June, 1917
UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE

Extension Service in Agriculture And Home Economics
in cooperation with the united states department of agriculture W. F. HANDSCHIN, VICE-DIRECTOR

CORN AND CORN PRODUCTS USED AS FOOD

BY
LUCILE WHEELER

# CORN AND CORN PRODUCTS USED AS FOOD 

Lucile Wheeler, Associate in Household Science

In every home the various mill products derived from the wheat kernels are used as food. White bread and entire wheat bread may be the only breadstuffs which are in common use in the household; Cream of Wheat, Farina, Puffed Wheat, with the oatmeals, may be the only breakfast foods. The three most important crops in extent of production at present are wheat, oats, and rice. Corn ranks fourth. This crop is easily grown wherever a long summer season prevails and, by using an early variety, it may be grown successfully in sections having a fairly short summer season. The South naturally spends its greatest energy on the cotton crop, while New England lacks the extensive level fields for corn cultivation. The raising of corn and the increases in its utilization are of particular interest to the Middle West.

Demands from abroad may be made upon the wheat crop whether it proves larger or smaller than in previous years, which will mean necessarily less for the people here at home. In such cases the breadstuffs so largely derived from wheat must be supplemented by other cereal products. Whether or not extreme emergencies arise, it seems of value to consider the uses of corn and to try to make it a more common article in the dietary. Many ways of utilizing the corn products to a much greater extent may be found, thus helping to lessen the demand for wheat and at the same time practising an economy which will decrease the food budget.

Composition of Corn Compared with Other Foods

| , | Water percent | Protein percent | Fat percent | Car-bohydrates percent | Mineral percent | Fuel value per pound | $\left.\begin{gathered} \text { Cost } \\ \text { per } \\ \text { pound } \end{gathered} \right\rvert\,$ | Cost <br> per <br> 1000 <br> calo- <br> ries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corn, dry, whole | 10.8 | 10. | 4.3 | 73.4 | 1.5 | 1795 | $\cdots$ |  |
| Corn meal, granu | 12.5 | 9.2 | 1.9 | 75.4 | 1.0 | 1770 | \$. 05 | . 028 |
| Corn, green | 75.4 | 3.1 | 1.1 | 19. | . 7 | 470 | $\cdots$ | -103 |
| Potato, as p | 62.6 | 1.8 | 1 | 14.7 | . 8 | 310 | . 06 | 193 |
| White flour. | 12.8 | 10.8 8.8 | 1.1 .3 | 74.8 79. | . 5 | 1640 1630 | . 108 | . 048 |
| Rice. | 12.3 | 8. | . 3 | 79. | . 4 | 1630 | . 10 | . 061 |

## From the table it is seen that:

Corn contains as much carbohydrate as flour.
Corn contains more fat than flour or potatoes.
Corn has more protein than potatoes and practically the same percent protein as flour.
Corn is higher in mineral content than either flour or potatoes.
The ash content of corn is, however, more like that of rice and wheat than like that of potatoes, having an excess of acid elements over the basic elements. Potato has more basic or alkaline forming elements than acid. For that reason when corn or rice replaces potato, it is necessary to use milk, fruits, and vegetables even more plentifully in the diet to supply the basic elements, such as calcium, magnesium, sodium, and potassium. Corn meal from the pecuniary standpoint supplies more than one and one-half times as much energy materials as flour for the same money, and six times as much as potatoes at the present prices. None of the cereal products from oats or corn or wheat supply adequate protein for maintenance and growth if used exclusively in a limited dietary. Milk, which is rich in all the proteins adequate for growth, supplies those which are essential and rounds out their "incompleteness."

## CORN MEAL

The following recipes, some used in laboratory courses in food work and some from the United States Farmers' Bulletins, are suggestive of a few of the many ways in which corn and hominy may be used as a vegetable, and corn meal, a mill product, may be used in batters and doughs. The prices on which costs were computed are those paid in Urbana-Champaign, Illinois, May 1, 1917.

The term fat is used in the recipes to indicate any shortening, butter, oleomargerine, lard, Crisco, or drippings. With corn meal mixtures, bacon drippings may be used to advantage. Chicken fat and beef drippings combined give a fat more like lard in consistency and may be used as its substitute. The amount of liquid in recipes will be affected by longer scalding of corn meal, necessitating more liquid, or by using a bread flour which has great absorptive power.

## CORN MEAL MUSH

| 1 cup corn meal | 4 to 6 cups water |
| :--- | :--- |
| $1 / 2$ to 1 teaspoon salt | 4 or |
|  | 4 or more milk |

Methods of mixing:

1. Combine dry ingredients with cold water and heat in a double boiler over boiling water. Cook thoroly at least one hour.
2. Start as above. Cook fifteen to twenty minutes, then remove to fireless cooker and cook overnight.
3. Have water boiling violently and add cornmeal slowly, stirring constantly. Bring to a boil and cook five minutes directly over fire. Remove from fire and cook in a fireless cooker overnight. When cooked in a fireless cooker use five cups of water to one cup of meal if for a cereal; if to be moulded and sliced, use four cups of water to one cup of meal. If to be cooked in a double boiler, use six cups of water.

One cup of meal when cooked for cereal equals four cups or enough to serve six to eight people, furnishes 550 calories, and costs less than two cents.

Milk may be used in place of water if desired. Serve with milk or cream.

## FRIED MUSH

Mush left from breakfast may be packed in tins, covered to prevent formation of a crust, and allowed to stand. Tins, such as baking powder cans, coffee cans, or small bread tins, may be used. Rinse them in cold water or grease before filling with cereal. When the mush has stood for twenty-four hours, it may be turned from the moulds, sliced, dipped in flour, and sautéd in drippings or fat. Serve with maple syrup, corn syrup, or caramel syrup.

## CARAMEL SYRUP

```
1 \text { cup sugar 1/4 cup water}
```

Method 1. Boil together until syrup becomes the color of caramel. Add one-half cup boiling water and boil to desired consistency.

Method 2. Sugar may be melted in a frying pan and browned to the color of caramel. Then add one-half cup boiling water to dissolve, and boil until it becomes a syrup of the desired consistency.

## BROWN SUGAR SYRUP

$1 / 2$ cup granulated sugar $1 / 2$ eup brown sugar
$1 / 2$ cup water
Boil the ingredients three minutes. This makes one cup of syrup.
CORN CAKE

```
3/4 cup corn meal
11/4 cups flour
1/4 cup sugar
4 \text { teaspoons baking powder}
```

1/2 teaspoon salt 1 cup milk
1 egg
1 or 2 tablespoons fat

In using one cup sour milk instead of the sweet milk, use one-half teaspoon soda and two teaspoons baking powder.

Mix and sift dry ingredients. The sugar may be omitted if desired. Add milk and egg well beaten. Add melted butter and bake in a shallow pan in a hot ọven twenty minutes.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 8 | 160 | 1530 | $\$ .12$ |

## MOLASSES CORN CAKE

1 cup corn meal
$3 / 4$ cup flour
$31 / 2$ teaspoons baking pow-
der
1 teaspoon salt
$1 / 4$ cup molasses
1 cup milk
1 egg
1 tablespoon melted fat

With one cup of sour milk or one cup of buttermilk instead of the sweet milk, use one-half teaspoon soda and one and one-half teaspoons baking powder. Mix as for corn cake, adding molasses to milk.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 8 | 127 | 1270 | $\$ .10$ |

## SPIDER CORN BREAD ${ }^{1}$

$11 / 2$ cups corn meal
2 cups sour milk
1 teaspoon soda

1 teaspoon salt
2 eggs
2 tablespoons fat

Mix soda, salt, and corn meal. Gradually add well beaten eggs and milk. Heat frying pan with butter, turn in mixture, place on middle grate in hot oven, and cook twenty minutes.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | $8-10$ | 150 | 1050 | $\$ .13$ |

## CORN MEAL MUFFINS

1 eup corn meal
1 cup flour
2 tablespoons sugar
2 tablespoons fat
$1 / 2$ teaspoon salt
1 cup milk
1 egg
3 teaspoons baking powder

Turn sealded milk on meal, let stand five minutes, and add flour sifted with dry ingredients. Add beaten egg.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 8 large | 160 | 1470 | $\$ .12$ |
|  | muffins |  |  |  |

[^0]
## CORN MEAL GRIDDLE CAKES

| 2 cups flour | 2 tablespoons sugar |
| :--- | :--- |
| $1 / 2$ cup corn meal | $11 / 2$ cups boiling water |
| $41 / 2$ teaspoons baking pow- | $11 / 4$ cups milk |
| der | 1 egg |
| $11 / 2$ teaspoons salt | 2 tablespoons melted fat |

Add meal to boiling water and boil at least five minutes, stirring constantly. Turn into a bowl, add milk and flour sifted with dry ingredients. Add egg either beaten or unbeaten. Fry on a hot iron griddle slightly greased.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | ---: |
| Recipe | 16 cakes | 192 | 1630 | $\$ .125$ |

RAISED CORN BREAD (BELGIAN RELIEF RECIPE)ㅗ

|  | Weights | Measures |
| :--- | :--- | :--- |
| Corn meal | 6 ounces | $11 / 2$ cups |
| Rye or graham flour | 11 ounces | $21 / 2$ cups |
| Yeast | $1 / 2$ ounce | $1 / 2-1$ cake |
| Salt | $1 / 3$ ounce | 1 teaspoon |
| Sugar | $1 / 3$ ounce | 1 or 2 teaspoons |
| Fat | 1 ounce |  |
| Water to make a stiffdough  |  |  |

Add three tablespoons cold water to yeast and rub to a smooth paste. Put sugar, fat, and salt in a bowl and add one cup scalded milk or water to start with; use more if needed. When lukewarm, add yeast mixture and stir in flour and corn meal mixed together to make a stiff dough. Corn meal may be scalded with water or milk and then added to the dry ingredients, and the rye or graham flour added last. Let rise overnight if a small amount of yeast is used. When double in bulk, knead, shape into a loaf, let rise again until double in bulk, and bake in a hot oven.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 1 loaf | 228 | 1850 | $\$ .088$ |

## YEAST MIXTURE WITH MAGIC YEAST OR YEAST FOAM ${ }^{2}$

```
2 cups water
    2 cakes dry yeast
    2 tablespoons sugar
```

2 tablespoons flour
$1 / 2$ cup boiled mashed potatoes
$1 / 4$ teaspoon salt

Soak yeast in one cup of water. Mix dry ingredients, add potatoes and the other cup of water. Add soaked yeast, beating mixture thoroly. Let rise over night. The yeast will be ready for use in the morning.

[^1]
## CORN MEAL BREAD ${ }^{1}$

1 cup lukewarm scalded milk 2 tablespoons sugar 1 cup corn meal cooked in 2 cups water

3 tablespoons butter or lard
1 teaspoon salt
1 cake dry yeast prepared according to directions above

Mix ingredients, adding yeast mixture and flour to make a thin batter. Beat thoroly with a spoon or egg beater, finally adding the scalded corn meal which has been thoroly cooled. Add flour and knead to make a firm, elastic dough. Let rise until the mass has doubled its bulk. Shape into loaves. Let rise again until the loaves have doubled their bulk. Bake.

## CORN MEAL FOR CRUMBING

Use corn meal in place of bread crumbs for croquettes. Dip pieces of fish or chicken in corn meal mixed with one-fourth as much flour as corn meal. Fry in deep fat or sauté.

## INDIAN PUDDING ${ }^{2}$

$$
\begin{array}{lr}
5 \text { cups milk } & 1 / 2 \text { cup molasses } \\
1 / 3 \text { cup Indian meal } & 1 \text { teaspoon salt } \\
& 1 \text { teaspoon ginger }
\end{array}
$$

Pour scalded milk slowly on meal, cook in double boiler twenty minutes, add molasses, salt, and ginger. Pour in buttered baking dish and bake two hours in slow oven. Serve with cream. Figs and dates may be added to vary the recipe.

|  | Number | Protein | Total | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | servings | calories | calories |  |
| Recipe | 6 | 195 | 1500 | $\$ .145$ |

## BROWN BREAD ${ }^{2}$

1 cup rye flour
1 cup corn meal
1 cup graham flour
2 cups sour milk

1 cup rye flour
1 cup graham flour
2 cups sour milk
$3 / 4$ cup molasses
1 teaspoon salt
11/2 teaspoons soda
$1 / 2$ cup raisins (if desired)

Mix and sift dry ingredients. Add milk and molasses. Beat thoroly and pour into well greased moulds, filling them one-half full. Steam three hours, then remove covers and dry in the oven to brown the top. Bread may also be made in a double boiler.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 4 loaves | 244 | 2475 | $\$ .19$ |

[^2]
## HOMINY

Composition of Hominy

| Hominy | Water <br> percent | Protein <br> percent | Fat <br> percent | Carbohy <br> drates <br> percent | Mineral <br> percent | Fuel <br> value per <br> pound | Cost per <br> pound |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fine, dry | 11 | 9.4 | .7 | 78.2 | .3 | 1810 | $\$ .06$ |
| Coarse, dry | 10.8 | 8.3 | .5 | 79.4 | .3 | 1770 | .06 |
| Boiled | 79.3 | 2.2 | .2 | 17.8 | .5 | 380 | .06 |

Hominy, like other cereal foods, requires long-continued and thoro cooking, especially when coarse.

## HOMEMADE HOMINY

The following old time recipes are included to suggest home preparedness at the present time. The tin can shortage will soon decrease our supply of canned hominy, necessitating either drying of hominy or home preparation.

## HOMEMADE HOMINY OR HULLED CORN I ${ }^{1}$

Husk one dozen ears of corn and cover with cold water. Put one quart of wood ashes in a bag and add to the water; boil until the strength is out and remove bag. Add more warm water and boil until water boils down. Put corn in cold water and hull. Salt and drain off water.

## HOMEMADE HOMINY OR HULLED CORN II

Pour hot water over corn and soak overnight. In the morning put the corn in an iron kettle with warm water enough to cover. For each pint of corn put in one tablespoon baking soda. Boil until the hulls come off readily. Wash in clear water. Slip off hulls with hands or with little broom by stirring around in water. Soak hulled corn in water and wash until alkaline taste is gone. Boil or let freeze until tender. Salt as desired. Drain off water or cook it down until concentrated.

## CANNED HOMINY

Canned hominy was used in the recipes below and costs have been estimated on the following data for one can of hominy.

```
Weight
Cost
Contains
```

2 pounds, 2 ounces
12 cents
3 cups solid hominy and
2 cups liquid

[^3]HOMINY GRIDDLE CAKES

```
1 cup milk
11/2 cups flour
\(1 / 2\) cup hominy, chopped
\(11 / 2\) cups flour
\[
1 \mathrm{egg}
\]
```

Mix and sift the dry ingredients. Add slowly the milk with beaten egg, then the hominy. Fry on hot griddle.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 4 | 140 | 880 | $\$ .13$ |

## HOMINY MUFFINS

| 4 tablespoons fat | 1 egg |
| :--- | :--- |
| 4 tablespoons sugar | 1 cup milk |
| $11 / 2$ cups flour | 3 teaspoons baking powder |
| 1 cup hominy | $1 / 2$ teaspoon salt |

Cream butter and sugar, add beaten egg and salt. Add alternately flour, sifted with baking powder, and milk, then hominy ground with coarse knife of meat grinder. Bake in buttered iron muffin pans for thirty-five minutes.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 8 large | 160 | 1430 | $\$ .21$ |
|  | muffins |  |  |  |

## REHEATED HOMINY I

2 cups hominy $\quad 1 / 2$ cup liquid
Heat the hominy and liquid together till the liquid has concentrated and the hominy is moist. Brown in a frying pan with two tablespoons melted butter. Grated cheese may be added if desired. Serve in place of potato.

## REHEATED HOMINY II

Reheat hominy with liquid, drain, and serve as a border around lamb or chicken. Tomato sauce or meat gravies may be used.

HOMINY A LA SOUTHERN
2 cups hominy put thru meat 1 egg grinder $1 / 2$ teaspoon salt

1 cup milk
Mix beaten egg with milk, add salt, and hominy. Bake in buttered baking dish till it becomes firm like a custard or until a knife when inserted is clean when removed. Avoid over baking which causes curdling.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 6 | 80 | 600 | $\$ .12$ |

## HOMINY SOUP I

| 2 cups liquid drained from | 1 tablespoon flour |
| :--- | :--- |
| hominy | 1 cup milk |
| 1 tablespoon butter | $1 / 2$ cup chopped hominy |
| 2 slices onion, chopped fine | 1 teaspoon salt |
| $1 / 3$ teaspoon pepper | 1 tablespoon chopped parsley |

Melt butter and add the flour. Cook butter and flour together. Add slowly the hot milk and hominy liquid, then add hominy, onion, salt, pepper, and parsley. Cook twenty minutes in double boiler.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 6 | 40 | 350 | $\$ .055$ |

## HOMINY SOUP II

$$
\begin{array}{ll}
2 \text { cups liquid drained from } & 1 \text { tablespoon chopped green } \\
\text { hominy } \\
\text { pepper } \\
1 \text { cup milk } & 1 \text { tablespoon butter } \\
1 / 2 \text { cup hominy pulp put } & 1 \text { teaspoon salt } \\
\text { thru sieve after cook- } & 1 \text { hard cooked egg, chopped } \\
\text { ing } & \text { fine }
\end{array}
$$

> Few drops onion juice

Heat liquid and milk, adding hominy pulp and seasonings. Cook twenty minutes in a double boiler. Add chopped egg just before serving.

| Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: |
| Recipe | 6 | 64 | 400 |

Heat liquid and milk with hominy and celery pulp. Add seasoning and cook one-half hour.

|  | Number <br> servings | Protein <br> calories | Total <br> calories |
| :---: | :---: | :---: | :---: |
| Recipe | 6 | 22 | 300 |

[^4]Put hominy thru a meat grinder using a coarse knife. Mix hominy with thick white sauce (see below) and other ingredients; use salt or sugar, depending on whether or not a sweet croquette is desired. Chill mixture and shape into balls. Roll in fine bread or cracker crumbs, then in egg, then crumbs again, and fry in deep fat till brown. May be served with jelly.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :--- | :---: | :---: | :---: | ---: |
| Recipe | 6 croquettes | 50 | 600 | $\$: 097$ |

## HOMINY CROQUETTES $\mathrm{I}^{1}$

| 2 cups hominy | $1 / 2$ cup thick white sauce |
| :---: | :---: |
| $1 / 3$ cup grated cheese | $1 / 2$ teaspoon salt |
|  |  |
| Pepper, paprika |  |

Mix hominy, which has been put through a meat grinder, with white sauce, cheese, and seasoning to such a consistency that it can be moulded or shaped. Chill, shape into croquettes, roll in fine bread or cracker crumbs, then in egg, then crumbs again, and fry in deep fat till brown.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 6 croquettes | 80 | 600 | $\$ .115$ |

## HOMINY CROQUETTES III ${ }^{1}$

$$
\begin{array}{ll}
2 \text { cups chopped hominy } & 1 \text { egg, slightly beaten } \\
2 \text { tablespoons melted butter } & \text { Few drops onion juice } \\
\text { Speck of cayenne pepper } & 1 \text { tablespoon minced parsley }
\end{array}
$$

Mix all the ingredients together, shape mixture into balls or cylinders. Roll in sifted bread crumbs, then in egg, then in crumbs again. Fry in deep fat until brown. Serve with tomato or cheese sauce.

In coating croquettes, add one tablespoon water to egg and beat slightly.

## WHITE SAUCE FOR CROQUETTE MIXTURES



Melt butter, add flour and salt; cook together, then add hot milk slowly. Cook till thick, cool, and use for binding croquettes.
${ }^{1}$ See note on preceding page.

## TOMATO SAUCE TO SERVE WITH CROQUETTES̄

| 2 tablespoons flour | 1 cup tomato juice |
| :--- | :--- |
| $1 / 4$ teaspoon salt | Paprika |

Combine as above.
CHEESE SAUCE TO SERVE WITH CROQUETTES

$$
\begin{array}{lc}
\begin{array}{ll}
11 / 2 & \text { tablespoons flour } \\
1 / 4 & \text { teaspoon salt }
\end{array} & 1 \text { tablespoon butter } \\
1 / 4 \text { cup grated cheese } & \text { Paprika } \\
& 1 \text { cup milk }
\end{array}
$$

Combine as above. Add cheese after milk is added. Slightly beaten yolk is added just as the sauce is removed.

## HOMINY AND OYSTERS

| $11 / 2$ cups chopped hominy | 2 dozen or more oysters and |
| :--- | :--- |
| liquor tablespoon butter | $1 / 2$ cup milk |
| $1 / 4$ cup bread crumbs | $1 / 2$ teaspoon salt |
| Pepper |  |

Butter a baking dish and put in a layer of hominy, then a layer of oysters, adding seasoning to each. Alternate until all materials are used. Pour milk and oyster liquor over oysters and put buttered bread crumbs on top. Bake in oven till browned on top or for about thirty to forty-five minutes, depending on the shape of the dish.

## SAUSAGE AND HOMINY ROLLS

| 2 cups chopped hominy | 1 egg, beaten |
| :--- | :--- |
| $1 / 2$ teaspoon salt | Pepper |

Shape the above mixture like sausages and roll in crumbs. Place them in a roasting or iron frying pan, alternating with six link sausages. While baking, turn once or twice in sausage fat.

Bananas cut once crosswise may also be cooked in the pan. This makes an easy dinner or lunch.

## CASSEROLE OF MEAT AND HOMINY

Drain one cup hominy, chop and put it into a buttered casserole in layers, alternating with one-half cup of meat cut in cubes. Chicken, veal, or beef may be used. Add seasonings, salt, pepper, chopped parsley, and onion salt. Add one cup meat stock or hominy liquid. Cover with buttered bread crumbs and cook covered one hour. Onethird of a cup of bread crumbs in one tablespoon melted butter is required.

|  | Number <br>  <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | $2-3$ | 50 | 328.6 | $\$ .067$ |

## HOMINY PUDDING

```
2 cups hominy, chopped fine 1/2 cup milk
1/2 cup chopped dates or 1 egg, beaten
    raisins
1/4 cup sugar
```

Mix the above ingredients and put in buttered custard cups. Put in a pan containing water and bake in a moderate oven till set like a custard or until a knife when inserted will be clean when removed.

| Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: |
| 6 | 80 | 1035 | $\$ .168$ |

Serve with the following soft custard sauce:
$11 / 2$ cups milk
2 eggs
$1 / 4$ cup sugar
Speck salt

Beat eggs slightly, add milk, sugar, and salt, and cook in a double boiler till the custard coats a wooden spoon.

| Number | Protein <br> servings | calories | Total |
| :---: | :---: | :---: | :---: |
| calories | Cost |  |  |
| .. | 96 | 611.3 | $\$ .078$ |

## GREEN CORN

As "all that glitters is not gold," all that is called corn is not corn for table use. Corn fed to cattle and corn raised for the corn products trade is not the typical sweet corn which is best for cooking. In the home vegetable garden, plant a good quality of sweet corn for table use and canning.

The following varieties and times of planting for Central Illinois are taken from "Home Vegetable Gardening" by Mr. C. E. Durst: ${ }^{1}$

| Date | Planting | Variety Sweet Corn <br> Golden Bantam |
| :--- | :---: | :--- |
| May 1 | 1 | White Cob Cory |
|  |  | Howling Mob Mob |
| Stowell's Evergreen |  |  |
| June 1 | 2 | Stowell's Evergreen |
| June 15 | 3 | Stowell's Evergreen <br> July 1 |
| Stowell's Evergreen |  |  |

The first planting of four varieties insures corn as early as is possible, and with the later plantings of "Evergreen" insures a continuous succession until about the time of frost. Corn to be best for the table should be pulled when of the right size and sweet in flavor, not when it has become too mature and the sugar has been converted into starch. Stowell's Evergreen and Golden Bantam are particularly recommended for canning and drying.

In selecting corn for table use and particularly for canning or drying, be sure to select only perfect ears. Corn may be infected with a fungus growth, smut, or may harbor the familiar tobacco worm. All ears which show any infection by smut should be discarded; even when not visible this disease sometimes gives the corn a bitter, unpleasant flavor and makes it unfit for canning. The tobaceo worm does not necessitate rejecting the entire ear. Be sure to remove all parts which show traces of being eaten. This pest is so common that if corn partly spoiled by it were not used, it would often mean wasting almost an entire crop.

## BOILED GREEN CORN

Remove husks and silky threads. Cook ten to fifteen minutes in boiling water. Place on platter covered with. napkin and cover by folding corners over the corn or with another napkin.

[^5]
## SUCCOTASH

Cut raw corn from cob. If the corn is rather old, score each row of kernels thru the center before cutting off. Add an equal quantity of boiled shelled beans, either kidney or lima beans, and cook twenty minutes. Season with butter, salt, and milk or cream. Boiled corn may be cut from the cob and combined with beans.

## CORN OYSTERS

> 1 cup chopped corn or pulp 1 egg
> $1 / 4$ cup flour teaspoon salt
> $1 / 8$ teaspoon pepper

Grate raw corn from cob or put thru meat grinder. Canned corn or Kornlet may be used. To the corn pulp, add egg, flour, and seasonings. Drop by spoonfuls and fry in deep fat.

| Number <br> servings | Protein <br> calories | Total <br> calories |
| :---: | :---: | :---: |
| Recipe | 6 | 54 |

Chop corn or put it thru meat grinder. Add dry ingredients mixed and sifted. Add beaten eggs. Fry in hot fat.

|  | Number <br> servings | Protein <br> calories | Total <br> calories | Cost |
| :---: | :---: | :---: | :---: | :---: |
| Recipe | 8 | 134 | 800 | $\ldots$ |

CORN A LA SOUTHERN

| 2 cups corn | 2 eggs |
| :--- | :--- |
| 1 teaspoon salt | $1 / 8$ teaspoon pepper |
| $11 / 2$ tablespoons butter | $11 / 2$ cups milk |

Use green corn which has been boiled and cut from the cob, or canned corn. Add beaten eggs to chopped corn, add seasonings, melted butter, and milk. Pour into a greased baking dish and bake in a slow oven. Test as for baked custard by cutting with a pointed knife. If it comes out clean, the custard is done. The mixture separates if over cooked.
Number
servings
10
Protein
calories
200
Total
calories
1500

Cost

CORN SOUP

| 1 pint canned corn | 1 pint milk |
| :--- | :---: |
| $11 / 2$ teaspoons salt | $1 / 2$ teaspoon pepper |
| 2 tablespoons butter | 2 tablespoons flour |
|  |  |
|  |  |
| 2 cups water |  |

Run corn thru food chopper. Add water and let boil for five minutes. Melt butter, add flour, stir together and add milk and seasonings. Cook until smooth and add corn. Bring to the boiling point and serve.

## CORN CHOWDER

2 cups corn
$11 / 2$ inch cube fat salt pork,
cut fine
2 tablespoons butter
8 crackers
1 sliced onion

2 cups corn
$11 / 2$ inch cube fat salt pork, cut fine

8 crackers
1 sliced onion

2 cups potatoes cut in onefourth inch pieces
4 cups scalded milk 2 cups boiling water Salt
Pepper

Fry out salt pork, add onion, and cook five minutes. Stir so as not to burn. Parboil potatoes five minutes in boiling water. Add to fat and cook until potatoes are soft. Add corn and milk and bring to boiling point. Add seasoning, butter, and crackers. Serve very hot.

## CORN RELISH

| 5 pints sweet corn cut from | 5 pints finely chopped cab- |
| :---: | :--- |
| cob | bage |

Mix all together and cook in a granite pan until tender. Seal in sterilized jars.

## PICKLED CORN

Drop the silked roasting ears into boiling water. As soon as the milk is set, take from the water and cut from the cob. Pack the cut corn into a container in the proportion of nine parts of corn and one of salt. Pound down with wooden potato masher. Cover with a clean cloth and a plate, weighting down the plate. If brine does not form to cover the plate in a week, add brine made of nine parts of water and one part of salt, sufficient to stand two or three inches above the plate. Take out the amount desired for use and wash in cold water. Cover with twice the amount of cold water and bring to a boil; pour off water and repeat process. Drain through a colander and return to the fire to sizzle dry. It is now ready to serve in any way.

## DRIED CORN

Blanch corn on the cob ten to fifteen minutes in boiling water. Score each row of kernels thru the center with a sharp knife, and cut
from the cob. Scrape off any pulp remaining. Spread thinly over pans or baking sheet and put in slightly warm, not hot, oven. Leave door ajar. Stir or shake pan occasionally. Corn may be dried very slowly till process is entirely complete, or it may be dried on successive days for short periods. This is done easily by using the oven heat when fire is allowed to die out after dinner is prepared, or it may be dried by placing the trays in the sun. Little or much corn may be dried at a time. The trays should be covered with screening to protect from insects. If extra corn on the cob has been cooked for dinner, the remaining ears may be used for drying.

## RECIPE FOR CANNING SWEET CORN ON THE COB ${ }^{1}$

Can corn the same day as picked. Remove husks and silks, and grade for size. Blanch on the cob in boiling water ten to fifteen minutes. Plunge quickly into cold water. Pack ears, alternating butts and tips, in half gallon glass jars or gallon tin cans. Pour boiling water over them and add two level teaspoonsful of salt to each gallon. Place rubbers and tops in position. Seal partially but not tightly. Cap and tip tin cans. Sterilize, using one of the following methods: in hot-water bath outfit 180 minutes, one period; 90 minutes in water seal outfit; 60 minutes in steam pressure outfit under five pounds of steam; 35 minutes in aluminum pressure cooker under twenty pounds of steam. Remove jars; tighten covers. Cool and test joints. Wrap glass jars with paper, and store.

Note:-When sweet corn is taken from the jar or tin can for table use, remove ears as soon as jar or can is opened. Heat corn, slightly buttered, in steam. Do not allow ears to stand in water or to be boiled in water the second time.

## RECIPE FOR CANNING SWEET CORN CUT FROM COB ${ }^{1}$

Can corn the same day as picked. Remove husks and silks. Blanch on the cob in boiling water ten to fifteen minutes. Plunge quickly into cold water. Cut the corn from the cob with a thin, sharp-bladed knife. Pack in jar tightly until filled to the neck of the jar. Add one level teaspoonful of salt to each quart and sufficient hot water to fill jars. Place rubber and top in position; seal partially, but not tightly. Sterilize, using one of the following methods: 180 minutes in hotwater bath outfit; 90 minutes in water-seal outfit; 60 minutes in steam pressure outfit under five pounds of steam; 35 minutes in aluminum pressure cooker under twenty pounds of steam. Remove jars; tighten covers. Cool, and test joints. Wrap with paper, and store.

[^6]
## market prices of materials used in recipes

The following market prices are those paid in May, 1917, in Ur-bana-Champaign, Illinois. In some recipes, as in those for corn used as a vegetable, the cost of the dish was not computed as it varied decidedly and gave misleading conclusions as to its expensiveness, depending on whether a commercial canned corn or a home product was used. In some recipes where prices vary particularly due to seasons, as with oysters, or in recipes where the ingredients would vary depending on personal preference, cost was not estimated.
Material
Baking Powder
Royal
$\quad$ Calumet or Rumford
Beef round
Butter
Oleomargerine
Lard
Crisco
Celery
Cheese
Corn meal
Eggs
Flour, bread
Flour, graham
Hominy
Milk
Molasses
Onions
Oysters
Peppers
Raisins
Sausage
Sugar
Yeast, dry
Yeast, compressed

| Amount | Price |
| :--- | ---: |
| 1 pound | $\$ .50$ |
| 1 pound | .25 |
| 1 pound | .24 |
| 1 pound | .45 |
| 1 pound | .30 |
| 1 pound | .30 |
| $11 / 2$ pounds | .50 |
| 1 bunch | .10 |
| 1 pound | .30 |
| 7 pounds | .35 |
| 1 dozen | .35 |
| 49 pounds | 3.25 |
| 8 pounds | .65 |
| 1 can | .12 |
| 1 quart | .10 |
| 2 pounds 6 ounces | .25 |
| 1 pound | .15 |
| 1 quart | .40 |
| 3 box | .10 |
| 1 pound | .15 |
| 25 pounds | .20 |
| 5 cakes | 2.75 |
| 1 cake | .05 |


[^0]:    ${ }^{1} \mathrm{C} . ~ \mathrm{~F}$, Langworthy and Caroline I. Hunt, "Corn Meal as a Food and Ways f Using It," Farmers' Bul. 565, U. S. Dept. of Agr.

[^1]:    ${ }^{1}$ Mrs. Melinda I. Manchester, Teachers College, 1915.
    ${ }^{2}$ Mrs. F. L. Stevens, 1917.

[^2]:    ${ }^{1}$ Mrs. F. L. Stevens, 1917.
    ${ }^{2}$ C. F. Langworthy and Caroline L. Hunt, "Corn Meal as a Food and Ways of Using It,' Farmers' Bul. 565, U. S. Dept. of Agr.

[^3]:    ${ }^{1}$ Dr. A. W. Chase, "Last Receipt Book," 1885.

[^4]:    ${ }^{1}$ Tests for fat:

    1. Fat should be smoking hot and should brown a cube of bread golden brown in forty seconds.
    2. Temperature $190^{\circ}$ C. or $370^{\circ} \mathrm{F}$.
[^5]:    ${ }^{1}$ O. E. Durst, "Home Vegetable Gardening," Circular 198, Agr'l. Exper. Sta., University of Illinois.

[^6]:    ${ }^{4}$ Form N R-24, States Relations Service, U. S. Dept. of Agr.

