

Breadmaking

Guide E-206

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INGREDIENTS FOR GOOD BREAD

Yeast—Available in active dry or compressed form. Yeast requires moisture (milk or water), food (sugar and flour), and warmth for growth. When growth requirements are satisfied, yeast grows, producing carbon dioxide gas and alcohol. The gas causes breads to rise, while the alcohol passes off in cooking and helps give the characteristic bread aroma.

Flour—Wheat flour is used most often in bread-making because it contains a necessary material called gluten. When flour is moistened and then stirred, beaten, or kneaded, gluten develops to give bread "stretch." The elastic framework of gluten holds the gas produced by the fermentative action of yeast. All-purpose flour, a blend of winter and summer wheat, is used most often for breads. Other flours that may be used in combination with wheat flour are rye, oatmeal, and whole wheat. When making yeast breads, home bakers need to become familiar with the proper consistency of a dough, since using the exact number of cups in a recipe might yield a dough of too soft or too stiff a consistency, depending on the moisture content of the flour and the atmosphere.

Liquid—Milk and water are the usual liquids used in breads. All forms of milk—fresh, evaporated, or dry—can be used with good results. Evaporated milk needs only to be diluted for use (half evaporated milk, half water). Dry milk can be mixed with dry ingredients for speedy mixing operation. Milk gives soft crust and creamy white crumb to bread; water makes bread crusty. Liquids that are too hot will kill the yeast, and liquids that are too cold will slow down or stop yeast activity.

Sugar—Sugar is food for yeast and thus aids in the development of carbon dioxide gas, which makes the bread rise. Sugar also adds flavor and helps the bread brown. In addition to white sugar, brown sugar, molas-

ses, and honey can be used. Artificial sweeteners do not provide food for yeast and should not be used in breads.

Salt—Salt adds flavor to breads and helps produce bread with a fine texture and grain. When too much is used, it can slow down the action of yeast.

Fat—Often called "shortening" because it lubricates the strands of gluten and makes them break easily. The more fat, the more tender or "shorter" the bread. Fats that can be used in breads are margarine, butter, hydrogenated shortening, lard, and salad or cooking oils. Fats give a soft and silky crust, help keep bread soft, and add flavor.

Eggs—Give color and flavor to breads, and help produce a fine crumb and tender crust by binding the ingredients together.

Other Ingredients—You can add interesting flavors and textures to your breads by using herbs, spices, fruits, or nuts.

MIXER METHOD OF MAKING BREAD

In a large bowl, mix active dry yeast with ½ of the flour and all other dry ingredients. In a small pot on the stove, heat liquid and fat until very warm. The temperature of the water, whether used to dissolve the yeast or added to a yeast/flour mixture, is critical. Until you get some experience, use a thermometer. When the yeast is dissolved in the water or other liquid, the temperature must be 110 to 115°F. Blend liquid mixture into dry ingredients with electric mixer, beating slowly until mixed, then increasing speed and beating 2 minutes to develop the gluten structure. Add enough of the remaining flour to make a soft dough. Knead dough until smooth and elastic. Cover the dough and let it rise in a warm place until it has doubled in volume, then punch it down and shape it into loaves or rolls as desired.

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White Bread

(Makes 2 loaves)

5½ to 6½ cups unsifted flour

3 tablespoons sugar

3 tablespoons margarine or butter

1 package active dry yeast

1½ cups water

½ cup milk

2 teaspoons salt

In a large bowl, thoroughly mix 2 cups of the flour and all of the sugar, salt, and undissolved active dry yeast.

Combine water, milk, and margarine in a saucepan. Heat over low heat until liquids are warm (110–115°F; margarine does not need to melt). Gradually add liquids to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally. Add ¾ cup flour, or enough flour to make a thick batter. Beat at high speed for another 2 minutes, scraping the bowl occasionally. Stir in enough additional flour to make a soft dough. Turn out the dough onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Place dough in a greased bowl, turning the dough over to grease the top. Cover and let rise in a warm place, free from draft, until it has doubled in volume (about 1 hour).

Punch down dough and turn out onto lightly floured board. Cover and let rest 15 minutes. Divide dough in half and shape into loaves. Place in 2 greased 8½ × 4½ × 2½-inch loaf pans. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Bake in hot oven (400°F) about 25 to 30 minutes, or until done. Remove from pans and cool on wire racks.

Sweet Dough

(Makes 2 loaves)

4½ to 5½ cups unsifted flour

1½ teaspoons salt

2 packages active dry yeast

2 eggs, at room temperature

½ cup sugar

½ cup milk

½ cup water

1/4 cup margarine or butter

Melted margarine or butter to brush on dough

In a large bowl, thoroughly mix $1\frac{2}{3}$ cups of the flour and all of the sugar, salt, and undissolved active dry yeast.

Combine milk, water, and margarine in a saucepan. Heat over low heat until liquids are warm (110–115°F; margarine does not need to melt). Gradually add liquids to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally.

Add eggs and ½ cup flour, or enough flour to make a thick batter. Beat at high speed for another 2 minutes, scraping the bowl occasionally. Stir in enough additional flour to make a soft dough. Turn out the dough onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Place dough in a greased bowl, turning the dough over to grease the top. Cover and let rise in a warm place, free from draft, until it has doubled in volume (about 1 hour).

Punch down dough and turn out onto lightly floured board. Divide in half and shape as desired according to one of the following shapes.

Variations for sweet dough

Coffee breakers: While dough is rising, prepare pans. Melt $\frac{1}{2}$ cup (1 stick) margarine in a saucepan. Add $\frac{2}{3}$ cup firmly packed light brown sugar and 2 teaspoons light corn syrup; bring to a rolling boil. Immediately pour into two $15\frac{1}{2} \times 10\frac{1}{2} \times 1$ -inch jelly roll pans. Sprinkle with $\frac{3}{4}$ cup chopped pecans.

Roll out half the dough and shape into a 12-inch square. Brush with melted margarine. Combine ½ cup firmly packed light brown sugar and 2 teaspoons ground cinnamon. Sprinkle the middle third of the dough with a quarter of the cinnamon/sugar mixture. Fold one third of the dough over the center third. Sprinkle with another quarter of the cinnamon/sugar mixture. Fold the remaining third of the dough over to make a three-layer, 12-inch strip. Cut into twelve 1-inch pieces. Hold the ends of each piece and twist in opposite directions, two or three times. Seal ends firmly. Place in prepared pan, about 1½ inches apart.

Repeat with remaining half of the dough and filling. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour). Bake in hot oven (400°F) about 15 to 20 minutes, or until done. Invert rolls onto wire racks to cool. Best when served warm.

Cinnamon rolls: Divide the dough in half and roll each half into an 18 × 9-inch rectangle. Brush with melted margarine. Combine 1½ cups sugar, ¾ cup raisins, and 2 teaspoons ground cinnamon. Sprinkle half of the sugar mixture over each piece of dough. Roll up the 9-inch side of each to make 18-inch long rolls. Seal edges firmly. Cut each roll into 12 pieces, about 1½ inches wide. Place pieces, cut side up, into two greased 9-inch round cake pans or two greased 8-inch square pans. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour). Bake in moderate oven (350°F) about 25 minutes or until done. Remove from pans and cool on wire racks. Serve plain, or frost with confectioner's sugar frosting if desired.

One-Bowl Dinner Rolls

(Makes 2 to 3 dozen rolls)

2¾ to 3¼ cups unsifted flour
5 tablespoons margarine or butter, softened
¾ cup very hot (110–115°F) tap water
1 egg (at room temperature)
¼ cup sugar
½ teaspoon salt
1 package active dry yeast
Melted margarine or butter to brush on dough

In a large bowl, thoroughly mix ¾ cup of the flour and all of the sugar, salt, and undissolved yeast. Add softened margarine. Gradually add very hot (110–115°F) tap water to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally. Add egg and ½ cup flour, or enough flour to make a thick batter. Beat at high speed for 2 minutes, scraping the bowl occasionally. Stir in enough additional flour to make a soft dough. Turn out the dough onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Place dough in a greased bowl, turning the dough over to grease the top. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Punch down dough and turn out onto a lightly floured board. Proceed according to directions for desired shape. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour). Carefully brush rolls with melted margarine. Bake in hot oven (400°F) about 10 to 15 minutes, or until done. Remove from baking sheets and cool on wire racks.

Variations of one-bowl dinner rolls

Parkerhouse rolls: Divide dough in half. Roll each half into a ¼-inch thick circle. Cut into rounds with a 2½-inch biscuit cutter. With the dull edge of a knife, make a slightly off-center crease down the length of each round. Brush each round with melted margarine to within ½-inch of the edges. Fold the larger side over the smaller side so the edges just meet. Pinch well with fingers to seal. Place on greased baking sheet so rolls are almost touching. Let rise and bake according to general directions.

Curlicues: Divide dough into two or three equal pieces. Roll out each piece into a 9×12 -inch rectangle. Brush generously with melted margarine. Cut into 12 strips (about 1 inch wide). Hold one end of each strip firmly and wind loosely to form a coil; tuck end firmly underneath. Place on greased baking sheets, about 2 inches apart. Let rise and bake according to general directions.

Pretzels: Divide dough into two or three equal pieces. Then divide each piece into 12 pieces. Roll each into a roll about 16 inches long and about as wide as a

pencil. Shape into pretzels and place on greased baking sheets, about 2 inches apart. Let rise and bake according to general directions.

Twists: Roll one fourth of the dough into a 7 × 16-inch rectangle. Brush half the dough the long way with soft margarine. Fold the unbuttered side over the buttered side. Cut strips 1 inch wide from the long side. Twist several times and place a little apart on a greased baking sheet. Press down ends. Let rise and bake according to general directions.

Knots: Roll dough into an oblong shape 6 inches wide and ½ inch thick. Cut strips ½ inch wide and roll into 8-inch lengths. Tie into loose knots, pressing ends down on greased baking sheet. Let rise and bake according to general directions.

Croissants: Roll one fourth of the dough into a 9-inch circle. Cut into eight pie-shaped pieces of equal size. Roll each piece of the dough from the wide side toward the point, stretching as it is rolled. Place on greased baking sheet and curve ends inward. Let rise and bake according to general directions.

Cinnamon Bread

(Makes 2 loaves)

4½ to 5½ cups unsifted flour
1 package active dry yeast
¼ cup margarine or butter
2 eggs (at room temperature)
1½ teaspoons ground cinnamon
¼ cup + ⅓ cup sugar
1 teaspoon salt
1¼ cups milk
Melted margarine or butter to brush on dough

In a large bowl, thoroughly mix 13/4 cups of the flour, 1/4 cup of the sugar and all of the salt and undissolved active dry yeast.

Combine milk and ½ cup margarine in a saucepan. Heat over low heat until liquid is warm (110–115°F; margarine does not need to melt). Gradually add to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally. Add eggs and ½ cup flour, or enough flour to make a thick batter. Beat at high speed for 2 minutes, scraping the bowl occasionally. Stir in enough additional flour to make a soft dough. Turn out the dough onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Place in a greased bowl, turning the dough over to grease the top. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Meanwhile, combine cinnamon and the remaining $\frac{1}{3}$ cup sugar. Punch down dough and turn out onto a lightly floured board. Divide dough in half. Roll half of the dough into a 12 × 8-inch rectangle. Brush lightly

with melted margarine. Sprinkle with half of the cinnamon/sugar mixture. Roll tightly from the 8-inch side. Seal edges firmly. Seal ends of loaf and fold underneath. Place loaf, seam side down, in greased 8½ × 4½ × 2½-inch loaf pan. Repeat with remaining dough. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Bake in a moderate oven (350°F) about 30 minutes, or until done. Remove from pans and cool on wire racks.

Whole Wheat Bread

(Makes 2 loaves)

4½ cups unsifted whole wheat flour

2¾ cups unsifted white flour (about)

3 tablespoons sugar

4 teaspoons salt

2 packages active dry yeast

1½ cups water

34 cup milk

1/3 cup molasses

½ cup margarine or butter

Combine flours in a large bowl. In a separate large bowl, thoroughly mix 2½ cups of the flour mixture and all of the sugar, salt, and undissolved active dry yeast.

Combine water, milk, molasses, and margarine in a saucepan. Heat over low heat until liquids are warm (110–115°F; margarine does not need to melt). Gradually add to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally. Add ½ cup flour mixture, or enough flour mixture to make a thick batter. Beat at high speed 2 minutes, scraping the bowl occasionally. Stir in enough additional flour mixture to make a soft dough (if necessary, add additional white flour to obtain desired dough). Turn dough out onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Place in a greased bowl, turning the dough over to grease the top. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Punch down dough and turn out onto lightly floured board. Divide in half. Shape into loaves. Place in two greased $8\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{1}{2}$ -inch loaf pans. Cover and let rise in a warm place, free from draft, until doubled in volume (about 1 hour).

Bake in hot oven (400°F) about 25 to 30 minutes, or until done. Remove from pans and cool on wire racks.

COOL-RISE METHOD OF MAKING BREAD

For this method, dough is mixed, kneaded, and shaped in a single operation that takes only 45 minutes. The panned bread is refrigerated from 2 to 24 hours and baked as desired. Use only special cool-rise recipes for this method.

Cool-Rise One-Bowl White Bread

(Makes 2 loaves)

6 to 7 cups unsifted flour

2 tablespoons sugar

½ cup (1 stick) margarine or butter, softened

1 tablespoon salt

2 packages active dry yeast

2 cups very hot (110-115°F) tap water

Cooking oil to brush on dough

In a large bowl, thoroughly mix 2 cups of the flour and all of the sugar, salt, and undissolved active dry yeast. Add softened margarine. Gradually add very hot tap water to dry ingredients and beat 2 minutes at medium speed of electric mixer, scraping the bowl occasionally. Add 1 cup flour, or enough flour to make a thick batter. Beat at high speed 2 minutes, scraping the bowl occasionally. Stir in enough additional flour to make a soft dough. Turn the dough out onto a lightly floured board and knead until smooth and elastic (about 8 to 10 minutes). Cover with plastic wrap, then a towel; let rest 20 minutes at room temperature.

Punch down dough, then divide in half on a lightly floured board and shape halves into loaves. Place in two greased $8\frac{1}{2} \times 4\frac{1}{2} \times 2\frac{1}{2}$ -inch loaf pans. Brush with cooking oil. Cover pans loosely with plastic wrap. Refrigerate 2 to 24 hours.

When ready to bake, remove from refrigerator. Uncover dough carefully. Let stand, uncovered, for 10 minutes at room temperature. Puncture any gas bubbles with a greased toothpick or metal skewer. Bake in hot oven (400°F) about 30 to 40 minutes, or until done. Remove from pans and cool on wire racks.

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