

EXTENSION SERVICE
STATE COLLEGE OF WASHINGTON
W.S. THORNER, DIRECTOR
PELLMAN, WASH.

State College of Wash-
ington and U. S. Dept.
of Agriculture cooperating.

War Food Emergency
Circular No. 1.

Liberty Breads
by

Leila W. Hunt, Assistant Professor of Home Economics.

Why must we Americans send wheat to the Allies ?

1. -Because the Allied people have few corn mills.
2. -We cannot send them cornmeal because it deteriorates when stored for any length of time and it would have to be sent in large quantities.
3. The allied people do not bake their bread at home. It is made in bakeries and cornbread can not be distributed from bakeries.

There is but one way. We must send them wheat. We can only do it by economizing and substituting.

The Food Administration asks for the substitution of only one pound of some other cereal flour for one pound of wheat flour weekly per person. In other words we are asked to reduce our consumption of wheat flour from five pounds a week to four pounds a week.

What can the housewife use in the place of wheat flour and yet properly feed the family? She can use:-

- | | |
|-------------------|--------------------------------------|
| 1. Cornmeal bread | 4. Barley bread |
| 2. Oatmeal bread | 5. Cotton seed bread (only in South) |
| 3. Rye bread | 6. Potato bread. |
| 7. Rice bread. | |

RECIPES

Cornmeal Yeast Bread

- | | |
|---------------------|----------------------|
| 2½ c. milk or water | 1 1/3 c. cornmeal |
| 4 T. sugar | 4 2/3 c. flour |
| 2 T. fat | 1 yeast cake |
| 1 T. salt | ¼ c. luke warm water |

Scald liquid and pour over salt, sugar and fat. Add cornmeal slowly, stirring constantly until all is added. Cool mixture and add yeast softened in luke warm water. Add 4 2/3 c. of flour and knead. Let rise until about double its bulk, knead again and put in pans; when light bake in a moderate oven about 1 hr.

. Note: -- The dough will be very stiff but follow directions closely.

Boston Brown Bread.

- | | |
|----------------|----------------|
| 2 c. graham | 1 c. corn meal |
| 1 c. molasses | 1 t. soda |
| 2 c. sour milk | 1 t. salt |

Sift dry ingredients together; add milk and molasses; fill greased mold 2/3 full and cover and steam 6 hours. Small molds like baking powder cans may be used and the time of steaming shortened.

Golden Cornmeal Gems.

- $\frac{3}{4}$ c. cornmeal
- $1\frac{1}{2}$ c. flour
- 4 T. sugar
- 1 egg
- 4 t. B. P.
- 1 t. salt
- 1 c. milk or water
- 1 T. melted fat.

Mix dry ingredients, beat egg until light; add milk to beaten egg; combine with dry ingredients; beat thoroughly and add melted fat. Bake in hot gem pans.

Virginia Egg Bread

- 4 c. cornmeal
- 3 c. milk
- 1 T butter
- 1 c. wheat flour
- 2 eggs

Bake batter in greased cups or a tin pan in a hot oven.

Oatmeal Bread

- 2 c. milk or water
- 2 t. salt
- 2 T. fat
- 4 T. sugar
- 2 c. rolled oats
- $4\frac{1}{2}$ c. flour
- 1 yeast cake
- $\frac{1}{2}$ c. luke warm water

Scald liquid and pour over oats, sugar, salt and fat. Cool. Add dissolved yeast cake; then the flour; knead; let rise to double in bulk; knead again; shape and place in pans to rise second time. When light bake for about 1 hour in a moderate oven.

Oatmeal Yeast Muffins

- 2 c. scalded milk or water
- 1 c. rolled oats
- 4 T fat
- 2 t. salt
- $\frac{1}{3}$ c. brown sugar.
- 1 yeast cake
- $\frac{1}{2}$ c. warm water
- 2 c. bread flour
- 2 c. whole wheat flour

Add oatmeal, sugar, salt and fat to the hot liquid and cool. Add dissolved yeast cake. Let rise to double in bulk. Beat and put into well greased muffin tins, half filling them. Let rise till light and bake in a moderate oven.

Rye Bread

- 2 c. milk or water, scalded
- 1 T. sugar
- 1 T. fat
- 4 c. white flour
- 1 yeast cake
- $\frac{1}{2}$ c. luke warm water
- 3 c. rye flour
- $\frac{1}{2}$ T. salt

Pour hot liquid over sugar, fat and salt. Cool. Add dissolved yeast cake; add enough white flour to make a sponge; beat well; let rise until light; add the rest of white flour and rye flour to knead; set aside to double in bulk; knead again; place in pans; let rise again until light; bake in a moderate oven.

Potato Bread

$\frac{1}{2}$ c. milk or water, scalded	4 c. cooked mashed potato
4 T. sugar	8 c. flour
4 T. fat	1 yeast cake
$\frac{1}{2}$ t. salt	$\frac{1}{4}$ c. luke-warm water

Pour hot liquid over sugar, fat, salt and hot potatoes which have been put thru a ricer or strainer; cool; add yeast cake dissolved in warm water; add flour all of the flour may be added but it will be difficult to knead or a part of the flour may be reserved and added with the second kneading. In either case the dough will be soft at the second handling. Follow same general directions as for any bread.

Potato Biscuit

2 c. mashed potatoes	2 t. salt
2 T. fat	1 t. soda
2 c. sour milk	3 c. rye flour
2 c. white flour	

Mix in the usual manner. Roll out, cut and allow to stand on greased tins in a cool place 1 hr. Bake in a hot oven.

Note:-- If potatoes are warm the biscuits may be baked immediately.

Rice Bread

1 c. milk or water, scalded	7 c. boiled rice
4 T. sugar	8 c. flour
4 T. fat	1 yeast cake
$\frac{1}{2}$ t. salt	$\frac{1}{4}$ c. warm water

Pour hot liquid over sugar, fat and salt; cool; add yeast cake, moistened in warm water; add rice, flour, and knead; after second rising bake for about 1 hr. in a moderate oven.

Note:-- Some difficulty will be experienced in kneading rice and flour as in potato bread but follow directions and a good bread will result.

Rice Muffins

1 c. cold cooked rice	2 t. B. P.
1 c. cornmeal	1 T. fat
1 c. milk	2 eggs
$\frac{1}{2}$ t. salt	

Stir salt and baking powder into the cornmeal. Add rice. Mix well together. Add well beaten eggs, milk and butter. Beat for 5 min. Bake in a quick oven for 30 minutes.

Liberty Bread

2 c. boiling water	$\frac{1}{2}$ c. molasses
1 yeast cake	1 c. rye flour
$\frac{1}{4}$ c. luke warm water	1 c. cornmeal
1 t. salt	3 c. whole wheat flour

Pour hot water over molasses and salt; Cool. Add yeast cake dissolved in luke warm water. Then add flours; knead; let stand to double in bulk; knead; place in greased pans; let rise again until light. Bake in a moderate oven for 1 hr.

Abbreviations: - c. - cupful; T. - tablespoonful; t. - teaspoonful; B.P. Baking powder.

HOW TO CONSERVE MEAT

by

Leila W. Hunt, Associate Professor of Home Economics
State College of Washington

WE AMERICANS must send more wheat to the Allies. Their food animals decreased 33 million head since the war began, and the lack of food for animals is causing still greater decrease. The great physical strain under which soldiers are working makes their food needs for meat greater.

THE HOUSEWIFE may help win the war by using less meat. She can use less beef, pork and mutton, planning to use any one of these meats not more than once a day. She can prevent the waste of meat in her kitchen by utilizing all left-overs. If she uses one ounce less of meat per day per person, the Allies will have an additional daily supply of more than five million pounds.

SHE CAN USE MORE:

Animal Foods

1. poultry and eggs
2. game in season
3. fish
4. skim milk
5. milk and cottage cheese.

Vegetable Foods

1. beans, peas, lentils and soy beans.
2. cereals, oats, rye and barley
3. nuts

Our government asks that we use no butter in cooking. For fat use chicken or goose fat, oleomargarine, crisco, cottolene, corn oil, or cotton seed oil.

SCALLOPED FISH: Slice halibut; wipe and steam 20 minutes. When cold flake as large as good sized buttons. Turn in large baking dish; pour over a medium white sauce, cover with buttered crumbs and serve. Season fish with salt, pepper and tabasco. Season white sauce with bit of bay leaf and cloves.

FISH SCRAPPLE:

- | | |
|-----------------------------|---|
| 1 c. yellow corn meal | $\frac{1}{2}$ c. shredded salmon, tuna or halibut |
| $\frac{1}{2}$ c. cold water | $\frac{3}{4}$ c. boiling water |
| 1 t. salt | |

Cook cornmeal with salt and water 3 hours. Add fish $\frac{1}{2}$ hr. before removing. Mold and chill. Slice thin; flour slices and saute.

SCALLOPED CODFISH AND RICE:

- | | | |
|-----------------------|------------------|------------|
| $\frac{1}{4}$ c. rice | 1 T. fat | 1 T. flour |
| 1 c. codfish | 2 T. breadcrumbs | 1 c. milk |

Cook rice in boiling salted water until tender. Soak codfish overnight or put in cold water and bring to boiling point. Drain and flake. Melt fat, add flour and stir until blended. Add milk and stir until thickened. Spread rice, codfish and white sauce in layers in oiled baking dish. Cover with crumbs and bake 20 minutes in moderate oven.

CLAM CROQUETTES:

- | | | |
|------------------|----------|-------------|
| 8 to 10 T. flour | 4 T. fat | 1 can clams |
|------------------|----------|-------------|

Add enough milk to clam broth to make 2 cups, add salt, pepper and seasoning. Mix as for white sauce, add clams, turn into shallow pan to cool. When cool, shape roll in breadcrumbs and egg, fry in deep fat and serve with sauce.

TOMATO RABBIT:

- | | | |
|--|-------------------------|-----------------------|
| 2 T. fat | $\frac{3}{4}$ c. cream | $\frac{1}{8}$ t. soda |
| 2 T. flour | $\frac{3}{4}$ c. tomato | 2 c. cheese cut fine. |
| 2 eggs slightly beaten, salt, mustard and cayenne. | | |

Make white sauce with fat, flour and cream; add tomato stewed, strained and mixed with soda; add cheese, eggs and seasonings. Serve on toast.

CHEESE LOAF WITH ITALIAN TOMATO SAUCE:

- 2 c. bread crumbs
- 1 c. cold milk
- 1 t. salt
- 1 c. American cheese
- 3 eggs
- 1/8 t. pepper
- 1 T. tabasco sauce
- 1 T. chopped pimento
- 2 t. fat

Cover crumbs with milk for 20 minutes; add cheese, seasoning and flavoring. Separate eggs, add yolks and beat 5 minutes. Beat whites of eggs until dry and fold into mixture. Do not beat after whites are added. Brush casserole or baking dish with fat, pour in mixture and bake in moderate oven 35 minutes- until firm. Try with silver knife in center. If it comes out clean the loaf is done. Serve at once in dish in which baked. Serve with sauce.

ITALIAN TOMATO SAUCE FOR CHEESE LOAF:

- 2 c. tomatoes
- 4 T. fat
- 2 T. flour
- 2 t. salt
- 1/2 c. each cut onion, carrot, turnip and green pepper

Put onion, carrot, turnip and green pepper into frying pan with fat; fry until tender. Add tomato and salt, cook five minutes, mash through strainer, return to fire. Add flour mixed with cold water. Boil five minutes.

RICE, CHEESE AND PIMENTO:

- 1 c. rice
- 1 c. chopped cheese
- 1 small can pimento chopped

Cook rice in boiling salted water. Drain, pour over cold water, mix with cheese and pimento. Bake 20 minutes. Save rice water for soup.

CORN AND CHEESE SOUFFLE:

- 1 T. fat
- 1 T. chopped green pepper
- 1/4 c. flour
- 2 c. milk
- 1 c. chopped corn
- 1 c. grated cheese
- 3 eggs
- 1/2 t. salt

Cook pepper in fat. Make sauce of flour and milk; add corn, cheese, egg yolks, and seasoning. Fold in stiffly beaten whites, pour in oiled baking dish and bake in moderate oven 30 minutes. Made with skimmed milk and without fat, this dish has food value in excess of 1 pound beef and 1 pound potatoes.

CORNMEAL AND CHEESE:

- 3 c. cornmeal
- 1/4 pound cheese
- 1 T. salt
- 2 qts. water

Sift cornmeal into boiling, salted water, stirring constantly. Boil until thick; cook in double boiler 1 hr. remove from fire; add cheese and stir until cheese melts; pour into damp, cold bread pan. When cold slice and brown in small amount of hot fat. Serve with tomato sauce.

TOMATO SAUCE:

- 1 c. canned tomatoes
- 1/8 t. pepper.
- 2 T. fat
- 1/2 t. salt, 1 slice onion, 2 T flour,

Cook onion with tomato 10 to 15 minutes; rub through strainer and add fat and flour to which seasonings have been added. Cook until thick.

SPANISH BEANS:

- 2 c. kidney beans
- 2 c. canned tomato
- 1 c. finely cut onion
- 6 T. oil
- 2 T. flour
- 1 T. salt
- 1/2 c. pimento

Soak beans over night; drain, cover with boiling water; boil slowly 1 1/2 hours, or until tender. Drain and add sauce as follows: Cook onion and pimento in oil until tender but not brown. Add tomato, salt and flour which has been mixed with cold water. Boil 5 minutes. Pour sauce over drained beans and simmer 10 min.

BEAN LOAF:

- 2 c. cold baked or boiled beans.
- 1 c. breadcrumbs
- 1 T. grated onion
- 1/8 t. pepper, 1 egg well beaten
- 2 T catsup
- 1/2 t. salt

Abbreviations: c - cup T - tablespoonful t. teaspoonful. 11/17/17

BIBLIOGRAPHY --- FOOD CONSERVATION

Published by Walla Walla Public Library in Co-operation
with Extension Service, State College of Washington, Pullman, Wash.

NUTRITIVE VALUE OF FOODS AND PLANNING OF MEALS.

BOOKS:

- 612.39 644 Chittendon, R. H., Nutrition of Man, 1907.
- 613.2 H97 Hutchinson, Robert. Food and Dietetics, 1911.
- 613.2 J76 Jordan, W.H. Principles of Human Nutrition, 1912.
- 640. K62 Kinn and Cooley, Foods and Household Management, 1914.
- " " " Foods and Health, 1916.
- 613.2 R39 Richards, M.H. First Lessons in Food and Diet, 1904.
- 613.2 R72 Rose, M. S. Feeding the Family, 1916.
- 613.2 Sherman, H. C. Food Products, 1915.
- Stern and Spits, Food for the Worker, 1917.
- 643. W21 Wardall & White, Study of Foods, 1914.
- 612.3 W64 Wiley, H. W. Not by Bread Alone, 1915.

BULLETINS:

- Ten lessons on food conservation, U. S. Food Administration 1917.
- Practical Suggestions Regarding Food Values, Maine Department of Agriculture 1917.
- Food, What to Buy, How to Cook It, etc. New York. 1917.
(Contains menus of the New York Diet Squad.)
- Food Preparedness, Columbia War Papers, 1917.
- Food Thrift, Massachusetts Board of Education, Sept. 1917.
- How to Select Foods,- What the Body Needs, Farmer's Bulletin 808.
- How to Select Foods,- Foods Rich in Protein. Farmer's Bulletin 824.
- How to Select Foods,- Cereals. Farmer's Bulletin 817.
- Principles of Nutrition and Nutritive Value of Food. " " 142.
- Fats and Their Economical Use in the Home. Agricultural " 469.
- Food and Food Values. Wash. State Dept. of Agriculture, 1916.
- Fresh Fruits and Vegetables as Conservers of Other Staple Foods
Farmer's Bulletin 871.

MAGAZINE ARTICLES:

Many references in magazines on balanced rations, calories in the edible portions of a number of foods, diet, proteins, mineral nutrients, eating, etc.

INFANT FEEDING.

- 618. H74 Holt, L.E. Care and Feeding of Children, 1911.

BULLETINS:

- Pre-natal Care. U. S. Children's Bureau, Pub. 4.
- Infant Care. U. S. Children's Bureau, Pub. 8.

MAGAZINE ARTICLES:

References in magazines on infant feeding, nutrition during growth, foods that are safe to give, etc., upon request.

DIET FOR CHILDREN.

BULLETINS:

- Food for Young Children, Farmer's Bulletin, 717.
- School Lunches, Farmer's Bulletin, 712.
- Daily Meals of Children, U. S. Educational Bulletin, 1909-3.
School

MAGAZINE ARTICLES:

Mothers and Children, feeding of two-year-olds, etc. References on request.

STUDIES OF VARIOUS COMMON AND NUTRITIOUS FOODS - THEIR PREPARATION AND RECIPES.

FRUITS:

BULLETINS:----

Use of Fruit as a Food; Farmer's Bulletin 293.
 Fruit and Its Uses as Food; Agriculture Year Book, 1905.
 Raisins, Figs and Other Dried Fruits and Their Uses, Agriculture Year Book, 1912.
 Fresh Fruits and Vegetables as Conservers of Our Staple Foods.

MAGAZINE ARTICLES:----

References on Apples, Cherries, Dates, Berries, etc., on request.

BREAD:

BULLETINS:----

Bread and Bread Making in the Home, Farmer's Bulletin, 807.
 Skim milk in Bread Making. " " 114.

MAGAZINE ARTICLES:

Plea for home-made bread, salt rising bread, cost of bread, etc.
 References on request.

BREAKFAST FOODS:

BULLETINS:----

Cereal Breakfast Foods, Farmer's Bulletin, 249.
 How to Select Foods; Cereal Foods, Farmer's Bulletin, 817.
Cornmeal & Hominy:
 Cornmeal as Food and Ways of Using It. Farmer's Bulletin, 565.
 Food Value of Corn and Corn Products. " " 298.

Rice:

Recipes, W.H.C., September, 1915.

Macaroni:

Macaroni Meals. L.H.J., November, 1912.

Vegetables:

Preparation of Vegetables for the Table. Farmer's Bulletin 256.
 Beans, Peas, and Other Legumes as Food. " " 121.

MAGAZINE ARTICLES:

On Food Value; whole meals in vegetable dishes, etc.
 References on request.

Potatoes:

Potatoes as Food. Farmer's Bulletin 295.
 Magazine references upon request.

Meat: Bulletins:---

Meats, Composition and Cooking; Farmer's Bulletin, 34.
 Economical Use of Meat in the Home: " " 391.
 Mutton and Its Value in the Diet; " " 526.

Magazine Articles:---

How much Meat; selection cheaper cuts, etc.
 References upon request.

Fish: Bulletins:---

Fish as Food. Farmer's Bulletin 85.

Dairy Products: Bulletins:----

Milk a Cheap Food. Cornell Reading Course, January 1917-3.
 Food Value of Milk. Mass. Agricultural College.
 Cheese and Its Economical Uses in the Diet. Farmer's Bulletin 437

Eggs: Bulletins:---

Eggs and their value as food. Farmer's Bulletin 471.
 Eggs and their uses as food. " " 128.

COOK BOOKS:

641. R56 Robinson. Lessons in Cookery Through Preparation of Meals, 1912.
 641. B27 Barrows, Anna, Principles of Cookery, 1907.
 640. B94 Benton, C.F. Living on a Little, 1908.
 Condit and Long, How to Cook and Why, 1914.
 641. F22 Farmer, Fannie M. Boston Cooking School Cook Book 1907.
 641. H55 Hill, J. M. Cooking for Two, 1909.
 641. N36 Nesbitt, Florence, Low Cost Cooking, 1915.
 Magazine references on request.

FIRELESS COOKERY:

641. L94 Lovewell, C.B.F. Fireless Cookery, 1906.
 Homemade Fireless Cookers and Their Use. Farmer's Bulletin
 771.

LEFT-OVER FOODS:

Magazine references on request.

COST OF FOOD:

643. R39 Richards, E.H. The Cost of Food, 1913.

FOOD SUBSTITUTES:

BOOKS:

- Cheese and Other Substitutes for Meat. Agricultural Year
 Book, 1910.
 613. 2B98 Buttner, J.L. Fleshless Diet, 1910.

BULLETINS:

- Cormmeal as a Food and Ways of Using It. Farmer's Bulletin, 565.
 Wheat Substitutes. Columbia War Papers. 1917.
 Nuts and their Uses as Food. Farmer's Bulletin 332.

MAGAZINE ARTICLES:

- Butter Substitutes; edible greens; meat substitutes; nuts; wheat
 substitutes, etc. References on request.
 Food, Patriotic bread recipes, p. 5. Food Administration, Wash. D.C.

FOOD PRESERVATION:

BOOKS:

664. 076 Conn, H.W. Bacteria, Yeasts and Molds, 1902.

BULLETINS:

- Care of Food in the Home. Farmer's Bulletin 375.
 Storing of Preserves, canned fruits. Farmer's Bulletin 281.
 Care of Milk and Its Use in the Home, " " 413.
 Preservation of Vegetables by Fermentation and Salting,
 Farmer's Bulletin 881.

WEIGHTS AND MEASURES:

- Weights and Measures Versus the High Cost of Living. 1913.

KITCHENS:

BULLETINS:

- Farm Kitchen as a Workshop. Farmer's Bulletin 607.
 Experiment Station Work, The Farm Home. Farmer's Bulletin 317.
 Experiment Station Work, A Model Kitchen. " " 342.

HOUSEHOLD MANAGEMENT:

BOOKS:

- Bruere, Increasing Home Efficiency.
 Fredericks, C.M. New Housekeeping, 1913.

STUDY OUTLINES FOR WOMEN'S CLUBS:

- Home Economics and Dietetics. 1913.