

# What Makes a Good Loaf of Bread?

There are only four ingredients you need to make yeast bread: yeast, flour, liquid, and salt. All other ingredients are there to add flavor, nutrition, color and to change the characteristics of the crumb.

1. **Yeast-** is a one-celled plant, available in dried form, instant blend, and live cakes. In yeast bread, yeast multiplies and grows by using available sugars and water, giving off carbon dioxide and ethyl alcohol (fermentation). As long as air is available, the yeast multiplies. Kneading and punching down breaks up small clusters or colonies of yeast cells so they can get in contact with more air and food.
  - a. Compressed yeast cakes were introduced in 1876 and revolutionized baking. The down side was the need for refrigeration and the resulting spoilage factor. Active dry yeast was developed for use during World War II. In 1984, instant-rise yeast, genetically modified and packaged with its own food supply, became available. It rehydrates and becomes active instantly when mixed with liquid. This type of yeast is very convenient, but because the rise is so fast, not much flavor develops from the fermentation process.

**1 cake of compressed yeast= 1 pkg. of active dry yeast.**

**1 pkg. active dry yeast= 2 ¼ tsp.**

**1 envelope packet of Active Dry Yeast, Instant Yeast, Rapid Rise Yeast, Fast Rising Yeast/Bread Machine Yeast= ¼ oz or 7 grams (2 ¼ tsp.)**

2. **Flour-** provides the structure for bread. The gluten, or protein, in flour, combines to form a web that traps air bubbles and sets. Starch in flour sets as it heats to add to and support the structure. In yeast breads, gluten formation is desirable, since it forms a stretchy web that traps carbon dioxide and steam during baking, to give bread its texture.
  - a. **Bread Flour-** is high protein flour, and produces bread that has a higher volume because it contains more stretchy gluten. **All-purpose flour** works for most breads.
3. **Liquid-** helps carry flavorings throughout the product, forms gluten bonds, and reacts with the starch in the protein for a strong but light structure. Liquids also act as steam during baking, contributing to the tenderness of the product. Yeast needs liquid in order to develop, reproduce, multiply, and form byproducts which make the bread rise.
4. **Salt-** strengthens gluten, and adds flavor. Salt enhances flavors. In yeast breads, salt helps moderate the effect of the yeast so the bread doesn't rise too quickly.
5. **Fat-** coats gluten molecules so they can't combine as easily, contributing to the finished products' tenderness. Yeast breads that have a high proportion of fat-to-flour content are much, more tender, don't rise as high, and have a tender mouth-feel. Fat also contributes flavor to the bread, and helps the bread brown while baking.
6. **Dry milk powder-** contributes minerals for gluten development and protein and sugar for better crust, adds flavor and helps keep the loaf moist.
7. **Sugar-** adds sweetness, as well as contributing to the product's browning. The main role for sugar in yeast breads is to provide food for the yeast. As the yeast grows and multiplies, it uses the sugar, forming byproducts of carbon dioxide and alcohol, which give bread its characteristic flavor. Sugar tenderizes bread by preventing the gluten from forming. Sugar also holds moisture in the finished product. Sugar can be in the form of granulated, honey, brown, etc.
8. **Eggs-** are a leavening agent and the yolks add fat for a tender and light texture. The yolks also act as an emulsifier for a smooth and even texture in the finished product.
9. **Vital wheat gluten-** has approximately three to 5 times the gluten forming potential of bread flour. Since it forms a lot of gluten, it absorbs a lot of water. Too much can make a loaf tough and dry. *Cautious* amounts of vital wheat gluten are ideal for lightening heavy loaves.

## Whole Wheat Bread

<b>Ingredient</b>	<b>Kitchen Machine</b>	<b>Stand Up Mixer</b>
Yeast	<b>4 loaves</b> 2 Tbs.	<b>2 loaves</b> 1 Tbs.
Warm water	½ c.	¼ c.
Oil	⅔ c.	⅓ c.
Sugar	⅔ c.	⅓ c.
Salt	2 Tbs.	1 Tbs.
Whole wheat flour	6-8c.	3-4c.
All-purpose flour	4½ -6c.	2¼-3c.
Hot tap water (<120°F)	5 c.	2½ c.

Blend about half of the flour and the hot tap water in a mixing bowl. Meanwhile, in a separate bowl, proof yeast with warm water (between 105 to 115°F and add ½ tsp of sugar to help the yeast grow). Add salt, oil and sugar to mixing bowl. Mix until well blended. Add prepared yeast mixture. Add enough additional flour to make the dough just stiff enough to clean the sides of the bowl. Knead on low for 10 minutes. On lightly oiled counter divide dough into four (two) equal portions. Shape loaves and place in greased pans. Cover with a damp towel and let rise in a warm place until it has doubled in bulk. Bake at 350° for 35-40 minutes (internal temperature of 190°F).

## Sweet Roll Dough

2 Tbs. yeast	¾ c. sugar
½ c. warm water	2 c. warm water
4¼ - 4½ c. whole wheat flour	1 tsp. salt
3¼ - 3½ c. all-purpose flour	½ c. melted butter (cooled to room temperature)
½ c. powdered milk	

In a small bowl, combine warm water (1/2 c.), 1 Tbs. sugar and yeast. Let stand for 5 minutes. In a large mixing bowl, add 3 c. of the flour, powdered milk, 2 c. warm water, salt, melted butter, sugar and the egg. Mix until combined. Add yeast mixture and enough flour to form dough. The dough should be a little sticky. Place finished dough in a greased bowl to rise (turn dough around in bowl to grease all sides). Cover and let rise in a warm place until double in size about one hour. Punch down risen dough. On a greased surface, roll out the dough into a rectangle the size of around 24-inch by 18 inches. Makes around 24 rolls.

## Cinnamon Rolls

Sweet Roll Dough	<u>Glaze:</u>
½ c. melted butter	1, 8 oz. pkg. cream cheese
¾ c. brown sugar	2 c. powdered sugar
1 ½ tsp. cinnamon	
½ c. chopped nuts (opt.)	
1 c. raisins (opt.)	

Pour melted butter over and spread over surface of sweet roll dough. Sprinkle with brown sugar, cinnamon, chopped nuts and raisins. Starting on the 24-inch side, roll the dough up tightly until you have a cinnamon roll tube. Pinch opposite end to seal. Cut one inch sections with a thread or pastry cutter. Place in a greased pan. Let rise until cinnamon rolls have doubled. Bake at 350° for 20 minutes or until golden brown.

## Orange Dinner Rolls

Sweet Roll Dough
½ c. melted butter
¾ c. sugar
1 ½ Tbs. orange zest

Finish rolls as the Cinnamon Rolls recipe above.

## Calzones

### Pizza Style

Whole Wheat Bread dough  
Pasta sauce  
2 c. Ricotta cheese  
1/8 c. dried parsley  
1/4 c. Parmesan cheese  
4 c. Mozzarella cheese, separated into 2 c. portions  
Toppings of your choice (Pepperoni, Sausage, Olives, etc.)  
Oil, for greasing cookie sheet  
Corn meal, for dusting cookie sheet  
Water, for sealing edge of calzones  
Milk, for dusting top of calzones  
Parmesan cheese, for sprinkling on top of calzones

### Breakfast Style

Whole Wheat Bread dough  
4 eggs, scrambled (just until set)  
Remainder of Ricotta Cheese Mixture  
1 c. ham, chopped  
Mozzarella cheese/ Cheddar Cheese to taste

### **Ricotta Mixture:**

Mix together Ricotta Cheese, eggs, dried parsley, Parmesan cheese and 2 c. of Mozzarella cheese in a medium bowl until combined. Divide the Ricotta Mixture into 2 equal portions and set to the side for calzone building.

### **Pizza Style**

Roll out a soft-ball sized ball of Whole Wheat Bread dough into a 6-in circle (dust with flour if necessary). Spread a couple of tablespoons of Pasta Sauce (only in the center of circle), 1 tablespoon of Ricotta mixture, toppings of your choice, and sprinkle with remaining Mozzarella cheese (small pinch only per calzone). Wet edges of calzone circle with water and fold over in half. Pinch edges together and fold up edges. Take a fork that is dusted in flour and crimp edges of calzone. Put calzone on a baking sheet that is oiled and dusted with corn meal. Makes about 6-8 calzones or until your toppings run out. Bake calzones in a 375°F oven for about 25 min or until golden brown.

### **Breakfast Style**

Scramble 4 eggs in a medium saucepan until just set (slightly runny). Add remainder of Ricotta cheese mixture (about 1 c.) and chopped ham. Put to the side and cool slightly. Roll out a soft-ball sized ball of Whole Wheat Bread dough into a 6-in circle (dust with flour if necessary). Put a couple tablespoons of egg mixture onto circle. Sprinkle with cheese of your choice. Wet edges of calzone circle with water and fold over in half. Pinch edges together and fold up edges. Take a fork that is dusted in flour and crimp edges of calzone. Put calzone on a baking sheet that is oiled and dusted with corn meal. Makes about 6 calzones or until your toppings run out. Bake calzones in a 375°F oven for about 25 min or until golden brown.

## Bread Sticks

Whole Wheat Bread dough  
Milk, for dusting top of bread sticks  
Italian Seasoning, for dusting  
Parmesan Cheese, for dusting  
Mozzarella Cheese/Cheddar Cheese

Pepperoni, ham, cheese, etc., for filling

Take a golf-ball sized ball of Whole Wheat Bread dough and make into a 6-in sized worm with your hands (you might need to dust the ball of dough with flour first if too sticky). Put on an oiled cookie sheet that has been dusted with corn meal. Brush bread stick with milk or water so seasoning will stick. Put seasoning or cheese on top of your choice. Bake at 375°F for about 20 min or until golden brown.

### **Filled bread sticks**

Repeat process for making bread sticks above. Place bread stick on counter this time, not cookie sheet, and flatten with your hands or a rolling pin. Put filling of your choice (pepperoni, ham, cheese, etc.) in the center of the bread stick. Pinch in edges of the bread stick to the center until really sealed. Reshape into a breadstick shape. Put on an oiled cookie sheet that has been dusted with corn meal. Brush bread stick with milk or water so seasoning will stick. Put seasoning or cheese on top of your choice. Bake at 375°F for about 20- 25 min or until golden brown.

## Whole Wheat Pizza

Whole Wheat Bread dough (dividing into thirds)  
Pizza toppings (sausage, pepperoni, mushrooms, olives, etc.)  
2 cans of Pasta Sauce (26.5 oz. can or 1 lb, 10 oz. jar of sauce)  
4-6 c. Mozzarella Cheese

Olive oil, for greasing cookie sheets  
Corn meal, for dusting  
Large rectangular cookie sheets

Roll out 1/3<sup>rd</sup> of Whole Wheat pizza dough to size of your cookie sheet (dust with flour if necessary). Move dough to cookie sheet (that is oiled and dusted with corn meal) and stretch out the dough until it fits your pan size. If the dough tears, just repair the dough with your fingers until it covers the entire cookie sheet. Spread with about 1-1½ cups of Pasta sauce onto the dough. Sprinkle with Mozzarella Cheese until well covered. Add on your favorite pizza toppings (sausage, pepperoni, etc.). Let pizza sit until you make the other 2 pizzas. The pizza dough will rise as it sits. Feeds a crowd and great for parties! Bake pizzas in a 375°F oven for about 25 min or until golden brown.

### Margarita Pizza

Pasta Sauce (remaining 1/3<sup>rd</sup> from Pizza recipe above)  
Fresh Mozzarella Cheese, 2 golf-ball sized portions, cut in slices  
Fresh basil, about a cup

Prepare pizza dough as above and place in an oiled and dusted with corn meal cookie sheet. Spread with about 1-1½ cups of Pasta sauce and top with sliced, fresh mozzarella cheese. Bake pizza in a 375°F oven for about 25 min or until golden brown. Place fresh basil on pizza just before serving. Enjoy! ☺

## Honey Butter

½ c. butter  
¾ c. honey

Blend butter and honey together until well combined. Serve on Whole Wheat Bread that is sliced. Yummy! ☺

## Fruit Turnovers

Whole Wheat Bread Dough/ Sweet Roll Dough  
Pie Filling (peach, cherry, blueberry, etc.)

Water, for moistening edge of turnover  
Egg wash (1 egg, blended with a little bit of water)  
Sugar, for dusting

Roll out a soft-ball sized ball of Whole Wheat Bread dough into a 6-in circle (dust with flour if necessary). Put on 2 tablespoons of pie filling into the center of the circle. Moisten edge of turnover with water. Fold over turnover and seal edges. Prick turnover edge with a fork until thoroughly sealed (dust fork with flour if sticking). Transfer turnover to a greased cookie sheet. Brush turnover with egg wash and sprinkle with sugar. Yummy for breakfast or dessert! Bake at 375°F for about 25 min or until golden brown.