# UNIVERSITY OF ILLINOIS COLLEGE OF AGRICULTURE 

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## WAR BREAD RECIPES

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The following compilation of recipes for war breads has been prepared in the hope that it may be helpful in lessening the use of wheat.

## BREAD

Bread is made from flour of wheat or other cereals by the addition of water, salt, and a ferment. Wheat flour is best adapted for bread making, as it contains gluten in the right proportion to make a spongy loaf. Gluten, the protein of the wheat, is a gray, tough, elastic substance, insoluble in water. Gluten, being elastic, is expanded by the gas developed in bread dough by fermentation, thereby causing the bread to rise. Flour should always be sifted before measuring.

Yeast is a microscopic plant of fungus growth, and is one of the lowest forms of vegetable life. The yeast plant reproduces by a process known as budding, multiplying very rapidly. Like other plants, favorable conditions for its growth are (1) food, (sugar); (2) warmth, $\left(25^{\circ}\right.$ to $35^{\circ} \mathrm{C}$. or $70^{\circ}$ to $90^{\circ} \mathrm{F}$.) ; (3) moisture. Fermentation, the production of alcohol and carbon dioxide, is the result of the growth of the yeast plant. The yeast plant is killed at a temperature of $100^{\circ} \mathrm{C}$. or $212^{\circ} \mathrm{F}$. Liquid, dry, or compressed yeast may be used for raising bread. Good bread depends primarily upon good yeast. Fermented bread is made by mixing flour to a dough with water or milk, salt, and a ferment. The dough should be thoroly kneaded to mix the ingredients and should be allowed to rise in a favorable temperature until it has doubled it bulk. It is then ready to be shaped into loaves. When it has doubled its bulk again, it is ready to be baked.

Bread is baked (1) to kill the ferment, (2) to render the starch digestible by cooking, (3) to drive off alcohol and carbon dioxide, (4) to develop flavor. The loaf should continue rising for the first fifteen minutes while baking, and continue browning for the next twenty minutes. The heat may then be reduced and the baking finished in fifteen minutes.

Rolls require more heat than bread. They should continue rising for the first five minutes and begin to brown in eight minutes.

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## YEAST

Yeast Foam is used in this demonstration. For yeast mixture when Magic Yeast or Yeast Foam is used:

```
2 cups water
1 cake dry yeast
2 tablespoons sugar
2 tablespoons flour
\(1 / 2\) cup boiled mashed potatoes
teaspoon salt
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Soak yeast in one cup of water. Mix dry ingredients, add potatoes and the other cup of water. Add soaked yeast, beating it thoroly. Let rise over night. The yeast will be ready for use in the morning.

## WHEAT BREAD

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\begin{array}{lc}
3 \text { tablespoons lard } & 1 \text { cup lukewarm (scalded) } \\
2 \text { tablespoons sugar. } & \text { milk } \\
1 \text { cake dry yeast prepared } & 1 \text { teaspoon salt } \\
\text { according to directions } &
\end{array}
$$

Mix ingredients, adding yeast mixture last. Beat together thoroly and add flour, beating with spoon or egg beater. Add flour and knead until a firm, elastic dough is obtained. Let rise until the mass has doubled its bulk. Shape into loaves. Let rise again until the loaves have doubled their bulk. Bake according to preceding directions.

## PARKER HOUSE ROLLS

For Parker House Rolls add an unbeaten egg, two tablespoons sugar, and two tablespoons butter at first mixing. Let the mass rise until it has doubled its bulk. Roll out on floured board, mould into shape, and let rise again until slightly increased in bulk. Spread melted butter over half of each bread roll, fold over, pressing the edges together. Place on buttered pan, one inch apart, and let rise. Bake from twelve to fifteen minutes in hot oven.

## SALAD OR DINNER ROLLS

Use the same ingredients as for Parker House Rolls, adding four tablespoons of butter to the first mass of dough. Shape as for Parker House Rolls, crescents, bow knots, clover leaf, braids, twists, sticks or other fancy shapes.

## SWEDISH ROLLS

Use the recipe for Salad Rolls, roll to one-fourth inch in thickness, let rise fifteen minutes, spread with butter, sprinkle with two tablespoons sugar mixed with one-third teaspoon cinnamon, onethird cup chopped, stoned raisins, and two tablespoons chopped
citron; roll like a jelly roll and cut into three-fourths inch pieces. Again let rise. When taken from oven, brush over with white of egg slightly diluted with water; return to oven to perfect the glaze.

## BREAD, USING ONE-THIRD STALE BREAD CRUMBS

Use proportions as for Wheat Bread recipe given above, working into the batter one cup of stale bread crumbs. The absorbent quality of the crumbs permits the use of less flour than in other dough mixtures.

BREAD, USING ONE-THIRD CORN MEAL

```
1 \text { cup boiling water}
1/2 cup lukewarm scalded
    milk
2 tablespoons lard
```

$21 / 3$ cups corn meal
2 tablespoons sugar
1 teaspoon salt
1 cake dry yeast prepared according to directions

Add the boiling water to the corn meal, cook in a double boiler for a few minutes, and proceed in the manner given in directions for bread.

Three cups of liquid of the recipe requires about seven cups of dour, varying slightly according to the quality of the flour and meal.

OLD VIRGINIA BATTER BREAD

```
1 \text { pint corn meal}
1 \text { teaspoon salt}
1 \mathrm { egg }
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1 quart scalded milk
1 teaspoon sugar (may be omitted)
Stir the corn meal into the quart of scalded milk; stir and cook to a mush. Allow to cool a little and add salt, sugar, and the milk, beaten yolk of egg, and lastly fold in the white of egg, beaten stiff. Melt two tablespoons of shortening in a baking pan, pour in mixture, and bake for forty-five minutes.

## SOUTHERN SPOON BREAD

$$
\begin{array}{ll}
1 / 2 & \text { cupful sifted corn meal } \\
1 / 2 & 1 \\
\text { cupful sweet milk } & 1 \\
\text { cuplespoon butter } \\
1 / 2 & \text { teaspoon salt }
\end{array} 1 \text { egg } \quad 1 \text { teaspoon baking powder }
$$

Pour the boiling water over the meal, and stir until smooth. Let cook briskly for five minutes; add butter and salt, stirring as it cooks. Take from fire. Add milk and the egg well beaten and then the baking powder. Pour it into a well buttered, shallow baking dish and bake for twenty minutes in a moderate oven, letting it brown carefully before removing. Serve from the dish in which it was baked.

## CORN MEAL AND RICE WAFFLES

| $1 / 2$ cup corn meal | $1 / 2$ cup flour |
| :--- | :--- |
| $1 / 2$ teaspoon soda | 1 tablespoon meIted butter |
| 1 cup boiled rice | 2 eggs, well beaten |
| 1 teaspoon salt | 1 cup sour milk |

Sift together the flour, soda, and salt; add the other ingredients and beat thoroly; have irons hot and well greased.

## GEM CRACKERS

Sift one and one-half pints of flour, one-half pint corn meal, one teaspoon baking powder, and the same amount of salt. Rub in two tablespoons butter, two-thirds of a pint of milk; work into a smooth, fine dough. Place on bread board, kneading a few times and roll to quarter-inch thickness; cut with a small oval or round cutter, lay on greased baking tin, puncture the top of each cracker with a fork, brush over with milk, and bake in hot oven.

## CORN MEAL PUFFS

Into one quart of boiling milk stir eight tablespoonfuls of meal, four tablespoonfuls powdered sugar, and one teaspoonful nutmeg. Boil five minutes, stirring constantly. Remove from fire and when cool stir in six well beaten eggs. Mix well and pour the mixture into buttered cups, nearly filling them. Bake in moderate oven onehalf hour. Serve with lemon sauce.

## CORN MEAL BISCUITS

$$
\begin{gathered}
1 \text { cup yellow corn meal } 2 \text { cups peanut cream } \\
2 \text { teaspoons salt }
\end{gathered}
$$

Put the meal into a shallow pan and heat in the oven until it is a delicate brown, stirring frequently. Make the nut cream by mixing peanut butter with cold water and heating. It should be the consistency of thick cream. While the nut cream is hot, stir in the corn meal, which should also be hot. Beat thoroly. The mixture should be of such consistency that it can be dropped from a spoon. Bake in small cakes on a greased pan.

If preferred, these biscuits may be made with cream or with butter in place of peanut cream, and chopped raisins may be added, one cup being the allowance for the quantities given above.

DELICATE INDIAN PUDDING


4 tablespoons sugar
2 large tablespoonfuls corn
meal

Boil milk and sift meal in slowly ; add butter, sugar, and salt. Set aside to cool, then add beaten eggs. Put in a baking pan and cook for three-quarters of an hour.

## OAT MEAL BREAD

Oat meal or rolled oats, passed thru a food chopper, may be used in the same proportion as corn meal. Cooking before adding to dough mixture as with corn meal is, however, not necessary.

## OAT MEAL AND CORN MEAL BREAD

$$
\begin{array}{cc}
11 / 2 \text { cups rolled oats } & 33 / 4 \text { cups flour } \\
11 / 4 \text { cups corn meal } & 2 \text { cups boiling water } \\
1 / 2 \text { cup brown sugar } & 2 \text { teaspoons salt }
\end{array}
$$

Dissolve the yeast cake in the lukewarm water. Pour the boiling water over the rolled oats, salt, and sugar, and let stand until lukewarm; add the dissolved yeast, corn meal, and flour. Let rise until light. Beat well, let rise again, and put into pans. Bake when light.

This combination of oat meal, corn meal, and wheat makes : palatable and economical variation.

## RYE BREAD

Another cereal which may well be substituted for wheat in breads is rye. When this is used about one-half wheat and onehalf rye make a good combination, as all rye is likely to be too strong for American tastes.
"OLD GLORY BREAD'"

1 cup rye
8 cups white flour
1 teaspoonful salt
3 tablespoons shortening (may be omitted)

3 cups whole wheat flour
4 cups water
1 yeast cake or more ac-
cording to the length
of time allowed for rising

Add salt and shortening to boiling water. Cool to lukewarm. Add yeast cake, dissolved in a little of the cool water. Add flours sifted together and knead until smooth and soft. Let rise in warm room until double its size. Knead and divide into loaves. Let rise as before and bake one hour. This recipe makes four medium sized loaves.
"Old Glory Bread" is used much in France at present.

[^1]The following recipes for barley bread are recommended by the University of Wisconsin and were published in the Journal of Home Economics for July, 1917.

## BARLEY BREAD I

| cups whole wheat fl | 1 cup milk |
| :---: | :---: |
| 2 cups barley meal | 2 tablespoonfuls molasses |
| 1 cup water | 1 teaspoonful salt |

Boil milk and water and cool; add molasses, salt, and yeast mixed with a little cold water; stir in flour and barley meal which have been sifted together. Knead to a soft dough, adding more flour, if necessary. Cover and let rise until the mixture is double its bulk. Knead a second time, form into loaves, place in well greased pans and let rise a second time until dough has very nearly doubled its bulk. Bake in a hot oven from one-half to one hour, depending upon size of loaves.

## BARLEY SPOON BREAD

$$
\begin{aligned}
& 1 / 4 \text { cup salt pork cut in } 1 / 4 \quad 1 \text { cup barley meal } \\
& \text { inch cubes } \\
& 4 \text { cups boiling water } \\
& 2 \text { or } 3 \text { eggs }
\end{aligned}
$$

Cook salt pork in saucepan until slightly brown, add water and when boiling, sprinkle in barley meal, stirring constantly. Cook in a double boiler one hour, cool, and add well beaten eggs. Turn into a buttered dish and bake in a moderate oven three-fourths of an hour.

## BARLEY MUFFINS

```
1 cup whole wheat flour 1 egg
1 \text { cup barley meal}
1/4 teaspoonful salt
2 teaspoonfuls baking pow-
    der
11/4 cups sour milk
1/2 teaspoon soda
2 tablespoonfuls beef drip-
    pings or lard
```

Sift flour, barley meal, salt, and baking powder. Dissolve soda in a little cold water and add to sour milk. Combine flour mixture and sour milk; add beaten egg and melted fat. Bake in muffin pans in a moderate oven.

## BARLEY SCONES

1 cup whole wheat flour
1 cup barley meal
$1 / 4$ teaspoonful salt
$1 / 3$ teaspoonful soda

2 tablespoonfuls lard or beef drippings
$3 / 4$ cup sour milk
2 teaspoonfuls baking powder

Sift flour, barley meal, salt, and baking powder together and work in lard with tips of fingers or two knives. Dissolve soda in
a little cold water and add to sour milk. Combine flour mixture and sour milk to form a soft dough. Turn out on a well floured board, knead slightly, roll to one-half inch in thickness; cut in diamond shapes and bake in a hot oven.

## POTATO BREAD ${ }^{1}$ (STRAIGHT-DOUGH METHOD)

The following recipe for potato bread has been so made as to use a large amount of potato as compared with flour. Excellent bread can be made with less potato. In making recipes it should be remembered that a pound of mashed potato contains about one and one-fourth cupfuls of water and starch and other substances about equivalent for the purpose to those in one cupful of wheat flour.

$$
\begin{array}{cc}
3 \text { pounds boiled and peeled } & 11 / 2 \text { level tablespoons salt } \\
\text { potatoes (equivalent to } & 3 \text { level tablespoons sugar } \\
\text { about } 33 / 4 \text { pounds water } & 2 \text { cakes compressed yeast } \\
\text { and } 3 \text { cups flour) } & 4 \text { tablespoons water } \\
21 / 4 \text { pounds bread flour }
\end{array}
$$

Clean thoroly and boil, without paring, twelve potatoes of medium size, allowing them to become very soft. Pour off the water, peel and mash the potatoes while hot, being careful to leave no lumps. Take three pounds, or five solidly packed half-pint cupfuls of mashed potato, and when at the temperature of lukewarm water add to it the yeast, rubbed smooth with three tablespoonfuls of lukewarm water. Rinse the cup in which the yeast was mixed with another tablespoonful of water and add to the potato. Next add the salt, the sugar, and about four ounces of the flour, or one scant half pint of sifted flour. Mix thoroly with the hand, but do not add any more water at this stage. Let this mixture rise until it has become very light, which should take about two hours if the sponge is at a temperature of about $86^{\circ} \mathrm{F}$. To this well-risen sponge, which will not be found to be very soft, add the remainder of the flour, kneading thoroly until a smooth and elastic dough has been formed. The dough must be very stiff, since the boiled potato contains a large amount of water, which causes the dough to soften as it ferments. Therefore, add no more water to the dough unless it is absolutely necessary. Set back to rise until it has trebled in volume, which will require another hour or two. Divide the dough into four parts, mold them separately, and place in greased pans which have been warmed slightly. Allow the loaves to rise until they have doubled in volume and bake forty-five minutes at a temperature of $400^{\circ}$ to $425^{\circ} \mathrm{F}$. This recipe makes four one-pound loaves.

[^2]
[^0]:    ${ }^{1}$ Used by Mrs. F. L. Stevens at the University of Illinois School for Housekeepers.

[^1]:    ${ }^{3}$ University of Vermont, Agricultural Extension Service.

[^2]:    the ${ }^{1}$ Caroline L. Hunt and Hannah L. Wessling, "Bread and Bread Making in the Home,' Farmers' Bul. 807, U. S. Dept. of Agr.

