

TERI'S UNDER-COVER BREAD BAKING METHOD

by Teri Fahrendorf

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INTRODUCTION

This method of bread baking is loosely based on the book, *English Bread and Yeast Cookery*, by Elizabeth David. It was published in the U.S. by Penguin books in 1980. There are English versions, but an American version is preferable. The book was reprinted in hardcover in 1995, and again in paperback in 2001. If you find a version in a used bookstore, I recommend you buy it. Here's the Amazon.com link: http://www.amazon.com/English-Bread-Yeast-Cookery-Library/dp/0140299742/ref=sr_1_4/102-84210073426523?ie=UTF8&s=books&qid=1183401080&sr=8-4

INSTRUCTOR BACKGROUND

Teri Fahrendorf was Corporate Brewmaster for the Steelhead/Bulldog family of pub breweries from 1990-2007. She began to work with yeast when she baked her first loaf of bread at the age of 10. From there she has experimented with making fruit, grape, and honey wines, and has been brewing beer since 1985 as a hobby and professionally since 1988. Beer is basically liquid bread, and bread yeast has many of the same needs as beer yeast.

HOW YEAST WORKS

Yeast ferments. It digests grain sugars creating carbon dioxide, alcohol, and heat as by-products. Yeast is only fermenting if it is reproducing itself, or budding off new yeast cells, called daughter cells. We need the yeast to ferment. That is what happens when the bread dough is rising. If you make everything ready for the yeast and it has all of its needs satisfied, it will produce the most wonderful loaf of bread you could want. And it's easy.

INGREDIENTS

Keep it simple! The only ingredients needed for a regular loaf of bread are flour, salt, yeast, and liquid. That's it. For special or holiday breads you may want to add egg, nuts, fruit, seeds, or spices, but the yeast doesn't need them. Cooked rice or grains or a grain-mix like Kashi are a nice addition and keeps the bread moist longer.

THE TOP 6 MISTAKES AMERICAN BREAD BAKERS MAKE

1. They use too much yeast.
2. They raise the bread too quickly.
3. They keep the dough too warm.

4. They use too little salt.
5. They add sugar or sweeteners.
6. They add fats.

ANSWERS TO THE ABOVE MISTAKES

1. In beer brewing, we call the amount of yeast added "the pitching rate." It is a very important consideration. Amateur bread bakers do not seem to consider this an important item when it comes to bread baking, but it is. Most American recipes tell you to add 1 or 2 packets of dry yeast. This is too much! I am going to tell you to add 1/2 tsp.

To ferment properly, yeast needs to reproduce itself or "bud" a certain number of times. If you use too much yeast, the yeast only reproduces one or two times. It is lazy yeast, which is still holding onto the grain sugars it took in to prepare itself to bud and reproduce 8, 10 or more generations. As I mentioned, yeast is only fermenting when it is reproducing properly, and, if it isn't fermenting properly, the bread won't raise properly.

2. American recipes tell you to add too much yeast because everyone here wants home-made bread in a hurry. If you add that much yeast, the bread rises very quickly (in 1 to 2 hours). We will be raising the bread overnight, while you sleep.

The consequence of raising the bread so quickly and using so much yeast is a dry loaf of bread that goes stale in one day. Also this bread has a coarse crumb with huge air bubbles in it. Using the method I am teaching here today, your bread should stay fresh for almost a week, without being wrapped in plastic! The crumb of your bread should be very fine and you shouldn't see any bubbles. (If you want bubbles, like in a Ciabatta bread, it is best to use a dough hook on a mixer and make the dough extra wet.)

3. In addition to adding too much yeast to the dough, American bread bakers speed up the rising of the dough by keeping it warm, for instance in a pre-warmed oven. Besides wasting your money and effort by killing yeast when you ferment too warm, you are causing the yeast to create unwanted by-products that can spoil the delicious taste of your bread. In beer and wine production these unwanted by-products are called esters, and they make a beer taste and especially smell like fruit (ie: apples and bananas usually). These esters are also undesirable in your bread.

The bread should be raised at room temperature, even in the winter when the temperature of your house drops to 55 or 60°F. The fermentation of the bread creates heat as a natural by-product, so the interior temperature of the loaf is warmer naturally.

4. Besides taste, salt has an important function in creating the consistency of the crust on your bread. Most American recipes use 1/2 tsp of salt, and consequently the crusts on these breads are wimpy, and the taste of the bread is insipid.

We will be making bread that has a nice crusty crust with lots of texture and variety to the crust. The peaks on the top of the bread and also the bottom will be extra crusty, and the valleys on top will be medium crusty. We will be using 2 tsp of salt, although you can go as high as 3 tsp if you prefer an even crustier crust. Just remember that salt inhibits the action of the yeast so that it does not ferment very quickly. Too much salt can increase the time it takes for your bread dough to rise fully.

If your body or your taste buds are sensitive to salt, I recommend that you not skimp on the salt in the bread recipe, but instead use unsalted butter as a condiment, or no butter at all. (Many have said that this bread is so moist you don't need butter anyway.)

5. The flour provides all of the grain sugars and nutrients the yeast needs to rise. Any additional sugar or sweetener changes the flavor of the bread (from the sweetener itself, and also by "tweaking" the yeast and causing it to give off cidery tasting by-products). Also, additional sweeteners dilute the wonderful flavor and natural sweetness of the grain.
6. Fats (butter or oil) are added to the dough in order to keep the bread moist. As I noted in #2 above, the consequence of using too much yeast and raising the dough too quickly is a very dry loaf of bread that goes stale quickly. American bread bakers began to add fats to their breads to give them moistness and to increase their keeping time. The only fat I would recommend using is regular soy milk or cow's milk as a liquid. The fats contained in these liquids could extend the keeping time of your bread by a day.

BASIC RECIPE

Makes a small loaf for 2-3 people

3 cups flour
 2 tsp salt
 1/2 tsp dry yeast
 1 cup liquid

Please see the appendix for information on making bread mixes in advance, packing them in quart Ziploc® bags, and baking them in a Dutch oven with coals while you are out camping.

EQUIPMENT NEEDED FOR UNDERCOVER METHOD

- 1 3-qt or larger oven-proof bowl, preferably with lid.
- 1 "Pizza Stone", tile, or cookie sheet, large enough to invert oven-proof bowl on.
- 1 smaller bowl. Does not need to be oven-proof.
- 1 teacup or small bowl.
- 1 set measuring cups and spoons.
- 1 liquid measure, or sauce pan if warming on the stove.
- 1 bread knife for serving.

- 1 sharp knife. Can use bread knife if very sharp.
- 1 instant-read thermometer.

TODAY'S RECIPE: TERI'S 3-R's BREAD One of my favorite recipes!

- 1/4 cup gluten flour
- 1/3 cup rye flour
- 2+ cups unbleached regular flour, to make up 3 cups total flours
- 2 tsp salt
- 1/2 tsp dry yeast
- 1 cup water
- 1/3 cup brown rice, pre-cooked
- 1/2 tsp fresh rosemary, chopped (about a 1 1/2-inch sprig)
- olive oil

SUBSTITUTIONS

You could substitute other specialty flours in other quantities, or use all unbleached bread flour instead of part gluten and part unbleached regular flour. The more gluten flour or bread flour, the higher the rise of the loaf. If you use a flour with a high oil content like oat flour, you will have to bake the bread 5 minutes longer at each of the three temperatures used and the bread will not rise very high.

For the liquid you could substitute beer, soy milk, rice milk, cow's milk, either full strength or half and half with water, or try 7/8 cup of water and 1 to 2 Tbsp of real cream (very yummy.) As a professional brewer, I had access to the first wort runnings to the kettle. I found that 1/2 first wort and 1/2 filtered (non-chlorine) water was a nice combination for the liquid.

For the rice, you could experiment with some leftover oatmeal or southern dirty rice. You don't have to cook up any grains special if you already have some handy. If you like the flavor of oats, I recommend boiled oat groats rather than oat flour. Many specialty flours can make your bread quite heavy and rather flat.

Spices to try include 1/2-2 teaspoons of garlic, onion, poppy, sesame or caraway seeds, even ground dried chilies. A very interesting bread uses blue corn flour and poppy seeds in the dough. Another nice loaf uses onion and grated asiago cheese in the dough. If you don't want to put the seeds in the bread, you could mix a little egg and water, brush the loaf with the mixture just before baking, and sprinkle the seeds on top. They will stick.

If you are a brewer or homebrewer, be sure to experiment with your brewing ingredients. Try grinding 1-3 teaspoons of caramel malt or other malt in your blender and tossing that in. Any dry ingredients you use should be counted toward your 3 cups of dry ingredients.

To change the texture of the bread to make it more cakey, like a thick pizza crust, add 1 or 2 egg whites. For yellow color and a chewier texture, add a whole egg. If you will be using an egg-

water mixture to stick seeds on before baking as described above, mix up 1 egg and 1.5 Tbsp water. Reserve 1.5 tsp in the refrigerator for sticking the seeds on later, and mix the rest right into the dough.

The ingredients and substitutions are as varied as your imagination. Just be sure not to make any of the top 6 mistakes listed above.

THEORY

We will be using three different temperatures during the course of baking this bread. Starting at 450°F, then reducing to 400°F and then to 350°F. This method reproduces the gradual cooling of those old, great brick-hearth ovens next to a wood-burning fireplace. If you know your home oven runs hot (ie: gas flame), then bake for 15 minutes at each of these temperatures. If your oven runs a little cooler (ie: electric), then bake for 20 minutes at each of these three temperatures. You may have to do some experimentation to find out the correct amount of time to use with your oven. You will know your bread is done by using your instant-read thermometer. The final temperature of your loaf should be 195-205°F.

We will be baking under a cover and on a "Pizza Stone" or tile if you have one. This method reproduces the small confines of those old brick ovens and retains moisture as they did.

BEST PROCEDURES

Before getting ready for bed, the night before:

(If you want hot bread for supper, you can do this step in the morning before you go to work. Then do the morning procedures about 1.5 hours before suppertime.)

We will be splitting the recipe in two in order to make a sponge. A sponge helps the non-bread (white wheat) flours absorb all the extra water they need to absorb. Also a sponge activates the glutes (proteins) in the flour, to stretch and lengthen them so they will become good gas (carbon dioxide) trappers during the rise (fermentation), and we will get a nice, light loaf of bread.

Get out a small bowl or teacup. Measure ½ tsp of dry yeast into it. Run faucet water until it is warm, but not too hot to put your hand under it. (If you have access to filtered, non-chlorine water, use that and heat it to warm bath temperature.) Add a bit of water to teacup (about 1.5 Tbsp) and add a pinch of unbleached flour to it. Set aside on the counter. Fold up opened yeast packet, and store it in the refrigerator.

Get out two bowls. I use a Visions Cookware 5-quart cookpot/bowl with lid and a medium-sized mixing bowl. Measure 1.5 cups of unbleached flour into the smaller bowl, and all the rest of the flours into the larger bowl. Measure 1 tsp of salt into each bowl and stir. Put the smaller bowl aside. Stir the chopped rosemary into the larger bowl. Add the cooked brown rice to the larger bowl, stirring until all the grains of rice are individually coated with flour mixture.

Measure 1/2 cup of ale into a liquid measuring cup. Add enough very hot water from the faucet

to bring it up to one full cup, or heat the beer-water mixture in the microwave. The temperature of the liquid should be fairly warm but not hot. An alternative is to measure the ale and cold water into a saucepan and warm on the stove until very warm, but not hot.

Make a well in the center of the larger bowl. Pour the yeast mixture into the well. Pour the beer-water mixture into the yeast teacup to rinse it out and then pour it into the well. Stir the larger bowl with a wooden spoon until sponge is mixed. Put lid on larger bowl or cover with a towel. No need to take wooden spoon out. Set timer for 20 minutes and go get ready for bed.

20 minutes later and before going to bed:

Dump contents of smaller bowl into larger bowl and stir with the wooden spoon. When it is stirred as much as you can with the spoon, knead with your hands. If your bowl is large enough, like the Visions Cookware bowl, you can knead right in the bowl and save yourself a messy counter top.

To knead: push down, fold the dough, turn it a one-quarter turn, and repeat. Add a little flour if the dough is too sticky. Knead until the dough becomes shiny and somewhat elastic and tough.

Take the dough out of the bowl and set down on the counter. Wash the bowl and your hands and dry the bowl. Coat the inside of the bowl with oil. I like a nice stinky green virgin olive oil. Place dough in the bowl and flatten to cover the bottom of the bowl. Turn dough to coat the bottom of the dough with oil, and then flip dough over and turn to coat the other side with oil. Place lid on the bowl or cover with a slightly damp towel, leave it on the counter and go to bed.

The next morning, about 1 hour 20 minutes before you want to leave the house or eat the bread:

Knead the dough, adding a little flour if it is too sticky. Shape dough into a round loaf, place gently back in the bowl and cover it. Lower oven rack to about 3 to 4 inches from the bottom of the oven. Preheat oven to 450 °F. If you have a "Pizza Stone" or other tile like surface, soak in the sink in warm water. Set timer for 20 minutes and go jump in the shower.

Just before baking:

After timer rings, dry off "Pizza Stone" if you are using one, otherwise grease a cookie sheet. Gently lift dough out of bowl and place in center of Stone or cookie sheet. If you want seeds stuck to the crust, gently brush egg-water mixture on surface and sprinkle with seeds, otherwise smooth a little nice oil on the surface.

Wash larger bowl but don't bother drying it, and invert it over the dough. This is called baking under a cover, and it is very important to the procedure of making this bread. Place dough and apparatus on rack. Apparatus should be centered in the oven. Set timer for 15 or 20 minutes, depending on how hot your oven runs, as described under Theory above. Go get dressed.

First temperature change:

After timer rings, turn oven down to 400 °F. Clear everything off the top of the stove. Open oven and pull out whole apparatus ("Pizza Stone" or cookie sheet, bread, and cover.) Please be careful

because at this point it is not only heavy, it is very hot. Place on top of stove. Lift cover **away** from you so you are not burned by the steam released. Put cover on the back of the stove. Take a sharp knife and score a checkerboard pattern about 1/4 inch deep into the top of the loaf. Replace cover and put apparatus back into oven. Set timer for 15 or 20 minutes, as described under Theory above. Go do your hair.

Second and last temperature change:

After timer rings, turn oven down to 350 °F. Open oven and pull out whole apparatus again. Be careful as it is heavy and hot. Place on top of stove. Lift cover **away** from you so you are not burned by steam. Put cover aside on the back of the stove to cool down. Gently remove bread from "Pizza Stone" or cookie sheet, and place back in oven in the center of the rack. Set timer for 15 or 20 minutes as described above. Go put on makeup, shave, or what ever.

The End:

After timer rings, turn oven off. Remove **hot** bread from the oven and place on a cooling rack for 5 minutes if you have the time. I have been known to put the bread into a paper bag and then into my backpack and jet off to work on my bicycle at this time. Then I share hot bread with the people at work, and they love it.

The bread should cool for 5 or more minutes, otherwise it will squash when you try to cut it.

SAVING UNEATEN BREAD

Heaven forbid that any of your fresh warm bread should make it through an entire day without being eaten! Try to cut the bread as you eat it so that there is always one edge open, not two. (ie: shaped more like a semi-circle than like a quarter circle.) Then to store the bread, just tip it cut-side-down onto a wooden cutting board and leave it. If you were to wrap it up in plastic, you would ruin that nice crusty crust, making it limp.

QUICK PROCEDURES

If you don't have quite enough time in the evening and the morning to follow the Best Procedures, you can cut out about 20 minutes in the evening and 20 minutes in the morning. Unfortunately, the bread will be heavier and will not rise as much or look as large.

Before getting ready for bed, the night before:

We will not be making a sponge.

Get out a small bowl or teacup. Measure 1/2 tsp of dry yeast into it. Run faucet water until it is warm, but not too hot to put your hand under it. Add a bit of water to teacup (about 1.5 Tbsp) and add a pinch of unbleached flour to it. Set aside on the counter. Fold up opened yeast packet, and store it in the refrigerator.

Get out a large bowl. I use a Visions Cookware 5-quart cookpot/bowl with lid. Measure all of the

flours into the bowl. Measure 2 tsp of salt into the bowl and stir. Stir in the chopped rosemary. Add the cooked brown rice, stirring until all the grains of rice are individually coated with flour mixture.

Measure 1/2 cup of ale into a liquid measuring cup. Add enough very hot water from the faucet to bring it up to one full cup, or heat the beer-water mixture in the microwave. The temperature of the liquid should be fairly warm but not hot. An alternative is to measure the ale and cold water into a saucepan and warm on the stove until very warm, but not hot.

Make a well in the center of the bowl. Pour the yeast mixture into the well. Pour the beer-water mixture into the yeast teacup to rinse it out and then pour it into the well. Stir with a wooden spoon until mixed. When it is stirred as much as you can with the spoon, knead with your hands. If your bowl is large enough, like the Visions Cookware bowl, you can knead right in the bowl and save yourself a messy counter top.

To knead: push down, fold the dough, turn it a one-quarter turn, and repeat. Add a little flour if the dough is too sticky. Knead until the dough becomes shiny and somewhat elastic and tough.

Take the dough out of the bowl and set down on the counter. Wash the bowl and your hands, and dry the bowl. Coat the inside of the bowl with oil. I like a nice stinky green virgin olive oil. Place dough in the bowl and flatten to cover the bottom of the bowl. Turn dough to coat the bottom of the dough with oil, and then flip dough over and turn to coat the other side with oil. Place lid on the bowl or cover with a slightly damp towel, leave it on the counter and go to bed.

The next morning, about 1 hour before you want to leave the house or eat the bread:

Knead the dough, adding a little flour if it is too sticky. Shape dough into a round loaf, place in the center of a "Pizza Stone" or other tile-like surface if you have one, otherwise place on a greased cookie sheet. If you want seeds stuck to the crust, gently brush egg-water mixture on surface and sprinkle with seeds. If not, smooth a little nice oil on the surface. Lower oven rack to about 3 to 4 inches from the bottom of the oven.

Wash large bowl but don't bother drying it, and invert it over the dough. This is called baking under a cover, and is very important to the procedure of making this bread. Place dough and apparatus on rack in cold oven. Apparatus should be centered in the oven. Set oven to 450°F, and timer for 20 minutes. Go take a shower.

First temperature change:

After timer rings, turn oven down to 400°F. Clear everything off the top of the stove. Open oven and pull out whole apparatus ("Pizza Stone" or cookie sheet, bread, and cover.) Please be careful because at this point it is not only heavy, it is very hot. Place on top of stove. Lift cover **away** from you so you are not burned by the steam released. Put cover on the back of the stove. Take a sharp knife and score a checkerboard pattern about 1/4 inch deep into the top of the loaf. Replace cover and put apparatus back into oven. Set timer for 15 or 20 minutes, depending how hot your oven runs, as described under Theory above. Go get dressed.

Second and last temperature change:

After timer rings, turn oven down to 350 °F. Open oven and pull out whole apparatus again. Be careful as it is heavy and hot. Place on top of stove. Lift cover away from you so you are not burned by steam. Put cover aside on the back of the stove to cool down. Gently remove bread from "Pizza Stone" or cookie sheet, and place back in oven in the center of the rack. Set timer for 15 or 20 minutes as described above. Go do your hair.

The End:

After timer rings, turn oven off. Remove **hot** bread from the oven and place on a cooling rack for 5 minutes before you cut it. If you try to cut it right out of the oven the knife will squash it.

CONCLUSION

Now that you know how to make bread by the Undercover method, you will probably bake bread more often because it is easy to fit into a busy schedule. I believe it actually takes less time with the Undercover method because the bread rises while I sleep.

Happy Baking!