

Bernalillo County Cooperative Extension Service

1510 Menaul Extension NW

Albuquerque, NM 87107

505-243-1386

<http://bernalilloextension.nmsu.edu>

Bread Baking

101





Email: csdavies@ad.nmsu.edu

Table of Contents

| | |
|--|-----------|
| Bread Baking 101 | 1 |
| How to Adjust Yeast Bread Recipes for High Altitude | 1 |
| Using a Bread Machine..... | 3 |
| Bread Machine Troubleshooting Guide | 3 |
| Yeast Dinner Rolls | 7 |
| French Bread | 8 |
| Grassy Creek Multigrain Bread | 9 |
| Whole Wheat Hot Roll Mix & Pan Rolls..... | 11 |
| Whole Wheat Bran Bread..... | 12 |
| No Knead Whole Grain Bread..... | 13 |
| Bread Sticks..... | 14 |
| English Muffins | 15 |
| Anadama Bread | 16 |
| Cinnamon Rolls | 17 |
| Pizza Dough..... | 19 |
| Refrigerator Bran Rolls | 20 |
| Artisan Bread in 5 Minutes a Day | 21 |
| Croissants..... | 23 |
| Quick Bread..... | 27 |
| Quick Bread Leavening Adjustments | 27 |
| Additional High-Altitude Adjustments..... | 27 |

Table of Contents

(continued)

| | |
|--|-----------|
| Cranberry Orange Scones | 29 |
| Lemon Blueberry Scones | 30 |
| Bacon-Cheddar-Chive Scones | 31 |
| Sour Cream Coffee Cake | 32 |
| Extraordinary Buttermilk Biscuits | 33 |
| Cheese Straws | 34 |

Bread Baking 101

Who doesn't love the smell of bread baking in the oven? It evokes a feeling of comfort, coziness, and well-being. From a hearty, whole-grain loaf to buttery, rich croissants or tender biscuits to tasty scones, we all have our weaknesses — I mean, our preferences!

High altitude bread baking doesn't have to be hard, time consuming, or tricky. Once you learn the basics, you can use your new found knowledge to bake all kinds of breads — yeast breads, quick breads, sweet breads, and savory breads.

Following are some basic adjustments for both yeast breads and quick breads. The key is to keep a baking journal so you will know which adjustments work best for your location. And keep practicing!

How To Adjust Yeast Bread

Recipes for High Altitude

1) Decrease the amount of white flour in the recipe. You may need to use up to 1/4 less flour than the recipe calls for because flour loses moisture at high altitude which creates a dry-tasting finished product. You'll know there is enough moisture your high altitude bread dough when the mass pulls away from the sides of the bowl.

Suggestion: Gradually add flour 1 tbsp. at a time if the batter is too wet or sticky

2) Increase the amount of liquid in the recipe if using wheat or rye flour. Add 1 tbsp. or more than the recipe calls for. These coarse flours lose even more moisture than white flour does at altitude.

3) Add additional liquid, 1 tbsp. at a time, if the dough seems too dry. Your dough should be soft, moist and pull away from the sides of the bowl after re-kneading.

4) Add an additional rising cycle. Good tasting bread depends on a long, slow rising process but bread dough rises as much as 25% to 50% faster in high altitude locations. Bread dough that rises rapidly will have a strong yeast-flavor and a dry texture. For the best flavor, allow enough time for 2 separate rising cycles and never let the dough rise more than twice its size each time.

Suggestion: Reduce the amount of rising time the recipe calls for by about 15 minutes or until the bread has reached nearly twice its size.

Punch down your dough after the first rising cycle is over. Set into a bowl and allow it to rise again but for half the time of the first cycle.

5) Subtract 1 degree of baking temperature for every 500 feet above sea level. At altitude, heat molecules don't have enough energy inside them which results in a lower boiling point but also makes food take longer to cook. Baking at a higher temperature will set the bread structure quickly and stop dough from rising more.

6) Use less yeast if all other altitude baking adjustments fail to provide firm bread dough that doesn't collapse after rising and baking.

Suggestion: Reduce the yeast by 1/8 tsp. to see if you get a firmer bread dough. If you are unhappy with your finished bread, decrease yeast by another 1/8 tsp. each time you attempt the recipe until you are happy with the finished product.



Using A Bread Machine

Bread machines are making a comeback into the culinary world! There are many beautiful, new (and improved!) bread machines on the market today. Also, you can almost always find a good, used bread machine at your local thrift store or yard sale. If you happen to buy a used machine that does not have an instructional booklet, or you have lost yours, a good resource to check out is

<https://www.wikihow.com/Use-a-Bread-Machine>

Bread Machine Troubleshooting Guide

1) Top inflated, mushroom-like appearance:

Possible cause —

- Too much yeast
- Too much sugar
- Not enough salt
- Substituted fast-acting yeast for amount given for active dry yeast
- Yeast was not added according to manufacturer's directions

Solution —

- Decrease yeast or sugar in recipe
- Try adding a little more salt
- If substituting fast-acting yeast for active dry, decrease amount by 1/4 to 1/2 teaspoon

Bread Machine Troubleshooting Guide, continued

2) Top and sides cave in:

Possible cause —

- Too much liquid
- Used canned fruit but did not drain well
- Liquid off-balanced by addition of cheese
- Used coarser flours such as whole wheat or rye

Solution —

- Try reducing liquids 1 tablespoon at a time
- If using more than half coarse flour, try increasing yeast slightly or reducing coarse flour and increasing bread flour

3) Soggy sides:

Possible cause —

- Did not removed bread from pan soon enough

Solution —

- If possible, remove bread immediately when baking is finished

4) Center of loaf is raw or not baked through:

Possible cause —

- Used coarse flours such as whole wheat or rye
- Used moist ingredients such as yogurt or applesauce

Solution —

- For coarse flours, try adding an extra knead cycle. To do this, after the first knead, let dough rise then restart machine at the beginning of the cycle as for a new loaf
- If too many moist ingredients are used, try reducing liquids 1 tablespoon at a time

Bread Machine Troubleshooting Guide, continued

5) Gnarly, knotted loaves:

Possible cause —

- Not enough liquid
- Too much flour

Solution —

- Increase liquid 1 tablespoon at a time or reduce flour 2 tablespoons at a time

6) Didn't rise or flat loaves:

Possible cause —

- Yeast was omitted
- Yeast was old
- Liquid used was too hot or too cold
- Too much salt was used

Solution —

- Make sure yeast is fresh
- Make sure to use room temperature water
- Taste the bread to see if it is too salty; if so, reduce salt by 1/4 teaspoon at a time



Bread Machine
Troubleshooting Guide, continued

7) Lower volume or shorter loaves:

Possible cause —

- Used stone ground and whole wheat flours
- Not enough liquid
- Not enough sugar or no salt added
- Wrong type of flour used
- Wrong type of yeast used
- Not enough yeast used

Solution —

- Try substituting bread flour for part of the stone ground or whole wheat flour
- Try adding more liquid, sugar or yeast
- Check to make sure bread flour, not all-purpose flour, was used
- Check to make sure yeast amount suggested was for the type of yeast you were using

8) Collapsed while baking:

Possible cause —

- May be cause from baking in high altitude

Solution:

- Try reducing yeast by 1/4 teaspoon or reducing water by 2 table-spoons



Yeast Dinner Rolls

—start with something easy!

Ingredients:

- 1 package active dry yeast
- 1 tsp sugar
- 1/2 cup warm water
- 2/3 cup sugar
- 3 Tbsp shortening
- 3 eggs
- 5 to 6 cups flour
- 1 teaspoon salt

Instructions:

Mix yeast, sugar, and warm water. Set aside in warm place; allow to rise and bubble up. While waiting for yeast mixture, cream 2/3 cup sugar with 3 heaping tablespoons shortening. Beat in eggs, one at a time.

Sift 5 to 6 cups flour and salt. Add yeast mixture to creamed mixture, plus 1-1/2 cups warm water. Add flour until dough is right texture for bread. Turn into large greased bowl, cover, and allow to rise until doubled in size (about 2 hours).

Once dough has risen, turn out onto floured surface and knead briefly. Roll dough to desired thickness then cut with a biscuit cutter or glass. Place in greased pans, and let rise 60 to 70 minutes.

When rolls have risen well, bake for approximately 15 to 20 minutes in preheated 400° oven. If rolls seem to be browning too quickly, cover with foil and continue baking until done.



French Bread

Ingredients:

- 1 1/4 cups warm water (add more water, by tablespoons, until bread dough is moist)
- 1 packet active dry yeast (less 25%, if you're at high altitudes of 5,000 feet or more.)
- 1 tablespoon honey
- 1 tablespoon shortening, melted
- 1 1/2 teaspoons salt
- 3 1/2 cups flour

Instructions:

- ⇒ Combine ingredients in the order listed above. Add flour last. Begin with 3 cups. Place 1/2 cup on your bread board and knead this into the dough. If the dough is very sticky, add additional flour 1/4 cup at a time.
- ⇒ Rising time: approximately 1 hour. 400 degree oven. Bake for 30 minutes. Brush loaf with beaten egg white and water mixture, for a crispier crust.



Grassy Creek Multigrain Bread

(recipe adapted from "Pie in the Sky")

Note: Adjusted for an altitude of 5,000 to 7,000 feet

Ingredients:

- 2 1/4 teaspoons active dry yeast
- 1/4 cup warm water
- 1 Tablespoon granulated sugar
- 1/2 cup plus 2 Tablespoons water
- 1/2 cup plain yogurt, low-fat or regular
- 1 1/4 teaspoons salt
- 2 Tablespoons olive or canola oil
- 3 Tablespoons honey
- 2 1/3 cups unbleached white bread flour
- 1/2 to 3/4 cup whole wheat flour
- 1/2 cup spelt flour
- 1/4 cup wheat germ, toasted or plain (plus some for sprinkling on top)
- 3 Tablespoons flaxseed meal or ground seeds
- 3 Tablespoons flaxseed or sesame seeds
- 1/4 cup sunflower seeds or chopped walnuts
- 1 Tablespoon poppy seeds, optional

Grassy Creek Multigrain Bread, continued

Instructions:

- 1) In a small bowl, combine the yeast, warm water, and sugar. Stir, and set aside for 3 to 4 minutes, until mixture bubbles up.
- 2) Combine the 1/2 cup plus 2 Tbsp. water, yogurt, salt, oil, and honey; heat until just hot to the touch (115° to 120°F). Cool to lukewarm.
- 3) In the large bowl of an electric mixer, toss together all the flour, wheat germ, and seeds or nuts. Stir in the bubbling yeast mixture. Stir liquid mixture into the flour and yeast.
- 4) With the paddle attachment, beat the dough slowly until it is well blended and the gluten begins to develop (about 5 to 7 minutes). The dough will look quite rough; if it feels very sticky, sprinkle on another 2 to 3 Tbsp. bread flour and beat.
- 5) Switch paddle to dough hook and place mixer on lowest speed. Knead until it forms a cohesive ball and is no longer sticky to the touch, about 6 to 7 minutes, adding another 2 or 3 Tbsp. flour if necessary. Form dough into a ball
- 6) Place dough in an oiled bowl or 2-gallon Ziplock bag; turn once to coat with oil. Seal the bag, or cover the bowl with wrap. Place in a warm spot free from drafts. Allow to double in size.
- 7) Punch down dough to remove large air bubbles and turn onto a lightly floured surface; knead once or twice and return to the oiled container. Allow to rise 35 to 40 minutes.
- 8) Punch down dough, knead once or twice, and then form it into a round smooth ball. Place ball on parchment lined cookie sheet (or sprayed with Pam); cover loosely with oiled plastic wrap. Allow to rest 15 to 20 minutes. Preheat oven to 400°F.
- 9) Position oven rack in center; place pan of hot water on lower rack. Glaze bread with egg wash (1 egg plus 1 tsp. water); slash with sharp knife and sprinkle with wheat germ.
- 10) Bake 15 minutes; reduce to 375°; bake 25 to 35 min., removing water after ten minutes at 375°. Cool before slicing.

Whole Wheat Hot Roll Mix

- 9 cups all purpose flour
- 9 cups whole wheat flour
- 5 packages 50% faster yeast
- 1 Tablespoon salt
- 1 cup instant dry non-fat milk
- 1 cup sugar
- Combine all ingredients and mix thoroughly in a large container. Store in an airtight container in a dark, dry, cool place.

Whole Wheat Pan Rolls

- 1 ½ cup lukewarm water
 - ½ cup vegetable oil or melted butter or margarine
 - 2 eggs, beaten
 - 5 to 6 cups basic Whole Wheat Hot Roll Mix (*above*)
- ⇒ Combine water, eggs and oil in large bowl. Add 5 cups of hot roll mix. Blend well (add additional mix to make a soft, but not too sticky dough)
- ⇒ Knead dough about 5 minutes until dough is smooth. Lightly grease a bowl. Put dough in bowl and turn greased side up.
- ⇒ Cover dough with a warm damp towel and let rise in a warm place until doubled in bulk, about an hour.
- ⇒ Grease a 13X9 inch baking pan. Punch dough down. Divide dough into 24 to 30 balls of equal size. Place balls in prepared pans. Cover and let rise again until doubled in bulk, about 30 to 40 minutes.
- ⇒ Preheat oven to 375 degrees and bake 20 to 25 minutes until golden brown.

Whole Wheat Bran Bread

Ingredients:

- 1-1/2 cups water, *divided*
- 3/4 cup milk
- 1 cup wheat bran
- 6 tablespoons butter, cubed
- 1/3 cup honey (or molasses)
- 3 tablespoons sugar
- 4 teaspoons salt
- 2 packages (1/4 ounce *each*) active dry yeast
- 2 cups whole wheat flour
- 3-1/4 to 3-3/4 cups all-purpose flour

Instructions:

- ⇒ In a saucepan, combine 1 cup water and milk; bring to a boil.
- ⇒ Remove from the heat;
- ⇒ Stir in the wheat bran, butter, honey , sugar and salt.
- ⇒ Cool to lukewarm.
- ⇒ Heat remaining water to 110°-115°; pour into a large bowl.
- ⇒ Sprinkle with yeast; stir until dissolved.
- ⇒ Add bran mixture and whole wheat flour; beat well.
- ⇒ Add enough all-purpose flour to make a stiff dough.
- ⇒ Turn out onto a floured surface; knead until smooth and elastic, about 6-8 minutes.
- ⇒ Place in a greased bowl, turning once to grease top.
- ⇒ Cover and let rise in a warm place until doubled, about 1 hour.
- ⇒ Punch the dough down. Shape into two loaves and place in greased 8-in. x 4-in. loaf pans.
- ⇒ Cover and let rise until doubled, about 1 hour.
- ⇒ Bake at 400° for about 40minutes (until golden brown on top and dough pulls away from the pan).
- ⇒ Makes 2 loaves.

No Knead Whole Grain Bread

- **3 cups** whole wheat flour, or use 2 cups plus a combination of other whole grain flours like buckwheat, rye, or cornmeal or 2 cups of white flour can be used for a less dense loaf
 - **1/2 teaspoon instant yeast**
 - **2 teaspoons salt**
 - **2 tablespoons olive oil or vegetable oil**
 - **Cornmeal or wheat bran for dusting (optional)**
 - **Up to 1 cup chopped nuts, seeds, dried fruit, or proofed whole grains (Optional: to proof grains, soak 1/2 cup grain in a small bowl, covered with water, for an hour or so. Drain and add to the dough as described in step 2.)**
1. Combine the flour, yeast, and salt in a large bowl. Add 1 3/4 cups water and stir until blended; the dough should be quite wet, almost like a batter (add some more water if it seems dry.) Cover the bowl with plastic wrap and let it rest in a warm place for at least 12 and up to 24 hours. The dough is ready when its surface is dotted with bubbles.
 2. Use some of the oil to grease the loaf pan. If you are adding nuts or anything else, fold them into the dough now with your hands or a rubber spatula. Transfer the dough to the loaf pan, and use a rubber spatula to gently settle it in evenly. Brush the top with the remaining oil and sprinkle with cornmeal if you like. Cover with a towel and let rise until doubled, an hour or two depending on the warmth of your kitchen. Heat the oven to 375° once the bread has almost finished rising.
 3. Bake the bread until deep golden and hollow-sounding when tapped, about 45 minutes. (An instant-read thermometer should register 200° when inserted into the center of the loaf.) Immediately turn out of the pan onto a rack and let cool before slicing.

****For fast whole grain bread, increase the yeast to 1 1/2 teaspoons. Reduce the initial rise to 2 hours and the final rise in the pan to 60 minutes or so. Proceed immediately to Step 3. ****

Recipe from — Mark Bittman, “Food Matters”

Bread Sticks

Ingredients:

- 2 cups whole wheat flour (or white whole wheat)
- 1 to 1 ¼ cup white bread flour
- 1 pkg. dry yeast
- 1 tbsp. sugar
- 2 tbsp. olive oil or cooking oil
- 1 tsp. salt
- 1 1/4 c. warm water

Instructions:

In large bowl, combine 1 cup flour, yeast, sugar, and salt. Combine warm water, oil, Add to large bowl. Beat at low speed with electric mixer until blended. Beat 3 minutes at high speed.

OR:

By hand, stir in enough flour to make soft dough. Turn dough out onto a lightly floured work surface. Knead until smooth.

THEN:

- ⇒ Cover and let rest for 10 minutes. Roll each piece of dough to form rope 14 inches long.
- ⇒ Spread melted butter on breadsticks then sprinkle on herb mixture or parmesan cheese
- ⇒ Place 2 inches apart on greased baking sheet.
- ⇒ Let rise in warm place for another 10 to 15 minutes.
- ⇒ Bake in 400 degrees oven until golden brown, around 12 minutes.

English Muffins

Ingredients:

- 2 ¼ cup flour (include at least 1 cup white flour)
- 1 Tablespoon sugar
- ¼ teaspoon salt
- 1 package quick rising yeast
- 2 tablespoons butter (cut into pieces)
- 1 cup warm water
- Cornmeal

Instructions:

In a food processor, combine all dry ingredients along with the butter. With food processor on, pour warm water through the spout in a steady stream until all ingredients are blended.

Form a dough ball and let rest 10 minutes.

Sprinkle surface of dough lightly with cornmeal and gently pat dough out to about ¾ inch thickness cutting with biscuit cutter.

Cook on medium hot griddle or skillet cooking about 3 minutes on each side. If muffin browns too quickly turn heat down.

Cool on a wire rack and split in half to serve or toast later.



Anadama Bread

Ingredients:

- ½ cup yellow cornmeal
- 1 package dry yeast
- ½ cup molasses
- 2 teaspoons salt (can cut back by 1 teaspoon)
- 4 ½ cups white flour

Instructions:

Put the cornmeal in a large mixing bowl. Bring 2 cups water to a boil and pour it over the cornmeal. Stir until smooth, making sure the cornmeal does not lump. Let stand for 30 minutes.

Stir the yeast into ½ cup warm water and let it stand for 5 minutes to dissolve. Add the molasses, salt, butter, and dissolved yeast to the cornmeal mixture. Stir in the flour and beat thoroughly.

Spoon into 2 buttered loaf pans, cover and let rise in a warm spot until double in bulk. Preheat oven to 350 degrees. Bake bread for 45-50 minutes. Remove from pan and cool on racks.

Makes 2 loaves.

Brown and crusty with a chewy, springy texture, this old-fashioned batter bread, quick and easy to make, is an American classic. From the Fannie Farmer Cookbook



Cinnamon Rolls

Ingredients:

- 4 ½ to 5 ½ cups unsifted flour
- 1 ½ tsp. salt
- 2 pkg. active dry yeast
- 2 eggs, at room temperature
- ½ cup sugar
- ½ cup milk
- ½ cup water
- 1 cup margarine or butter

Filling:

- Melted butter (approximately 1 ½ sticks)
- 1 ½ cups granulated sugar
- 1 ½ cups brown sugar
- Cinnamon, as needed

Instructions:

- 1) In a large bowl, thoroughly mix 1 2/3 cups of the flour and all of the sugar, salt, and dry yeast.
- 2) Combine milk, water, and margarine or butter in a saucepan. Heat over low heat until liquids are warm (110° to 115°; butter does not need to melt).
- 3) Gradually add liquids to dry ingredients and beat 2 minutes at medium speed of electric mixer using paddle attachment, scraping the bowl occasionally.
- 4) 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.

Cinnamon Rolls, continued

- 5) Replace the paddle attachment with the dough hook attachment and knead for 8 to 10 minutes at lowest speed. Place dough in a greased bowl, turning the dough over to grease the top. Cover and let rest for 15 to 20 minutes.
- 6) Turn onto lightly floured board and divide dough in half. Roll each half to a 9 x 18-inch rectangle.
- 7) Spread each rectangle with melted butter and sprinkle evenly with granulated sugar, brown sugar, and cinnamon. Roll dough into a jelly roll, beginning with long side.
- 8) Cut into 12 1½ -inch slices and place on a cooking sheet that has been sprayed with Pam.
- 9) Allow to rise for an additional 30 minutes.
- 10) Bake at 350° for about 20 to 25 minutes or until golden brown.
- 11) Remove from oven and drizzle with icing. Serve warm.

Icing:

- 2 cups powdered sugar
- ¼ cup milk
- ½ tsp. vanilla



Pizza Dough

Ingredients:

- 1 envelope active dry yeast
- 1 cup warm water, 110° F.
- 1 1/2 teaspoons sugar
- 1 cup all-purpose flour
- 1 ¼ to 1 ½ cup whole wheat flour
- 2 tablespoons olive oil (or other vegetable oil)
- 1 teaspoon salt

Instructions:

- 1) Put warm water in a cup; sprinkle yeast over water and stir in sugar; let stand for about 10 minutes, or until it begins to bubble.
- 2) Combine 2 1/4 cups flour and salt in a large bowl; pour in oil and yeast mixture and stir until a stiff dough is formed. Turn dough out onto a floured surface; knead about 5 minutes, or until smooth and elastic. Add extra flour as needed to keep from sticking to hands and board.
- 3) Place in a large bowl greased with shortening or butter; turn dough over to coat the dough well. Cover with towel and let rise in a warm place for about 30 minutes. Dough should double in bulk. Punch down the dough and shape to fit a lightly greased pizza pan which has been sprinkled lightly with cornmeal. Keep dough slightly thick around the edges. Fill with favorite filling and toppings and bake for about 15 to 20 minutes at 425°.

Refrigerator Bran Rolls

Ingredients:

- 1 cup shortening
- $\frac{3}{4}$ cup sugar
- 1 cup All-Bran cereal
- 1 $\frac{1}{2}$ tsp. salt
- 1 cup boiling water
- 2 eggs, well beaten
- 2 pkg. instant yeast
- 1 cup lukewarm water (110° to 115°)
- 6 cups flour (3 cups white and 3 cups white whole wheat)

Instructions:

- 1) Mix shortening, salt, sugar, and All-Bran with boiling water, stirring until shortening melts. Let stand until lukewarm.
- 2) Stir 2 pkg. of yeast into the cup of lukewarm water and let stand for 5 minutes.
- 3) Add eggs and yeast mixture to the bran mixture and beat thoroughly.
- 4) Stir in the flour with a wooden spoon.
- 5) Cover and rest the dough for 15 minutes.
- 6) Place dough in refrigerator until ready to make into rolls.

To make into rolls: With floured hands, pinch dough into golf ball-sized pieces and roll into smooth ball. Place in buttered pan and allow to rise at room temperature until doubled in bulk. (This will take approximately 1 hour for cold dough or 30 minutes for dough that has not been refrigerated) Bake in 400° oven until golden brown. Makes about 2 $\frac{1}{2}$ dozen rolls.

Master Recipe from

Artisan Bread in 5 Minutes a Day

- **3 cups lukewarm water** (you can use cold water, but it will take the dough longer to rise. Just don't use hot water or you may kill the yeast)
- **1 tablespoon granulated yeast** (you can use any kind of yeast including: instant, rapid rise, bread machine, active dry or cake yeast)
- **2 teaspoons Salt** (adjust to suit your taste or eliminate it all together)
- **6 1/2 cups (2-pounds) unbleached all-purpose flour** (we tested the recipes with Gold Medal and Pillsbury flour)

Mixing the dough:

- ⇒ In a 5 or 6 quart bowl or lidded food storage container, dump in the water and add the yeast and salt. Because we are mixing in the flour so quickly it doesn't matter that the salt and yeast are thrown in together.
- ⇒ Dump in the flour all at once and stir with a long handled wooden spoon (or a Danish Dough hook or whisk, which is one of the tools that makes the job so much easier!).
- ⇒ Stir it until all of the flour is incorporated into the dough, as you can see it will be a wet rough dough.
- ⇒ Put the lid on the container, but do not snap it shut. You want the gases from the yeast to escape.
- ⇒ Allow the dough to sit at room temperature for about 2 hours to rise. When you first mix the dough it will not occupy much of the container. But, after the initial 2 hour rise it will pretty much fill it. (If you have decreased the yeast you will have to let it go longer than 2 hours.)
- ⇒ **DO NOT PUNCH DOWN THE DOUGH!**
- ⇒ The dough will be flat on the top and some of the bubbles may even appear to be popping. (If you intend to refrigerate the dough after this stage it can be placed in the refrigerator even if the dough is not perfectly flat. The yeast will continue to work even in the refrigerator.)

Artisan Bread, Continued

- ⇒ The dough can be used right after the initial 2 hour rise, but it is **much easier to handle when it is chilled. It is intended for refrigeration and use over the next two weeks, ready for you anytime. The flavor will deepen over that time, developing sourdough characteristics.**
- ⇒ The next day when you pull the dough out of the refrigerator you will notice that it has collapsed and this is totally normal for our dough. It will never rise up again in the container.
- ⇒ Dust the surface of the dough with a little flour, just enough to prevent it from sticking to your hands when you reach in to pull a piece out. You should notice that the dough has a lot of stretch once it has rested. *(If your dough breaks off instead of stretching like this your dough is probably too dry and you can just add a few tablespoons of water and let it sit again until the dough absorbs the additional water.)*
- ⇒ Let the dough rest for at least 40 minutes, *(although letting it go 60 or even 90 minutes will give you a more open hole structure in the interior of the loaf. This may also improve the look of your loaf and prevent it from splitting on the bottom.)* You will notice that the loaf does not rise much during this rest, in fact it may just spread sideways, this is normal for our dough.
- ⇒ Preheat the oven to 450 degrees
Cut the loaf with 1/4-inch slashes using a serrated knife. *(If your slashes are too shallow you will end up with an oddly shaped loaf and also prevent it from splitting on the bottom.)*
- ⇒ Slide the loaf into the oven onto the preheated stone (the one I'm using is the cast iron) and add a cup of hot water to the broiler tray. Bake the bread for 30-35 minutes or until a deep brown color. As the bread bakes you should notice a nice oven spring in the dough. This is where the dough rises. To insure that you get the best results it is crucial to have an oven thermometer to make sure your oven is accurate.
- ⇒ For more information (pictures!) and additional recipes, please visit www.artisanbreadinfive.com



Croissants

well worth the effort!

The butter:

- 1 tsp. lemon juice
- 5 sticks unsalted butter, slightly chilled
- ¼ cup bread flour

Work the lemon juice, butter, and flour by kneading it against the table or in a bowl (with your hand) until smooth.

Shape the butter into a 6 to 8-inch square. Place the butter on a sheet of parchment paper and set aside. If the room is warm, place it in the refrigerator, but do not let it get too firm. (If this happens, rework and reshape the butter back to the original consistency.)

The dough:

- 1 lb. 8 oz. bread flour
- 6 ¾ tsp. (or 3 ¼-oz. packages) active dry yeast
- 2 cups whole milk, room temperature
- 2/3 cup sugar
- 2 Tbsp. honey
- 4 tsp. salt
- 2 eggs, for egg wash

Dissolve the yeast in ½ cup milk in the bowl of the mixer and let rest for 5 minutes.

Add the sugar, honey, and salt to the yeast mixture. Attach the dough hook, set mixer to lowest speed; begin to add the flour. Mix in enough flour to make a dough that is slightly firm but not rubbery.

Mix on lowest speed for 1 to 2 minutes. If the dough is too dry, add more milk, 1 Tbsp. at a time. You want all of the flour on the bottom of the bowl to be picked up by the dough hook. Stop the mixer and look at the bottom of the bowl – if there is still flour, add a few more drops of milk.

Croissants, continued

When the dough is smooth, elastic, no longer sticky, and close to the consistency of soft butter (no longer than 4 minutes), remove dough and a table that has been dusted lightly with flour.

Roll dough to about a 12-inch square.

Check the butter to be sure that it is smooth and at the same consistency as the dough; adjust if necessary.

Place the butter square on the dough diagonally so that there are 4 triangles on the sides, fold in the sides, and seal in the butter.

Give the dough 3 turns, then refrigerate for at least two hours.

Instructions for making a single turn:

Roll the dough into a rectangle $\frac{1}{2}$ -inch thick, as carefully and evenly as possible, with a long side facing you.

Divide the rectangle crosswise into thirds by sight or by marking the dough lightly by the edge of your hand.

Fold one-third of the dough over the middle section, then fold the remaining one-third over both of them, brushing away the excess flour from the inside as you fold.

The dough now has one single turn.

Refrigerate, covered, for 30 minutes.

Position the dough so that the long sides run horizontally, roll the dough to the same size rectangle as before, and make the second single turn.

Chill the dough, covered, for 30 minutes, then make the last single turn.

(continued on next page)



To make the croissants:

Roll the dough into a rectangle slightly thinner than $\frac{1}{4}$ -inch and as even as possible. Let the dough rest 5 minutes so that it will not shrink when you cut it, then cut it lengthwise into 3 equal strips.

On the bottom edge of the strip closest to you, start at the left corner, measure 4 $\frac{1}{2}$ -inches, and make a mark in the dough. Continue making marks every 4 $\frac{1}{2}$ -inches from that point. Do the same on the top edge of the top strip.

Cut from the lower left corner up to the first mark on the top strip and cut the dough, using a knife or pastry wheel. Then cut from the first mark on the bottom strip to the second mark on the top strip. Repeat, cutting every 4 $\frac{1}{2}$ -inches for the length of the dough.

Beginning at the opposite end, follow the same pattern and cut from right to left. Form 2 or 3 croissants from the end scraps.

Make a $\frac{1}{2}$ -inch cut in the center of the short side on each croissant. Pull the cuts apart a little, then form the croissants by rolling the triangles toward you. Roll them up tightly, but do not stretch the dough too much.

Form each croissant into a crescent shape as you place it on a sheet pan lined with baking paper. The tip of the croissant should be inside the center curve and tucked underneath so that it does not untie. Do not crowd on the pan; allow room for rising.

Let the croissants rise until slightly less than doubled in volume.

Brush the croissants with egg wash.

Bake at 425°F until golden and baked through, about 25 minutes.

Tips for working with laminated dough

Laminated dough is a baking term for the process of alternating layers of dough and butter when making pastry. The dough is wrapped around butter (so that the butter is completely enclosed in dough and cannot slip out), the “package” is rolled out, folded over to double the number of layers, and then the whole thing is repeated. Each time the dough is folded, it is called a “turn.” The more turns your laminated dough has, the flakier your finished pastry will be. When heated, the water in butter turns to steam. The thin layers of butter in laminated dough cause the dough to puff up and rise during baking, giving croissants and puff pastry their layered and crispy look, and the milk solids in the butter cause the pastry to brown – and, of course, taste delicious.

- **Don’t overwork the dough block.**
- **When folding the dough, brush off any flour left on the surface so it doesn’t become incorporated.** Extra flour can dry and toughen the dough and prevent the layers from adhering to one another.
- **Keep the butter chilled at all times.** The butter needs to be cold but malleable - this is far better than working with a rock-solid slab. And it must be of a good quality. The cheaper butters, often with a high proportion of water in them, tend to ooze out during the baking
- **Wrap the dough completely in plastic wrap.**
- **When folding the dough,** take care to line up the edges precisely and square off the corners by gently pulling or stretching them as you fold them into the center. *This attention to detail results in perfectly even layers, which create a high rise and flaky texture when the dough is baked.*
- **When you begin a turn,** arrange the dough with its long folded side toward you. *This helps to ensure consistent layering and finer end product.*
- **Laminated dough freezes well for up to one month.** Allow to thaw overnight (still wrapped) in the refrigerator before shaping and rising.

Quick Breads

Chemical leavenings play a major part in adjusting quick breads for high altitudes. Here is a handy chart that shows adjustments for various altitudes:

| Baking powder or baking soda | 3,000 feet to 5,000 feet | 5,000 feet to 6,500 feet | 6,500 feet to 8,000 feet |
|------------------------------|--------------------------|--------------------------|--------------------------|
| 1 teaspoon | 7/8 teaspoon | 1/2 teaspoon | 1/4 teaspoon |
| 1 1/2 teaspoons | 1 1/4 | 3/4 | 1/2 |
| 2 teaspoons | 1 1/2 | 1 | 3/4 |
| 2 1/2 teaspoons | 1 3/4 | 1 1/4 | 1 |
| 3 teaspoons | 2 | 1 1/4 | 1 |
| 3 1/2 teaspoons | 2 1/2 | 1 1/2 | 1 |
| 4 teaspoons | 2 1/2 | 1 1/2 | 1 |

For additional high-altitude adjustments when baking quick breads such as muffins, biscuits, scones, and coffee cakes, use the following chart:

| WHAT TO CHANGE | HOW TO CHANGE IT | WHY |
|--------------------|--|---|
| Baking time | Decrease by 5-8 minutes per 30 minutes of baking time. | Baking at higher temperatures means products are done sooner. |

| WHAT TO CHANGE | HOW TO CHANGE IT | WHY |
|-------------------------|--|--|
| Oven Temperature | Increase 15 to 25°F; use the lower increase when making chocolate or delicate cakes. | Since leavening and evaporation proceed more quickly, the idea is to use a higher temperature to “set” the structure of baked goods before they over expand and dry out. |
| Sugar | Decrease by 1 tablespoon per cup | Increased evaporation also increases concentration of sugar, which can weaken the structure of what you’re baking |
| Liquid | Increase by 1 to 2 tablespoons at 3,000 feet. Increase by 1 1/2 teaspoons for each additional 1,000 feet. You can also use extra eggs as part of this liquid, depending on the recipe. | Extra liquid keeps products from drying out at higher temperatures and evaporation rates. |
| Flour | At 3,500 feet, add 1 more tablespoon per recipe. For each additional 1,500 feet, add one more tablespoon. | In some recipes, a flour with a higher protein content may yield better results. Additional flour helps to strengthen the structure of baked goods. |

Cranberry Orange Scones

Ingredients:

4 cups plus 1/4 cup all-purpose flour
1/4 cup sugar, plus additional for sprinkling
2 tablespoons baking powder
2 teaspoons kosher salt
1 tablespoon grated orange zest
3/4 pound cold unsalted butter, diced
4 extra-large eggs, lightly beaten
1 cup cold heavy cream
1 cup dried cranberries
1 egg beaten with 2 tablespoons water or milk, for egg wash
1/2 cup confectioners' sugar, plus 2 tablespoons
4 teaspoons freshly squeezed orange juice

Instructions:

Preheat the oven to 400 degrees F. In the bowl of an electric mixer fitted with a paddle attachment, mix 4 cups of flour, 1/4 cup sugar, the baking powder, salt and orange zest. Add the cold butter and mix at the lowest speed until the butter is the size of peas. Combine the eggs and heavy cream and, with the mixer on low speed, slowly pour into the flour and butter mixture. Mix until just blended. The dough will look lumpy! Combine the dried cranberries and 1/4 cup of flour, add to the dough, and mix on low speed until blended.

Dump the dough onto a well-floured surface and knead it into a ball. Flour your hands and a rolling pin and roll the dough 3/4-inch thick. You should see small bits of butter in the dough. Keep moving the dough on the floured board so it doesn't stick. Flour a 3-inch round plain or fluted cutter and cut circles of dough. Place the scones on a baking pan lined with parchment paper. Collect the scraps neatly, roll them out, and cut more circles. Brush the tops of the scones with egg wash, sprinkle with sugar, and bake for 20 to 25 minutes, until the tops are browned and the insides are fully baked. The scones will be firm to the touch. Allow the scones to cool for 15 minutes and then whisk together the confectioners' sugar and orange juice, and drizzle over the scones.

Lemon Blueberry Scones

Ingredients:

2 cups all purpose flour
1/4 cup sugar
2 tsp baking powder
1/4 tsp salt
6 Tbsp. butter, chilled
1/2 cup milk
1/4 cup fresh lemon juice
1 Tbsp. lemon zest
1 cup frozen blueberries



Instructions:

Preheat oven to 400F. Line a baking sheet with parchment paper. In a large bowl, whisk together flour, sugar, baking powder and salt. Cut butter into 6-8 chunks and add to flour mixture, tossing to coat. Using your fingertips, rub the butter into the flour until mixture is sandy and butter is well distributed, with no pieces larger than a big pea.

Add in milk, lemon juice and lemon zest and stir until dough comes together. If dough is too wet, add an additional tablespoon of flour to the dough.

Either keeping the dough in your mixing bowl, or turning it out onto a lightly floured surface, knead dough for about 1 minute. Flatten dough and add blueberries. Knead gently for 30-60 seconds to distribute them. Divide dough into two balls and press each into a disc about 3/4-inch thick. Use a knife to divide each disc into quarters and place scones on prepared baking sheet.

Bake for 17-22 minutes, until scones are golden brown.

Lemon Glaze : 1 Tbsp. lemon juice + 1/2 cup confectioners' sugar

Whisk glaze ingredients together until smooth, then drizzle over still-warm scones before serving.

Bacon-Cheddar-Chive Scones

2 cups (8 1/2 ounces) King Arthur Unbleached All-Purpose Flour or Perfect Pastry Blend
1 teaspoon salt
1 tablespoon baking powder
2 teaspoons sugar
4 tablespoons (1/2 stick, 2 ounces) cold butter
1 cup (4 ounces) very coarsely grated or diced cheddar cheese
1/3 cup (about 1/2 ounce) snipped fresh chives, or finely diced scallion tops (the green part, 3/4 ounce)
1/2 pound bacon, cooked, cooled, and crumbled (about 1 cup)
3/4 cup + 2 tablespoons (7 ounces) heavy cream or whipping cream, or enough to make the dough cohesive

Preheat the oven to 425°F. Lightly grease a baking sheet, or line it with parchment.

- 1) Whisk together the flour, salt, baking powder, and sugar.
- 2) Work the butter into the flour until the mixture is unevenly crumbly, with some of the butter remaining in larger pieces.
- 3) Mix in the cheese, chives, and bacon until evenly distributed.
- 4) Add 3/4 cup of the cream, stirring to combine. Try squeezing the dough together; if it's crumbly and won't hang together, or if there are crumbs remaining in the bottom of the bowl, add cream until the dough comes together. Transfer the shaggy dough to a well-floured work surface.
- 5) Pat the dough into a smooth 7" disk about 3/4" thick. Transfer the disk to the prepared baking sheet.
- 6) Use a knife or bench knife to cut the disk into 8 wedges, spreading the wedges apart a bit on the pan.
- 7) Brush the scones with a bit of cream; this will help their crust brown.
- 8) Bake the scones for 22 to 24 minutes, until they're golden brown. Remove them from the oven, and cool right on the pan. Serve warm, or at room temperature.

Yield: 8 large scones

Sour Cream Coffee Cake

Ingredients:

- 3/4 cup sugar
- 1/2 cup butter, softened
- 1 tsp. vanilla
- 3 eggs
- 2 cups all purpose flour
- 1 tsp. baking soda
- 1/8 tsp. salt
- 1 cup sour cream

Filling and Topping:

- 1 1/4 cups firmly packed brown sugar
- 1 cup chopped walnuts or pecans
- 2 tsp. cinnamon
- 3 Tbsp. butter, melted

Instructions: Preheat oven to 375°F. Grease 2 9-inch round cake pans.

In large mixing bowl, cream butter and sugar until light and fluffy. Add vanilla and eggs; mix well. In small bowl, combine flour, baking powder, baking soda, and salt. Stir flour mixture and sour cream alternately into creamed butter and sugar, beginning and ending with the flour mixture. In small bowl, combine all filling/topping ingredients; mix well. Spread 1/4 batter in each cake pan; top each with 1/4 filling. Divide remaining batter; spread over filling; sprinkle with topping.

Bake 20 to 30 minutes until golden and firm.

Extraordinary Buttermilk Biscuits

Ingredients:

- 2 1/2 cups self-rising flour
- 2 teaspoons sugar
- 1/2 cup butter (diced) or shortening
- 3/4 to 1 cup buttermilk, milk, or whipping cream

Instructions:

- 1) Preheat oven to 450°F. In medium bowl, stir together flour and sugar. Using pastry blender or fork, cut in butter until mixture is crumbly. Stir in buttermilk until dough leaves sides of bowl (if dough is dry, stir in 1 to 2 tablespoons additional buttermilk).
- 2) On lightly floured surface, knead dough just until smooth. Roll to 1/2-inch thickness. Cut dough with floured 2 1/2-inch round cutter. On ungreased (or parchment lined) cookie sheet, place about 1 inch apart for crusty sides or touching for soft sides.
- 3) Bake 10 to 12 minutes or until golden brown.

For drop biscuits: Use 5 5/8 cups buttermilk. Do not knead dough. Drop dough by rounded spoonfuls 2 inches apart.

For Cheese-Garlic biscuits: Use 5 cup buttermilk; add 7/8 cup shredded Cheddar cheese. Do not knead dough. Drop dough by large spoonfuls 2 inches apart. After baking, brush with mixture of 2 tablespoons melted butter and 1/8 teaspoon garlic powder.

Cheese Straws

Ingredients:

- *Three 10-ounce bricks sharp Cheddar cheese, shredded cold then left at room temperature
- *1 cup (2 sticks) butter, softened
- *4 cups sifted all-purpose flour
- *2 teaspoons salt
- *1/8 teaspoon black pepper
- *1/8 teaspoon cayenne pepper
- *Dash of garlic powder

Instructions:

- 1) Directions: Preheat the oven to 325 degrees F.
- 2) Put the softened cheese and butter in the bowl of a heavy-duty electric mixer. Using the heaviest mixer paddle attachment, beat until the mixture has the consistency of whipped cream, 15 to 30 minutes.
- 3) In a large bowl, sift 3 cups of the flour with the salt, black pepper, cayenne pepper and garlic powder. Gradually add the seasoned flour to the cheese mixture by large spoonfuls, beating well after each addition. Add the remaining 1 cup unseasoned flour incrementally until the dough is somewhat stiff but still soft enough to be pushed through a cookie press; you may not need to add all the flour.
- 4) Lightly spray 4 cookie sheets with cooking spray. Put a portion of the dough into a cookie press fitted with the star tube (or roll out by hand) and press the dough onto a cookie sheet in long strips that run the length of the pan. Repeat until the pan is full. Bake until straws are golden brown and crisp, about 20 minutes.
- 5) With your hands or a sharp knife, break or cut the long strips into 3-inch lengths. Use a flat, thin spatula or an egg turner to remove the cheese strips from the pan. Allow them to cool on a wire rack. When they are completely cool, serve or store in a tightly covered container.



Email: csdavies@ad.nmsu.edu