

USES OF WHOLE WHEAT IN THE HOME

PRICE IS NO MEASURE OF FOOD
VALUE. SOME EXPENSIVE AND
POPULAR FOODS HAVE LITTLE
IMPORTANCE IN AN ADEQUATE
DIET. WHEAT EVEN THOUGH
COSTING LITTLE IS A PRICELESS
FOOD. ABUNDANT IN OREGON
IT PROVIDES A BASIC RESOURCE
FOR EVERY HOMEMAKER AND
FAMILY DETERMINED TO PRAC-
TICE THE MOST INTELLIGENT
AND CAREFUL THRIFT.

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Uses of Whole Wheat in the Home

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OREGON produces large quantities of excellent-quality wheat, which can be purchased at a low price. The unmilled wheat can be used in many delicious and inexpensive dishes for family meals.

Food value of whole wheat. Whole-wheat products have a higher nutritive value than white flour or refined cereals. Whole wheat contains approximately twice as much vitamin B as white flour, thus contributing valuable protection from certain forms of neuritis, poor digestion, lack of appetite, and poor growth. Whole wheat contains four times as much iron and phosphorus, more valuable proteins, and a much larger amount of roughage, than white flour or refined cereals. Large quantities of whole-wheat products should not be eaten in any one day because of their laxative effect. They are not recommended for young children nor for adults suffering from digestive disturbances.

Both whole wheat and white flour are valuable sources of energy. They are moderately good sources of vitamin G, which functions in helping to preserve muscular tone and other characteristics of youth.

Whole-wheat products which are milled at home or under home supervision contain the entire grain. From much commercial whole wheat the germ has been removed. The germ contains considerable fat and therefore wheat containing the germ does not keep for many weeks. Prepare cracked wheat and home-ground flour only in quantities sufficient for early consumption.

Hard-wheat flour contains more gluten than soft-wheat flour and is suitable for bread making. Soft-wheat flour contains more starch than hard wheat and is suitable for cakes and pastries.

In order to obtain a balanced diet, wheat products must be supplemented by an adequate supply of milk, vegetables or fruit, and eggs, meat, or fish. Foods that may be replaced by whole wheat products are commercially prepared breakfast foods, rice, macaroni, spaghetti, white flour, and products made from it such as white bread and crackers.

Cleaning whole-wheat grains. Wheat may be purchased cleaned or uncleaned. To clean wheat at home, place it in a broad pan, add considerable water, and stir. Most of the oats, chaff, and other impurities will rise to the top. Pour these off into a sieve or strainer, not directly into the sink. Repeat washing. Look over remaining grain, a handful at a time, and remove undesirable kernels or other impurities.

If flour is to be made from washed wheat, spread the wheat on clean paper or pans and dry in the sun, in a warm room, or in a slightly warm oven with door left open.

Grinding whole wheat. Whole wheat may be ground into flour at home in a hand or power grist mill. Hand mills can be purchased for \$3.50

or more. If a small gas engine or electric motor is available, the mill may be equipped with a belt for a small sum.

Many communities have feed or flour mills where one can have wheat ground or cracked either for a small sum or in exchange for grain. When making flour at home, shake the milled product through flour sifter, and regrind the larger particles several times if necessary, until they will pass through the sifter.

Cracked wheat can be purchased as such at feed stores or mills, or it can be made at home by grinding cleaned soaked wheat in a food chopping machine or coffee mill. Cracked wheat cooks to a more mushy, stiff consistency than does the whole grain. Whole and cracked wheat may be used interchangeably in most of the recipes given below.

Cooking whole wheat. To one cup of washed whole wheat, add 2 cups of hot water and 1 level teaspoon of salt. Boil over direct heat in top of double boiler or similar utensil 5 minutes.

Place the covered saucepan of wheat in a pan of boiling water and let the wheat stand over night or for several hours. Heat can be retained longer by use of a fireless cooker or other insulation, or by placing the double boiler in the oven over night. The following morning, add 1 more cup of hot water or milk to each cup of dry wheat used, and cook in a double boiler until tender, usually about an hour.

If cracked wheat is desired rather than whole grains, proceed as described above up to point of the second cooking. Then put the partly cooked wheat through the food chopper in the morning before finishing the cooking.

Wheat can be cooked without the over-night process by placing 1 cup of wheat, 3 cups of hot water, and 1 teaspoon of salt in the double boiler and cooking the wheat without stirring for 3 to 4 hours.

Wheat can be cooked in a steam pressure cooker by placing in a pan 1 cup of wheat, $1\frac{1}{2}$ cups of hot water, and 1 teaspoon of salt, and cooking at 15 pounds pressure for $1\frac{1}{2}$ hours. Allow pressure to return to zero before opening the petcock.

Parboiling wheat in soda helps to soften the grains. If this method is used, add 1 teaspoon of soda to 1 quart of boiling water and drain off liquid after boiling an hour.

Each cup of dry wheat makes from 2 to 3 cups of the cooked wheat. It is economical to cook a large amount of wheat at one time and use it in several different dishes.

Uses of cooked wheat and wheat hominy. Wheat or wheat hominy that has been boiled or steamed can be served in any of the following ways:

1. As a breakfast cereal with cream or milk and sugar.
2. As a breakfast cereal with butter and brown sugar.
3. As a breakfast cereal or dessert with dried fruits added the last half hour of cooking, with cream or milk and sugar.
4. As a side dinner dish with butter and jam, jelly, or honey.
5. In place of rice or barley in soups and stews.
6. In place of rice in baked main dishes and desserts.
7. In place of macaroni in baked cheese and tomato dishes.
8. In place of rolled oats in cookies and bread.

9. As a dessert with butter and brown sugar sirup or other sirup.
 10. Combined with diced fried bacon or salt pork.

RECIPES USING COOKED WHEAT

1. Whole-wheat chowder (6 servings)

3 medium carrots	2 tablespoons flour
$\frac{1}{2}$ cup diced salt pork or bacon	2 minced hard-cooked eggs (may be omitted)
1 medium onion, diced	Salt to taste (about 1 tea- spoon)
1 quart milk	
1 cup cooked cracked or whole wheat	

Peel the carrots, cut lengthwise and cook in sufficient boiling salted water to prevent burning. Drain the water into the heated milk. Chop the carrots with a perforated chopping can. Fry the pork until crisp, cook the onion in fat, remove from fire and stir in the flour. Add the pork mixture to the milk gradually and stir until slightly thickened. Add wheat, carrots, and minced egg. Cook over hot water 10 minutes. Add salt if desired. One tablespoon of chopped parsley or other fresh greens may be added.

2. Spanish wheat (6 to 8 servings)

3 slices bacon or salt pork	$\frac{1}{2}$ cup diced onion
1 cup canned or fresh tomato	$\frac{1}{2}$ teaspoon salt
3 cups cooked cracked wheat	$\frac{1}{2}$ tablespoon butter

Cut the bacon into half-inch pieces and fry until crisp. Combine the bacon and bacon fat with the other ingredients, and mix.

Pour into a buttered baking dish and bake in a hot oven, uncovered, about 45 minutes or until the mixture becomes dry enough to serve. Serve hot.

3. Wheat cutlets

Prepare cracked wheat as described above under "Cooking Whole Wheat." If the wheat is cooked in milk instead of water the cutlets brown well.

Pour into bread pan to mold. When ready to use, loosen from sides of tin and invert the loaf. Slice with a sharp knife into $\frac{1}{2}$ -inch slices.

Prepare a batter, using $\frac{1}{2}$ cup milk to two beaten eggs and $\frac{1}{2}$ teaspoon of salt. Heat butter, bacon or other fat in frying-pan. Dip slices of cracked wheat into the batter, then into bread crumbs, corn-meal, or cracker crumbs, and fry until light brown in color. Slices may be fried without being dipped into batter and crumbs.

4. Lamb stew with wheat (10 servings)

- 1 pound lamb shoulder, breast, or neck, cut in 2-inch pieces
- 5 onions
- 8 medium carrots
- 4 cups whole or cracked wheat partly cooked and soaked over night as described under "Cooking Whole Wheat."
- 3 quarts boiling water
- $\frac{1}{2}$ tablespoon salt

Trim and clean lamb, being careful to remove any splinters of bone. Boil water and add lamb. Place partly cooked wheat into a sack and tie shut, leaving room for expansion, and cook with the lamb 2 hours. About half an hour before time for finishing, add salt and vegetables cut in 2-inch pieces. Celery is a good addition. Keep the wheat below the surface of the water to give it the flavor of the meat and vegetables. Replenish boiling water when necessary. Add more salt if necessary. Serve the wheat separately. If desired, meat may be seared before stewing.

5. Wheat and meat loaf (6 servings)

- 4 cups cooked cracked or whole wheat
- 1 cup cooked diced celery (may be omitted)
- 1 small can tomato soup or $1\frac{1}{2}$ cups tomato pulp
- 2 tablespoons suet or butter
- $\frac{1}{2}$ cup chopped onion
- $\frac{1}{2}$ pound chopped lamb, beef, chicken, veal, ham, liver, or mixture
- $\frac{1}{2}$ cup bread crumbs
- Salt to taste

Try out suet, add onion and chopped meat, and brown slightly. Mix with other ingredients. Pour into a baking pan. Cover with buttered bread crumbs and bake uncovered in moderate oven about 1 hour or until the mixture becomes dry enough to serve. Serve hot. Canned meat, cooked meat, or salmon may be substituted for the fresh meat. With salmon add two beaten eggs.

6. Wheat and vegetable loaf (6 to 8 servings)

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| 4 cups cooked wheat | $\frac{1}{2}$ cup diced onion |
| $1\frac{1}{2}$ cups canned tomato | 2 tablespoons fat |
| 1 cup chopped or grated carrot | 1 teaspoon salt |

Melt the fat. Combine all the ingredients. Salt to taste. Pour into a greased baking dish and bake in a hot oven about 45 minutes or until the vegetables are tender.

7. Scalloped wheat and cheese (6 servings)

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| 3 cups cooked cracked or whole wheat | $\frac{1}{2}$ teaspoon salt |
| 4 tablespoons fat | Buttered crumbs ($\frac{1}{2}$ cup crumbs and $\frac{1}{2}$ tablespoon butter. Plain crumbs may be used.) |
| 4 tablespoons flour | |
| 2 cups milk | |
| $\frac{3}{4}$ cup grated cheese | |

Heat the milk in a double boiler. Melt the fat, remove it from the heat, and stir in the flour. Add this mixture gradually to heated milk, then add the cheese, stirring until the mixture is smooth. Add salt.

Place cooked wheat and cheese sauce in alternate layers in a greased baking dish. Top with crumbs. Bake uncovered in moderate oven about one-half hour or until the top is browned. Cheese may be added separately to each layer instead of to white sauce.

8. Whole-wheat muffins using cooked wheat *

1 cup sifted flour	1 egg
$\frac{1}{2}$ teaspoon salt	$\frac{1}{2}$ cup milk
2 teaspoons baking powder	1 tablespoon melted fat
1 cup cooked whole wheat	

Sift the dry ingredients together, add the wheat, and mix thoroughly. Beat the egg, add the milk, and stir into the dry ingredients with the fat. Pour into greased muffin pans and bake in a moderate oven about 30 minutes. Serve hot.

9. Whole-wheat cookies *

$\frac{3}{4}$ cup sifted flour	$\frac{1}{2}$ cup sugar
$\frac{1}{2}$ teaspoon salt	1 egg
1 teaspoon cinnamon	1 cup cooked whole wheat
$\frac{1}{2}$ teaspoon soda	1 cup seedless raisins
2 tablespoons fat	

Sift together all dry ingredients except the sugar, add the fat, sugar, beaten egg, wheat, and raisins. Stir until well mixed. Drop by teaspoonfuls on to a greased pan about 2 inches apart and bake in a moderate oven until slightly brown.

10. Whole-wheat custard pudding (10 servings)

4 eggs	2 cups cooked cracked or whole wheat
4 cups hot milk	$\frac{3}{4}$ cup diced dried prunes, raisins or other dried fruit
$\frac{1}{2}$ cup sugar	
$\frac{1}{2}$ teaspoon salt	
1 teaspoon vanilla	

Beat the eggs slightly, add all other ingredients in order given and mix thoroughly. Bake in buttered pan in moderate oven until a knife inserted in the center shows no liquid. Best results are obtained by placing the baking dish in a pan of hot water in oven.

11. Whole-wheat brown Betty † (6 servings)

2 cups cooked whole wheat	$\frac{1}{2}$ teaspoon cinnamon
3 or 4 apples sliced	$\frac{1}{2}$ cup dry crumbs
$\frac{1}{2}$ cup sugar	Grated rind and juice of $\frac{1}{2}$ lemon (may be omitted)
3 tablespoons butter	

*"Whole Wheat a Valuable Addition to the Diet," Bureau of Home Economics, U. S. Department of Agriculture.

†Circular 382, University of Illinois.

Cover the bottom of a greased baking dish with cooked wheat and spread over it half of the apples, sugar, butter, spice, and lemon. Repeat, having the top layer apples. Cover with a layer of buttered crumbs. Bake 35 to 45 minutes in a moderate oven (375° F.). Serve with cream or vanilla sauce.

RECIPES USING HOME-GROUND FLOUR

Flour which has been ground in a mill at home is usually coarser than the commercial product. Light, fine-grained baked products are not to be expected when home-ground flour is used.

12. Whole-wheat bread (2 loaves)

2 cups milk, water, or potato
water
2 teaspoons salt
2 tablespoons sugar
1 tablespoon fat
1 cake dry or compressed
yeast softened in $\frac{1}{2}$ cup
lukewarm water or 1 cup
liquid yeast

3 to 4 cups sifted home-
ground whole-wheat flour
3 to 4 cups sifted white flour

Scald milk, add salt, sugar and fat, and cool. When lukewarm, add the softened yeast. Add about 2 cups of each kind of flour, enough to make a stiff batter. Beat well. Add remainder of flour, enough to make a fairly stiff dough. Mix and turn out onto a floured board. Knead until the mixture is elastic to the touch and does not stick to the hands or to the unfloured board. This takes about 5 minutes. Place the dough in a deep bowl or pan, rub the top with melted fat, cover, and set it in a warm place to rise. When it is doubled in bulk, fold it under, rub with fat and let it rise again. When light, shape into loaves and put into greased bread tins. Let rise until almost trebled in bulk. Bake slowly in a moderate oven 50 to 60 minutes. Remove from pan and cool. If a soft crust is desired, rub butter or oil over the tops of the loaves as soon as they are taken from the oven or a few minutes before.

13. Whole-wheat nut and prune bread

1 $\frac{1}{2}$ cups home-ground whole-
wheat flour
1 $\frac{1}{2}$ cups white flour
3 $\frac{1}{2}$ teaspoons baking powder
1 teaspoon salt

$\frac{1}{2}$ cup sugar, white or brown
1 egg
1 $\frac{1}{2}$ cups milk
1 cup chopped nuts
 $\frac{1}{2}$ cup chopped dried prunes

Mix and sift flour, baking powder, salt, and sugar. Add the milk, beaten egg, nuts, and fruit. Place in a well-greased loaf pan and let stand one-half hour before baking. Bake about one hour in a moderate oven, 350° F.

RECIPES USING WHEAT HOMINY

To make wheat hominy, clean the wheat. Place one quart in an agate or enamel kettle (never use aluminum or tin). Add one level teaspoon of concentrated lye. Add cold water to cover and boil 10 minutes or until the husks are dissolved. Stir with a clean wooden stick. Avoid touching lye water.

Pour off all of the liquid. To remove the lye add twice as much cold water as wheat, bring to boil, and drain. Add the same amount of water again, bring to boil again and drain.

Add boiling water and one tablespoon of salt to each quart of dry wheat used, and boil until done, about one hour. Wheat hominy may be cooked by other processes described above under "Cooking Whole Wheat." One quart of dry wheat produces two and a half quarts of cooked hominy.

Serve as cereal with milk or cream and sugar; as a side dish with butter, cream or white sauce; as a dessert with butter and brown sugar sirup; or in any of the foregoing recipes in place of whole or cracked wheat.

Hominy does not equal the untreated whole wheat in vitamins and minerals. Persons with digestive disturbances, however, and young children, will find hominy less irritating than plain wheat. Hominy is less laxative than plain whole wheat. The action of soda on wheat is similar to that of lye, but less marked.

14. Squaw wheat (4 servings)

3 slices bacon	$\frac{1}{4}$ cup milk (may be omitted)
2 cups cooked hominy	$\frac{1}{8}$ teaspoon salt
5 eggs	

Cut the bacon into $\frac{1}{2}$ -inch pieces and fry until brown. Pour off one-half of the grease. Add the hominy to the bacon. Beat the eggs and to them add the milk and salt. Add the egg mixture to the hominy and bacon mixture and scramble over moderate heat until the egg mixture is soft cooked.

15. Hominy with bacon (4 servings)

3 slices bacon	$2\frac{1}{2}$ cups cooked hominy
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Cut the bacon into $\frac{1}{2}$ -inch pieces. Fry until brown. Pour off one-half the fat. Add the hominy to the bacon, stir, and cook five to ten minutes. Stewed tomato may be added.

16. Thrift salad

2 cups cold cooked hominy	2 diced hard-cooked eggs
$\frac{1}{4}$ cup diced pickle.	(may be omitted)
1 tablespoon grated onion	Salad dressing to moisten
$\frac{1}{2}$ cup grated raw carrot	

Combine the ingredients in the order given and let stand in a cold place for one hour before serving. Serve on shredded tender raw cabbage.