junket tablet	$\frac{1}{2}$ tb. salt

Warm the milk over hot water, add junket tablet dissolved in cold water and let stand as in making junket. When firm pour on double cheesecloth or piece of domestic and let whey drain out. Fold cloth over curd and place between two plates with a weight on top to press out remaining whey. Add salt and milk or cream to soften sufficiently. Liquid rennet may be used, following the directions given on the bottle.



**Cottage Cheese (Sour Milk Method)**

Stir or cut the curd of sour milk and heat it over hot water stirring occasionally and being careful to keep it from going much over body temperature. If a thermometer is used it should not go above 100° F. (38° C.) Let heat for 20 to 30 minutes or till whey begins to separate and come to the top. Be careful not to heat it so long or so hot as to make the curd tough and hard. Strain thru cheesecloth and add salt and cream or milk and mix well.

**Baking Powder Biscuit**

2 c. flour	3 tb. shortening
3 t. baking powder	2/3 c. milk
	1/2 t. salt

Use the dough method of mixing and follow the directions for baking soda biscuit on page 21.

*Food Value of Cheese.* Cheddar or American cheese is made of the casein and fat of milk. It contains more protein and nearly twice as much fat as average meat so may be used in place of it to give variety and to save expense, but it should not be added to a meal already containing meat, fish or eggs.

What other foods are good to serve with a cheese dish?

*Ways of Using Cheese.* Cheese may be combined with milk and eggs, as in creamed cheese, Welsh rarebit and cheese souffle; or served with starchy food as bread, crackers, or toast. It may have starchy food added to it as in baked macaroni, rice or hominy grits and cheese, cheese fondue, cheese and bean or nut loaf, etc. Or it may be sliced or grated and served with crackers or bread or made into sandwiches, especially if mixed with milk and a little chopped pepper, pickles, etc. Cottage cheese may be eaten with top milk or cream; used with fruits or peppers or tomatoes for a salad, made into sandwiches with lettuce and salad dressing or with chopped raisins or dates, or eaten with bread and butter.

*Reference.* Milk and Its Uses in the Home, Farmers Bulletin 1207.

Cheese and its Economical Use in the Diet, Farmers' Bulletin 487.

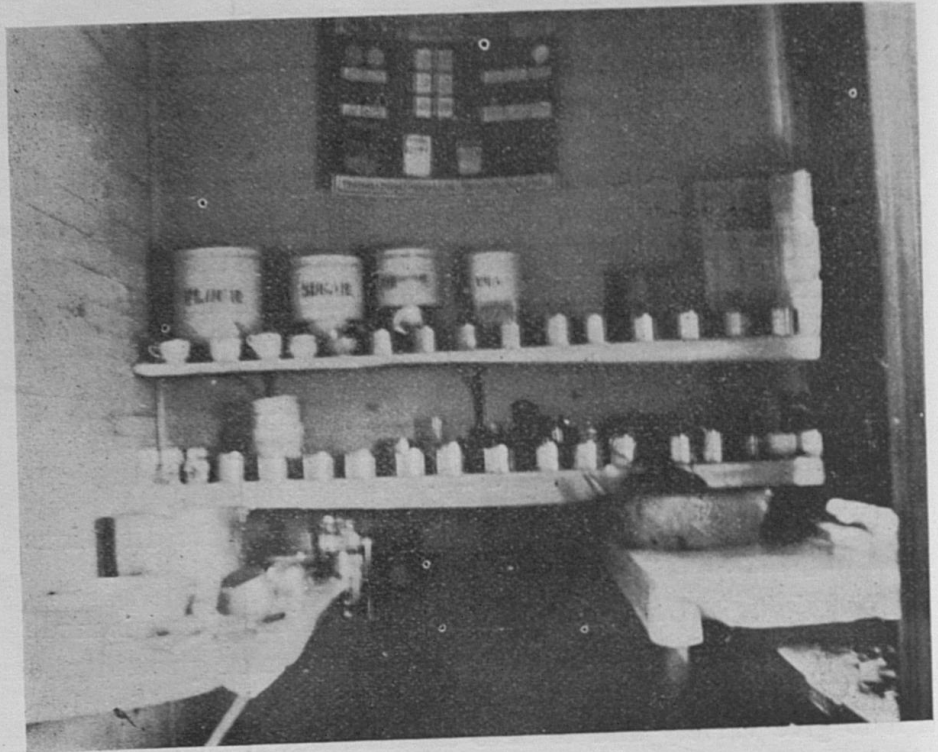


Fig. 7. A simple school kitchen.

#### LESSON XV. HAM AND EGGS

*Food Value of Ham.* Ham is a meat which, like bacon, is very rich in fats and so would better be used more in winter than in summer. If prepared or served with eggs the amount of ham eaten will be decreased.

Why should bread or potatoes be served with ham? Why is a fat gravy not needed? Which will be easier to digest, a poached or a fried egg?

##### Pan-broiled Ham

Slice ham  $\frac{1}{2}$  inch thick, place in a hot pan and cook till golden brown on both sides, turning occasionally. If very fat, pour off the melted fat as soon as much collects in the pan.

##### Poached Eggs

Have enough boiling salted water to cover each egg in a shallow saucepan or skillet, allowing 1 t. salt to each pt. water. Place pan where water will not boil, but keep hot, break each egg into a cup and slip from it gently into the water. Cook till

the white is firm and a film forms over the top of the yolk. Remove the eggs carefully with a skimmer or battercake turner, drain and serve on toast or on a slice of cooked ham, sprinkling the egg with salt and pepper.

**Fried Eggs**

Melt a little ham, bacon or other meat fat in a frying pan and slip each egg in carefully. Let cook very slowly, pouring hot fat over the top with a spoon if necessary. When creamy and brown on the bottom, serve at once. Avoid cooking long, for this makes the eggs tough.

*Reference.* Eggs and Their Value as Food, Dept. Bulletin 471, Supt. Documents, Gov't Printing Office, Washington, D. C. Price 5 cents.

**LESSON XVI. CUSTARDS, DROP COOKIES**

*Use of Desserts.* Desserts usually are expected with dinners and sometimes with suppers. After a heavy meal a simple dish such as fresh fruits in their season, a fruit sauce or jelly, or a light pudding should be served. Custards supply a good deal of protein yet are easily digested and are good for children's desserts as well as for grown people. Custards may be flavored with the different flavoring extracts, with cocoa or chocolate, with fruit juice, or may be served with fruits.

*General Rules for Making Custards.* The whole egg may be used for custard-making or simply the yolks, using 1 1/2 yolks in place of each egg and the whites may be made into a meringue to serve on top, or used for other things. Soft custard should be cooked over hot water and stirred constantly to prevent the protein of the egg, called albumen, from separating and hardening in little lumps, which we call curdling. Even if cooked carefully the custard will curdle if cooked too long. In this case it should be at once removed from the hot water and set in cold water and beaten with an egg-beater or fork until smooth again. To test baked custard, stick a pointed knife in and if it comes out clean, the custard is done. When done the soft custard thickens, the bubbles disappear from the top, and it coats the back of the spoon evenly.

**Soft Custard**

1 pt. milk  
2 eggs

$\frac{1}{4}$  c. sugar  
 $\frac{1}{2}$  t. vanilla

$\frac{1}{4}$  t. salt

Beat the eggs with a spoon only enough to mix yolks and whites, and add salt and sugar. Scald the milk in a double boiler and add it to the eggs, stirring constantly. Return to the double-boiler and cook 5 to 10 minutes, stirring gently until it coats the spoon evenly.

**Baked Custard**

1 pt. milk  
2 eggs

$\frac{1}{4}$  c. sugar  
 $\frac{1}{2}$  t. vanilla

$\frac{1}{4}$  t. salt

Mix like soft custard. Pour into cups or a bowl. Set them in a pan of hot water and bake in a moderate oven till firm and brown on top.

**Peanut Cookies**

2 tb. butter  
 $\frac{1}{4}$  c. sugar  
1 egg  
1 t. baking powder

$\frac{1}{2}$  c. flour  
 $\frac{1}{4}$  t. salt  
2 tb. milk  
 $\frac{1}{2}$  t. lemon juice

$\frac{1}{2}$  c. chopped nuts

Cream butter, add sugar and beaten egg. Then add a little flour, the milk, and the rest of the flour with the salt and baking powder sifted with it. Pour the lemon juice and nuts into the mixture and drop by spoonfuls two inches apart on a greased baking pan. Bake in a quick oven about 10 minutes.

*Reference.* Eggs and Their Value as Food, Dept. Bulletin 471. Supt. Documents, Gov't Printing Office, Washington, D. C. Price 5 cents.

**LESSON XVII. CORNSTARCH PUDDING, WHIPPED CREAM**

*Cooking of Starch.* All foods containing starch need a rather long cooking to take away the raw starch flavor. To prevent danger of burning it is best to cook it over hot water. Cornstarch pudding may be flavored like custards, and is a simple pudding which even little children may eat.

Skim-milk may be used in many foods and except for the loss of fat it is just as good a food as whole milk. If it is used in making breads, a very little more fat should be used, and cream may be added to puddings made of it. It is very good for making cottage cheese.

What other foods have you used for thickening?

#### Cornstarch Pudding

2 c. milk	¼ t. salt
4 tb. cornstarch	½ t. flavoring or
1/3 c. sugar	½ square chocolate

Mix cornstarch, sugar and salt and add ½ c. cold milk. Scald remaining milk in a double boiler, add cornstarch mixture slowly, stirring constantly to prevent lumping, and boil over fire for 5 minutes, still stirring gently. Put into double-boiler and cook 20 minutes. Add flavoring and pour into molds which have been wet in cold water and chill.

#### Whipped Cream

1 c. thick cream	2 t. sugar
Pinch Salt	

Beat cream with cream whip or egg beater till thick and frothy. Add salt and sugar, mix and serve.

*Reference.* Use and Preparation of Food, Bulletin 35, Federal Board of Vocational Education, Washington, D. C. Price 20 cents. Pp. 16, 18.

#### LESSON XVIII. SUPPER OR BREAKFAST

*Reference.* How to Select Foods, What the Body Needs, Farmers' Bulletin 808.

A Week's Food for an Average Family, Farmers' Bulletin 1228.

