





Enjoy Yeast **Breads Both Plain and Fancy**

By *Elna Miller*, Extension Nutritionist With update by Georgia Lauritzen, Food and Nutrition Specialist

1976, 1989 FN 283

Contents

PART I. FUNDAMENTAL FACTS FOR BREAD MAKING	
Recognize the Problem	1
Learn to Know Good Bread	
Let Good Equipment Help You	
Collect the Right Ingredients	
Watch All the Temperatures	
Practice Easy Kneading	
Know How the Dough Ferments	
Discover the Ripe Test	
Develop Skill in Molding	
Plan to Bake It Right	
PART II. TRY UTAH'S TESTED RECIPES	
"Staff of Life" Bread	19
Recipe for Enriched White Bread	
Recipe for Whole Wheat Bread	
Fancy Yeast Breads	
Make Some Batter Bread	
Foundation Recipe for Sweet Yeast Dough	
Some Causes of Poor Quality Bread	35

Utah State University is an Equal Opportunity/Affirmative Action Institution

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Robert L. Gilliland, Vice President and Director, Cooperative Extension Service, Utah State University, Logan, Utah. (EP/09/2000/DF)

Recognize the Problem

The bread-making suggestions in this bulletin have been adapted to meet conditions which are common throughout the State of Utah. Our high altitudes and dry atmosphere make problems in bread-making which are quite different from those found in lower elevations and more moist climates.

You will find, in the pages which follow, many changes from the bread-making methods and recipes prepared for use at sea level.

We need more liquid, less yeast, more and shorter rising periods, and a higher baking temperature to make really good bread in our Utah homes.

Read the general instructions before you try any of these recipes. They will help you to understand why these methods are recommended. Follow the directions carefully and you will have uniformly good bread and rolls every time you make them.

Methods, tests and recipes are given in much detail, to help those of you with little experience develop skills which will result in high quality baked products. Use of these skills can save you money as well as time and energy.

4-H Foods club leaders will use the information to give some of their club members their first lesson in bread-making.

Some new homemakers may also use these instructions for their first bread-making.

Experienced homemakers who are veterans in the art of making bread may find a few ideas which can help them.

The methods and recipes in the pages which follow, come to you as a result of several years of testing in different parts of Utah. Many of our homemakers and 4-H club members have adopted these bread-making practices. They report much improvement in the quality of their breads.

The general instructions in the first part of this bulletin apply both to the plain and to the fancy yeast breads. You will find when you turn to the recipe section that the "Sweet Yeast Doughs" call for more ingredients than do those for the "Staff of Life" bread. Methods of handling the two doughs differ slightly.

Learn to Know Good Bread

GENERAL APPEARANCE

A good loaf of bread is symmetrical in shape with a good volume. It is smooth on the top with no bulges or lumps. It has a well rounded dome showing good "oven spring." It has an evenly "shredded break" around the sides of the loaf, just above the top edge of the pan.

"Oven spring" is the quick rising that takes place during the first 10 minutes after the bread goes into the hot oven. This "oven spring" happens before the heat sets the cell walls and before the bread starts to brown.



Three Well Shaped Loaves of Bread

The "shredded break" develops during the "oven spring." The oven heat comes in contact first with the part of the loaf just above the pan. This part expands quickly, so the shreds of gluten stretch suddenly. Some of them break. Others bake in the stretched form and give an appearance of shredded wheat.

A well baked loaf of bread has a rich golden brown color on all sides. The top may be slightly darker brown than the sides or bottom of the loaf.

Sides cut from the center of a well shaped loaf are very little larger than those cut near the ends. A well shaped loaf given a slice of bread which measures about the same in both directions. The crust on high quality bread is thin, crisp, and tender.

THE CRUMB

The **color** of good white bread is uniformly creamy white. Whole wheat will be darker, depending on the percent of whole wheat flour used.

The **texture** of good yeast bread shows moderately small, rather uniform cells with thin cell walls. Good bread is free from streaks or extremely close grain. The freshly cut surface has a velvety feel, both to your fingers and to your tongue. As you press the crumb, it is soft, elastic, and springy. There are no hard spots or knots in the crumb of high-quality bread.

The **flavor** of good bread is rather bland. It has the sweet nut-like flavor of the wheat. Good bread has good eating quality. Both the flavor and the texture combine to make this good eating quality.

KEEPING QUALITIES

Bread which is made and cared for according to recommendations in this bulletin will stay fresh a reasonable length of time. Good bread does not dry out or get stale quickly.

Let Good Equipment Help You

The right kind of equipment will help you do the whole process of bread-making more efficiently. You can make good bread without all of the things listed below. Some of them may seem non-essential, but they do make the job much easier and the results more satisfying.

Here are some of the things you will want to have ready before you start your breadmaking:

Measuring Cups

Set of four, standard sizes to measure one-fourth, one-third, one-half, and one cup.

One pint measure.

One quart measure.

Cups made for measuring dry ingredients have the cup or pint or quart line at the top edge. This makes level measurements possible.

Cups for measuring liquids have the one cup, pint, or quart line about ½ inch below the top of the cup.



Leveling Flow with Spatula Using Standard Measuring Cups

Measuring Spoons

Set of four standard sizes to measure one-fourth teaspoon, one-half teaspoon, one teaspoon and one tablespoon.

Spatula or straight edge knife for leveling.

Flour Sifter.

Pans or bowls to use while sifting and measuring flour.

Large spoon or scoop to lift flour lightly into measuring cup.

Double boiler or sauce pan for scalding milk.

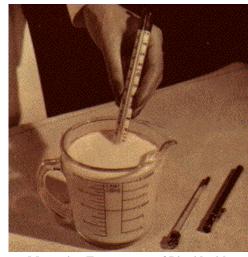
Small bowl for softening yeast.

Small pan for softening shortening.

Dairy or bread thermometer to insure correct temperature at every stage.

Large bowl for mixing dough.

Large bowl or straight sided crock to hold fermenting dough.



Measuring Temperature of Liquid with Thermometer

An earthen-ware bowl or crock keeps the temperature more nearly constant than does the metal containers. It is easier to judge the volume increase of the dough in a straight sided container than it is in a rounding bowl.

Wooden spoon for mixing dough.

Plastic or rubber scraper to clean dough from bowl.

Two pastry brushes. Use one for oiling the bread bowls or crock, and the baking pans. Use the other for brushing milk over the molded rolls before putting various toppings over them. Use it also to brush the top of the bread with milk just before it finishes baking.

Plastic bowl covers to keep the rising dough from drying on top.

Canvas-covered kneading board (description on page 4).

Thin cloths to dampen and cover rising dough to prevent drying.

Plastic ruler to measure volume increase in dough.

Sharp knife and kitchen shears for cutting dough at molding time.

Standard size load pans (described below).

Muffin tins, baking sheets, 9-inch round pans or 8-inch square pans for baking fancy rolls and breads.

Rolling pin covered with child's size 5 stocking, to roll out soft dough without sticking.

Egg beater

Wire cooling racks

Timer or alarm clock

Cardboard rising gauge to tell when the dough in the pans is ready for the oven (described on page 18).

Pad and pencil to help with timing of dough.

USE STANDARD SIZE BAKING PANS

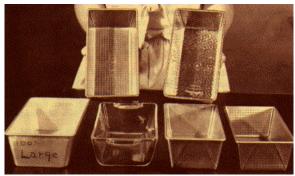
Use individual loaf pans for baking loaves of bread. Your bread will bake more evenly. It will have a much better shape than when two or more loaves are baked on one pan.

Standard size bread pans measure 7½ inches long and 3½ inches wide on the bottom. They are 2¾ inches deep. This standard size may be stamped with No. 7 or No. 11. Different manufacturers have different numbers for the same size pan.

The standard size loaf pans are available in aluminum, tin, and glass.

Those made of tin need tempering before they are used. Shiny tin pans will prevent the bread from browning. Temper the pans by putting them into a cold oven and heating it to 450° F. Leave the pans in the oven until the oven cools. This tempering makes any tin pan dull and slightly darker so the bread will brown sufficiently. Cookie sheets or cake pans made of tin also need tempering.

Glass baking dishes permit a slightly faster baking. Set your oven 25 degrees lower for bread baked in glass loaf pans than for that baked in metal pans.



Dull Pan Upper Left Has Been Tempered. Shining Pan Upper Right Has Not

The bread recipes in this bulletin are developed to give the amount of dough that is just right for baking a standard size loaf in a standard size pan.

This size pan will permit a well shaped loaf which has a good "oven spring" and an evenly "shredded bread" at the sides. It gives a slice of bread which has about the same dimensions both directions, and one which is just the right size for the electric toaster.

The baking time given with these recipes is based on a standard size loaf in a standard size pan.

If this standard amount of dough goes into a larger pan, it makes a poorly shaped loaf which is flat and squatty with no "oven spring" and no "break in shred." It cuts a slice of bread which is out of proportion.

If you use the larger pan and put more dough into it, you will still have a poorly shaped load of poor-quality bread. The larger pan is too wide to permit an evenly rounded dome on the top of the loaf. The spread is too great. The dough collapses in the middle.

There is a tendency to put the larger pan with more dough into the oven before the dough is light enough. This makes a loaf of heavy bread.

The baking time must be lengthened for the over-sized loaves.

These larger loaves make slices which are too large for the toaster.

Standard size pans are available in most places which sell kitchen equipment. They help so much in giving you a good, finished loaf of bread.

Standard size pans are found in stores which sell kitchen wares. They help you make a well-shaped loaf of bread.

USE A CANVAS-COVERED KNEADING BOARD

You can handle a soft dough more easily, both in kneading and in molding the dough, if you use a canvas-covered board. The canvas makes it easier to work with a very soft dough without sticking. A soft dough makes better bread and better rolls than does a stiff one. A lightweight canvas, sewed up to cover both sides of the board, and just large enough to slip the board tightly inside, makes a firm kneading and molding surface.

The Board

A piece of plywood or masonite cut 2 feet square makes a good kneading board. This size is convenient to use for molding the long rolls of dough used in making some of the fancy breads. You can use the smaller board from your kitchen cabinet. Make a light-weight canvas cover to fit whatever size board you will be using.

The Canvas

If you use a board 2 feet square, look for some light-weight canvas which is 29 or 30 inches wide. Buy 60 inches of it. Hem both ends of the canvas. Then shrink it so it will not shrink after you stitch it to fit your board. Iron it while it is quite damp. Fold the canvas with the two hemmed ends together. Put the board between the two layers of canvas. Pin the sides to fit the board. Stitch along the pin lines so the board will slide in and out easily but still keep the canvas tight. Then stitch along the outside edge of the salvage. This gives about 2 inches of canvas on two edges of the board.

When you are ready to use the board, put it inside the canvas. Use three or four large safety pins to hold the open ends very tightly together so the canvas will not wrinkle while you knead the dough.

Take the canvas off the board when you finish molding the loaves or rolls. Fold it with the used side in. Slip it into a plastic bag and keep it in your refrigerator until your next baking day. You can use the canvas several times between launderings if you keep it cool.

Collect the Right Ingredients

Plain breads are made from flour, liquid, yeast, shortening, salt and sugar. Fancy breads have eggs, fruits, nuts, spices, or other ingredients added to those basic ones for plain breads.

WHEAT FLOUR is the main ingredient of all breads. Wheat contains two proteins in just the right proportion to make gluten when water is added to the flour. Gluten makes it possible for batters and doughs to hold the leavening gas which makes them light.

ENRICHED FLOUR. Use enriched flour wherever the recipe calls for white flour. Enriched flour is white flour to which three of the B vitamins and iron have been added. Thiamin (B_1) , riboflavin (B_2) , niacin and iron are the required ingredients in enriched flour. Enriched flour looks, tastes and bakes the same as any other white flour. The difference comes in the added food values. The enrichment process puts back these four ingredients which were removed from the whole wheat in the process of making white flour.

LIQUID. Flour dries out so quickly in our dry climate. We need more liquid in proportion to flour, to keep the dough soft enough to make good bread.

Breads made with milk have more food value than do those made with water. They stay fresh longer. Milk gives bread a more velvety grain. Bread made with milk toasts more evenly and more quickly.

Fresh liquid milk, evaporated milk, or powdered milk all make good bread.

Scald the fresh liquid milk. Unscalded milk has an enzyme which causes a softening of the dough. Evaporated milk and the dried milk which is made for the baking trade need no scalding. The enzyme has been killed in the evaporation and the high temperature drying process. Dilute evaporated milk with equal parts of water.

When you use the "instant" powdered milk you will have better bread if you liquefy the milk and then scald it as you do the fresh fluid milk.

Most of the powdered milk on the grocery shelves today is the "instant" variety. It has been processed at a lower temperature than that which is necessary to destroy the enzymes which cause a sticky dough.

The powdered milk which the bakers use has been processed at a temperature high enough to destroy the enzyme action. That kind of powdered milk you may mix with the dry flour and use water where the recipe calls for milk.

One-fourth cup of the powdered milk made for the baking trade plus one cup cold water make one cup of milk. Use package directions for proportions of the "instant" variety.

SHORTENING makes the gluten mesh-work of the dough more elastic so the gas can expand freely and easily. This helps increase the volume. Shortening improves the flavor, makes bread more tender, and helps give it a soft velvety crumb. It also makes it brown better and stay fresh longer. Any kind of fresh, sweet fats or cooking oils may be used in breads or rolls.

SALT brings out the flavor of the other ingredients used in making bread. Salt also helps control fermentation. The more salt used, the slower the fermentation will be. Do not add salt to the liquid in which yeast is softened as it may retard the yeast action too much.

YEAST is responsible for the bubbles of gas which cause the dough to rise. Yeast most commonly used today comes as compressed yeast in cake form, or in granular form as active dry yeast.

Compressed yeast is perishable. It can be kept about 2 weeks in a refrigerator. Good compressed yeast is grayish in color. It is brittle. It crumbles easily when broken between the fingers.

Active dry yeast contains much less moisture than does compressed yeast. This makes it much less perishable. It can be kept several weeks without refrigeration. It stays in good condition much longer if it is kept in a cool place. Follow directions on the package for softening the active dry yeast.

RAPID MIX YEAST

A yeast product has been developed to "short-cut" bread making. This type of yeast is finer than conventional granulated yeast. It can be added to the flour without being dissolved in water. It can, however, be used in the conventional manner by dissolving in water.

Any conventional recipe can be adapted to use this product. To do this, simply add the undissolved yeast to the flour. Include the amount of liquid (required to dissolve the yeast) with the other liquid in the recipe.

RAPIDRISE YEAST

RapidRise yeast is a product developed by Fleischmann's. It is a different, more active yeast strain which is finer and lighter in color. Its ability to raise dough may be 50 percent faster than regular. One study reported from Nabisco Brands research laboratories that the RapidRise yeast outperformed a regular yeast in leavening action by about 15 percent; after storage for 6 months at room temperature, the RapidRise outperformed regular yeast by 70 percent.

RapidRise is a different yeast strain which is treated with greater amounts of phosphorus and ammonia to increase enzymatic activity and produce greater leavening ability. The yeast also suffers less cell damage during the drying stage. The yeast cell is able to feed on sugars in the bread dough at a faster rate and produce carbon dioxide at a faster rate.

For maximum time savings, combine RapidRise directly with dry ingredients, heat liquids to $120^{\circ}-130^{\circ}$ F and add liquids to dry ingredients. There is no need to "proof" the yeast. (This is a change in temperature and procedures from page 7.)

Time savings are less dramatic with the freezer and CoolRise doughs because the exposure to cold temperature retards the action of all types of yeast. For food processor recipes, RapidRise should be combined with the flour mixture in the processor bowl in the initial mixing step. The warm water normally used for dissolving yeast and then cold liquids should then be added as the recipe directs.

SUGAR is the food from which the yeast plant makes the leavening gas. Yeast makes carbon dioxide gas and alcohol from sugar. Yeast and sugar work together to form the tiny gas bubbles which permit the light porous texture of yeast products.

Sugar adds flavor to the bread. It also helps its browning in the oven. Too little sugar prevents browning. Breads brown too quickly if too much sugar is added.

White sugar is used more commonly in bread. Brown sugar, honey or molasses often are used in whole wheat or in fancy breads.

Watch All the Temperatures

USE COOL WATER TO SOFTEN YEASTS

Correct temperatures are so important for good bread-making. The first one to watch is that of the water in which the yeast is softened. The best temperature for this water is between 85° and 90°F if you are using compressed yeast. A higher temperature may kill many of the yeast cells before they ever get into the dough. If you have no thermometer, test the water on the inner side of your wrist. Water at 90°F will feel cool.

When you use active dry yeast, the water for softening the yeast may be as high as 110°F without damage to the yeast. This will feel slightly warm on your wrist.



Judging Temperature of Liquid without Thermometer

COOL THE LIQUID BEFORE ADDING THE SOFTENED YEAST

The next temperature to watch is that of the liquid and flour mixture when the softened yeast is added to the dough. Add the yeast when the mixture is between 85° and 90°F.

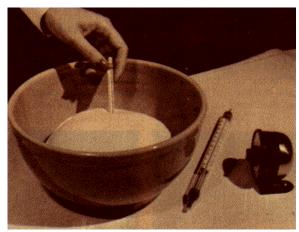
Here is a good guide to help you find the best temperature for milk used in mixing the dough. The flour will be about the temperature of the place where it is kept. This temperature and that of the room will determine what temperature you will want the liquid, to insure finished dough of 85° to 90°F when you put it to rise. In the winter, if the room is cool and the flour is cold, you will need warmer liquid. In summer when the room and the flour both may be very warm, you will want cooler liquid.

Assume that the room temperature is 80°F and that of the flour is 80°F and the liquid is 80°F. Those figures total 240. Here are examples:

(Read Down)		In Summer	In Winter
Temperature of room Temperature of flour Temperature of liquid	80°F	90°F	70°F
	80°F	90°F	70°F
	80°F	60°F	100°F
	240°F	240°F	240°F

You will find in the recipe section, that the directions call for part of the flour to be added before the softened yeast goes into the dough mixture. The cool flour will lower the temperature of the liquid, while the hot liquid warms up the cool flour. Then you can add the yeast, which you previously softened in the lukewarm water, without danger of killing some of the yeast cells from too high a temperature when you mix the dough. This is very important in cold weather when the liquid may need to be above 85° or 90°F to make a finished dough of the right temperature.

KEEP THE FERMENTING DOUGH AT 85°F



Measuring Temperature of Dough with Dough
Thermometer

The third important temperature is during the entire fermentation process. The yeast action is best during the rising period when the fermenting dough is kept between 85° and 90°F. If necessary put the bowl or crock into a pan of warm (not hot) water. Change the water as needed to keep this temperature constant.

BAKE THE BREAD AT 450°F

Correct baking temperature is most necessary for high quality bread. When the bread is ready to bake, put it into an oven which has been preheated to 450° F. This temperature sets the cell walls quickly and stops further rising.

In Utah's high altitudes and dry climates, bread baked at 450°F for 35 to 40 or 45 minutes will be better than if it is baked at a lower temperature for a longer time. The baking time varies with the altitude. The higher the altitude the longer will be the baking time.

If you find your bread getting too brown when the oven registers 450°F you probably have an inaccurate register. Check your oven with a good oven thermometer. Have your gas or power company check your oven thermostat.

Keep the oven at 450°F for the entire baking period unless your particular oven does too much browning. If you have to turn it down to 400° or 425°F do this after it has baked at 450°F for 15 or 20 minutes. This high temperature at the beginning will stop the yeast action and set the cell walls.

Much bread which has been handled properly at every stage up to baking fails to reach a high standard because it goes into an oven which is not hot enough. Bread baked from dough which got too light, will have a coarse, overly porous texture and a thick coarse crust.

Bread baked in an oven where the temperature is uneven may develop a large crack on one side of the loaf. We call this a shell crack. This shell crack comes from imperfect circulation in the oven. The uneven heat may be due to a faulty oven. It may come from crowding too many loaves into the oven so the hot air cannot circulate evenly around each loaf. The shell crack comes on the coolest side of the loaf.

A shell top is another bread fault that may come form dough which gets too light before the oven heat sets the cell walls. A slight jar will cause the dough to fall. This may come before or after the loaf of dough goes into the oven. The baked loaf may look all right from the outside. When you cut into it, you find a large hole immediately under the crust. This hole was left by the collapsing dough.

The shell top may come when you leave a large gas bubble under the top of the loaf. If the dough gets a dry surface while it is rising, the shell top is more apt to develop. Keep a damp cloth over the loaves after you put them into the pans.

Baked bread at too low a temperature will get too light before the cell walls are hardened. The cell walls stretch too far and then they collapse. This leaves some of the dough hanging over on each side of the pan. This we call an over-hang.

BAKING TEMPERATURE FOR FANCY ROLLS IN UTAH

IS 375°F instead of 450°F which we use for plain bread. Fancy breads have more sugar. The extra sugar makes them brown too fast at the higher temperature.



Loaf with Shell Crack



Loaf with Shell Crack Cuts Poorly Shaped Slice



Loaf with Shell Top

STORE THE BREAD IN A COOL PLACE

The last temperature to watch is after the bread is cooled. Turn the bread out of the baking pans onto wire racks to cool. Cool it completely before it is wrapped and stored. Keep it out of drafts while it is cooling. Keep bread in a cool storage place until it is used.

Practice Easy Kneading

The kneading process blends all the ingredients thoroughly. It stretches the gluten to develop the elastic framework which holds the gas that is formed by the yeast. Kneading distributes the gluten framework or cell walls completely through the dough. Proper kneading makes these cell walls thin and tender as well as more elastic.



Loaf with Overhang

AVOID TOO MUCH DOUGH

Some homemakers fail to do a good job of kneading because they make too much dough at one time. A four-loaf batch is as much as most women can knead efficiently by hand.

If you have a bread mixer, you can manage more dough at one mixing. The larger batches make too much dough to knead effectively to develop the thin cell walls which make up the structure of really good bread.

If you want to bake more than four loaves of bread in one day, mix two or more separate doughs. Time them far enough apart so the



Bread Made from Dough that Has Not Been Kneaded Enough Will Have Cell Walls Which Are Much Too Thick

first will be baked before the second is ready for the oven. This will give you much better bread than if you try to knead too much dough at one time.

KNEAD ON THE CANVAS

Do the kneading on a canvas-covered board. Rub flour well into the canvas before you start to knead the dough. Use the least amount of flour possible to make a smooth, but slack, or soft dough. You can handle a softer dough on a canvas-covered board than when you knead the dough directly on the floured board.

KEEP THE DOUGH SOFT

A soft dough makes better bread. A stiff dough rises slowly and makes the bread or rolls coarse in texture with thick cell walls.

Let the dough rest 10 to 15 minutes after you mix the ingredients together, and before you start the kneading. The dough will be less sticky and easier to handle.

LEARN TO KNEAD EFFECTIVELY

You can learn to knead the dough effectively with very little back work. Many women get a lot of backache and finger exercise, while they do the kneading, and then end up with a dough which still is under kneaded. Keep your back straight while you knead the dough. Bend forward from your hips and not from your waist line. You will be less tired.

Let the push come from your shoulder through the heels of your palms (the part of your hand nearest your wrist). Keep your fingers curved above the dough. Use them just to turn the dough over, so you will have a fresh part to push away from you. You can turn the dough over with your curved fingers, without pressing hard enough to leave any finger dents in the dough. You can turn the dough around one quarter with each push by using a little more pressure on one hand than on the other.

Develop a rhythm as you do the kneading. This makes it easier on you and more effective on the dough. Learn to knead the dough quickly and easily.

As you do this kneading, a smooth skin develops on the surface of the dough. Avoid pushing the dough in such a way that you tear the surface of the skin. These breaks will make a poor texture on the inside of the finished bread. They also make the dough stick to your hands. You can knead with a firm push without tearing the dough surface.

RELAX THE DOUGH

If the dough seems tense and hard to handle during the kneading, instead of elastic and pliable, pick it up and throw it hard onto the kneading board a few times. This will relax the dough and shorten the kneading time.

Dough which is too stiff or too cold is hard to knead. It takes more time to bring it to the finished stage. Avoid chilling the dough during the kneading. Do the kneading away from drafts and away from an air conditioner. These drafts will dry the surface of the dough and give it a wrinkled skin.

HERE ARE THREE STEPS TO FOLLOW IN KNEADING

Continue the kneading rhythm 10 or 15 minutes until:

- 1. The dough is smooth and satiny and has many little blisters just under the surface.
- 2. The surface of the dough looks tightly stretched.
- 3. The dough feels springy and elastic.
- 4. The dough does not stick to the canvas nor to your hand. Hold your hand lightly on the dough while you count to 30. If the dough has been kneaded enough, it will not stick to your hand.

When the kneading is finished, put the dough into the oiled container. Turn the dough



Use Your Curved Fingers to Fold the Dough Over from the Far Side Toward You



Push It Away from You with the Heel of Your Hand



Turn the Ball of Dough Around One Quarter with Each Outward Push

over so there will be a film of fat on the top. Cover tightly and keep away from drafts. The light film of fat and the tight cover will keep a crust from forming on the dough as it rises. Our dry, windy atmosphere in Utah will dry the dough surface if it is not tightly covered. A large plastic bowl cover, or a damp cloth, will help to prevent the drying.

Keep the dough at 85° to 90°F until it is ready to punch down. Use the "ripe test" (described later) to tell when the dough is ready for its first "punch down."

Know How the Dough Ferments

When liquid is added to wheat flour to make a dough, gluten is formed from proteins in the flour. Gluten makes an elastic framework which holds the tiny gas bubbles made by the yeast. Kneading spreads this gluten evenly through the dough.

During the fermentation period the dough rises. The yeast cells feed on the sugar to form carbon dioxide gas and alcohol. It is this gas which makes the dough rise. The gas bubbles are held in the tiny spaces between the elastic framework of the gluten.

This elastic framework we call the cell walls. As the yeast forms more gas, these cell walls stretch to hold this gas. This stretching makes them very thin. The thinner and more delicate the cell walls, the better the bread will look and taste.

Although these cell walls are very elastic, they can be stretched too far. If the dough is allowed to get too light at any stage, the cell walls will collapse and a poor quality of bread will result.

The "ripe test" tells when the cell walls have stretched far enough so the dough will be just right for its first "punch down."

The gluten becomes mellow as well as elastic during the fermentation period. These changes improve the flavor of the bread.

If the fermentation goes on too fast, either from too much temperature or too much yeast, there will not be time for these necessary changes to take place in the gluten.

If the dough ferments too slowly, this also will cause poor flavor and texture in the finished bread.

Poor or inactive yeast, or dough which is too stiff, or temperature which is too low will slow down the fermentation process.

It takes about 200 minutes (3 to 3½ hours) under ideal conditions, for these desirable fermentation changes to develop in white dough made from hard wheat flour. The time is slightly less for whole wheat dough or for white dough made from soft wheat flour. We count this fermentation period from the time the kneading is finished until the dough is ready to mold into loaves.

The first rising period takes slightly more than half the time. With white bread this time is about 1 hour and 50 minutes. The temperature and softness of the dough will influence the time required to bring it to the proper state of ripeness.

Most recipes say to let the dough double in bulk for its first rising. In the high elevations in Utah, dough will increase its volume as much as two and one-half to three times before it is ready to punch down. Dough from hard wheat flour almost triples before it is "ripe." Most whole wheat dough and the white dough made from soft wheat flour will be more than doubled before it is ready for the first punch.

As you learn to use the "ripe" test (see next page), you can tell just when the dough from whatever kind of flour you use, is ready for the first "punch down."

USE LESS YEAST

We need less yeast and more and shorter rising periods to make good bread in Utah. The atmospheric pressure is much less at high elevations than it is at sea level. That is why dough rises faster in the high mountain states than it does at lower altitudes.

We have standardized our Utah bread recipes, to use only one-fourth cake or package of yeast to one loaf of bread. More yeast at our elevations, speeds up the fermentation period too fast. This means the dough will not have time to develop those desirable flavor and texture changes that make good bread.

There may be times when you might want to use more yeast to speed up the bread making process. More yeast will hasten the rising periods but the quality of the bread will not be so good. Both flavor and texture are improved when the fermentation period is long enough for the desirable changes to take place in the gluten.

MAKE MORE PUNCHES

Our Utah tested bread recipes call for more and shorter rising periods because dough rises faster in our high altitudes. Punching the dough down at more frequent intervals prevents it from getting so light that the cell walls will be stretched too far.

Discover the Ripe Test

We use the "ripe test" to tell when the fermenting dough is ready for its first "punch down." It is "ripe" when the gluten cell walls have stretched as far as they can go without collapsing.

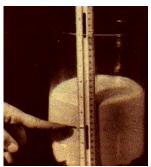
Do not let the dough get too light before this first "punch down." When the cell walls have stretched too far they will break. Then the carbon dioxide gas is no longer held in the gluten mesh work. This results in coarse, heavy bread. Once the dough goes beyond this "ripe" point, you cannot have really good bread.

Remember, that dough made in Utah from all purpose white flour will usually increase in volume from two and one-half to three times before it is ready to show the "ripe" test. Whole wheat dough, or white dough made from soft wheat flour may be ready to punch down soon after it doubles in bulk. Occasionally you may find flour which makes dough that will not quite double in bulk before it is ready for the first punch.

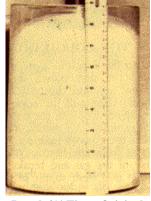
Close observation with your first dough from each new bag of flour will tell you what to expect by way of volume increase from that particular supply.

If you use a container with straight If you use a container with straight sides, instead of a bowl with rounding sides, it is easier to tell when the dough has doubled or tripled in bulk. Put a clean plastic ruler between the dough and the side of the container. Record the height of the flattened dough when it first goes in to rise.

Assume that you have white dough in the crock, and its depth when it first went in was 3 inches. When the dough has doubled it will be 6 inches. Start watching closely when the dough gets up to 7 inches.



Dough Measured 3 Inches When First Put Into Crock



Dough 2½ Times Original Volume, Start Making Ripe Test

Make the first ripe test in white dough before it reaches two and one half times its original height. If you have whole wheat dough, start making the rip test before it is quite doubled in volume.

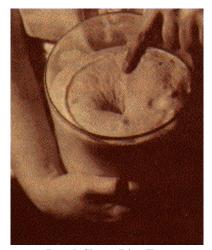
MAKE THE "RIPE TEST" THIS WAY

Push the first finger down to the second joint, quickly in and out of the dough.

The dough is ripe and ready for its punch down when:

- 1. The hole made by your finger stays in the dough without closing in.
- 2. The small creases show on the walls of the hole.
- 3. The bubble or blister appears near the edge of the hole. You may see several bubbles.

If the hole closes in slightly, and the bubble does not appear, the dough is not "ripe." It needs a slightly longer fermentation period. If the whole mass of dough collapses quickly when your finger is pushed into it, the dough has gone beyond the point of being just "ripe." It is too light.

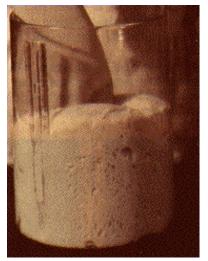


Dough Shows Ripe Test

PUNCH THE DOUGH DOWN

When the dough is "ripe," it is ready for the first punch down. Punch your fist into the center of the dough. Then pull the edges in and fold them over into the center. Punch the dough, all round, a few times with the hand, then turn it over with the smooth side up. This smooth side will still have a thin film of fat from the bottom of the crock. This punching down forces out some of the gas and breaks up the large gas pockets or bubbles. It also brings in a fresh supply of oxygen for the yeast cells to live on.

We use the "ripe test" only at the end of the first rising period. We time the others by the clock. You will find these time schedules with bread recipes.



Punching the Dough Down

Develop Skill in Molding

There are several good ways to mold the dough into loaves. The one described here is a method that many Utah homemakers and 4-H club members have used to mold loaves which are symmetrical in shape on the outside, and which have uniformly good texture on the inside.

Mold the loaves on the canvas-covered kneading board without putting more flour on the canvas. If you kneaded the dough to the right stage before you put it to rise, you can mold it into loaves without it sticking to the canvas or to your hands.

The flour which you mixed and kneaded into the dough in the beginning has gone through several changes during the fermentation period. If you put more flour onto the kneading board or canvas when you mold the loaves, you will have heavy streaks of unfermented flour in the finished bread. This makes the bread unattractive as well as unpalatable.

Do not put fat on your hands before molding the loaves, or you may have streaks of fat where the dough will not seal together. This will leave cracks inside the finished loaf.

LEARN TO MOLD THIS WAY

Divide the finished dough into the number of loaves you are making. Roll each piece into a ball and cover to prevent drying while it rests 10 minutes. After each ball of dough has had its final rest period, mold the loaves this way:

1. Flatten and pound the ball of dough into an oblong shape with the palms of your hands. Pound the gas bubbles out of the dough. Keep the corners square. Have the dough about 10 inches long and 6 inches wide.



2. Fold the dough in half lengthwise with the folded side toward you.



3. Press out the air by pushing from the folded side. Seal the open edges of the dough by pressing firmly with the edge of your palm.



4. Lift the folded dough with both hands. Be careful to hold the dough far enough in from the ends so your fingers will not break through it. Slap the center of the dough gently onto the kneading board. This relaxes and lengthens the dough. At this stage it will be about 15 inches long and 5 inches wide.



5. Place the lengthened piece of dough on the kneading board parallel to your body. Fold almost one-third of the dough back on itself. Keep the corners square. Start from the folded edge, and press out all the air



and gas bubbles. Seal the open edges with the edge of your palm.

6. Fold the remaining third over the other two layers. Press out the air and seal the edges. Keep the corners square. The folded dough will be about the length of the baking pan.



7. Roll the dough very tightly, jelly roll fashion, beginning at one of the sealed sides. As each small section of the dough is rolled with one hand, seal it with the edge of the palm of your other hand. Then seal the ends of the loaf with the edge of your palm. Uniform rolling insures a uniform texture in the finished bread.

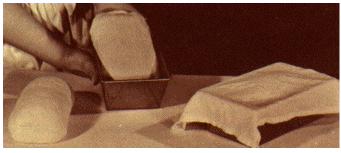


8. Let the loaf stand 2 or 3 minutes to permit the dough to relax. Then gently roll it under the palms of your hands to make it long enough to fit the pan. After you practice this method a few times you will end up with a loaf that is just right to fit the standard bread tin. If the finished roll



standard bread tin. If the finished roll of dough is too long for the pan, you will have a loaf of bread with humps on the top.

- 9. Place the loaf in the oiled pan with the sealed side of the dough on top. Shake the pan sideways to help shape the loaf to the pan and to leave a film of fat on what will be the top surface of the loaf. Next, turn the loaf out onto your hand and return it opposite side up, into the pan.
- 10. Cover with a thin damp cloth and let rise until "ripe" for baking. Keep the cloth moistened while the loaf is rising. This prevents a dry crust from forming before the dough is baked.



- 11. Keep the covered loaves at a temperature of 80° to 85°F until they are ready to bake.
- 12. Put the rising dough on a warm but not hot surface. Too compact texture at the lower part of the loaf may come from leaving the loaf pans on a cold surface while the dough is rising for baking.

Plan to Bake It Right

The two most important points to follow in baking bread the right way are:

- 1. Put good dough which has been cared for properly, into the oven when the dough has just reached the right stage of lightness.
- 2. Have the oven hot enough when you put the dough into it. Put the dough into an oven which has been heated to 450°F.

If the dough is too light, you will have poor bread with every coarse texture. If it is not light enough, the baked bread will be coarse and heavy.

When the oven temperature is too low, the dough goes on rising, and gets much too light before the cell walls are set. This results in poor quality bread with some of the faults you read about back in the temperature pages. The bread may come out of the oven with shell crack, or shell top or overhang.

Use these tests to tell you when the dough is just "ripe" for baking.

- 1. Press the little finger gently into the dough at one corner of the pan. If the dent stays in, the dough is ready to bake. If it does not, the dough needs more time. If the dough collapses around the dent, it has gone beyond the point of being just right. It is too light.
- 2. **Note the volume increase.** The dough at this stage may be just doubled in bulk, or slightly more, or slightly less than doubled. This will depend on the kind of flour used.
- 3. **Make a cardboard gauge.** We have worked out one test in Utah which many homemakers use to tell when the dough is ready for the oven. We make a cardboard gauge with the right size opening. We put this over the pan of rising dough at intervals, to tell us just when the dough is light enough to go into the oven.

White dough made from all purpose flour, using our standard recipe, will be ready to bake when it is 3¾ inches above the bottom of the standard size loaf pan. Whole wheat dough will be ready when it is 3¼ inches above the bottom of the pan.

MAKE THE CARDBOARD GAUGE THIS WAY

Cut two pieces of heavy cardboard 12 inches long and 6 inches wide. Cut an opening in one card 5½ inches wide and 3¾ inches high. This makes the gauge for white dough. Cut the opening in the second card 5½ inches wide and 3¼ inches high. This measures the whole wheat dough.



Test the height of the rising white dough by holding the white bread gauge over the pan with the two ends of the card resting on the table. When the dough just touches the edge of the cardboard above it, the dough is just right for the oven.

HAVE THE OVEN READY

Make sure that the oven is ready for the bread when the bread is ready for the oven. Place the oven rack so the center of the loaf from the top to bottom will come in the center of the oven from top to bottom.

If your oven bakes unevenly, put the rack higher or lower as needed to insure uniform browning on the top and bottom of the loaves.

Some of the newer ranges have ovens deep enough to bake two layers of bread at the same time. When you bake two layers at once, place the pans of dough in the oven so the loaves on the top rack are not directly above the ones on the lower level. This alternating of the loaves will permit better heat circulation.

Put the loaves into an oven which has been pre-heated to 450°F. Bake at this temperature the full 35 to 45 minutes, unless your particular oven browns the bread too fast on top. If you have this trouble with your oven, keep it at 450°F for the first 15 or 20 minutes. Then turn it down to 400°F or 425°F.

This high temperature at the beginning will stop the yeast action and set the cell walls so the bread will not get too light.

When you open the oven door too often to look at the bread inside, you will need to increase the baking time.

We have better bread in Utah's high elevations when we bake it a shorter time at 450°F than when it goes into a cooler oven for a longer time.

Good bread shows a good "oven spring." This develops from the right combination of oven heat and stage of lightness of the dough. This combination permits a quick rising of the dough, followed by a quick setting of the cell walls during the first 10 or 12 minutes before the browning of the loaf takes place.

When the bread has baked long enough it will shrink slightly from the sides of the pan. It sounds hollow when you thump it.

Remove the bread from the pans onto wire cooling racks as soon as the loaves come out of the oven. Let the loaves cool completely before you wrap them and put them into your bread can.

The plastic bags made for storing frozen foods are good for keeping bread fresh. They are available in the right size for holding one loaf of bread.

PART II. TRY UTAH'S TESTED RECIPES

"Staff of Life" Bread

Review the fundamental facts for bread-making before you try these recipes. They give detailed methods for all the steps outlined in the recipe directions. They also tell you why these particular methods are recommended. The quality of the bread you make will be influenced by your application of:

- Accurate measurements
- Correct temperature at every stage
- Proper timing of fermentation periods
- Skillful handling of the dough

STAY ON THE JOB

Do your bread making days when you can be at home to take care of the rising dough at each stage when it is ready for attention. Many women turn out very poor quality bread because they mix the dough and then leave home for several hours. You can made good bread without standing over the rising dough while it ferments, provided you are not too far away for too long.

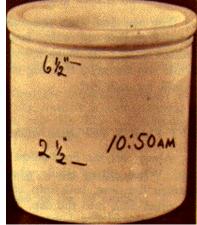
The longest possible time you can leave the fermenting white dough without attention, in Utah's high elevations, is about 1 hour and 15 or 20 minutes. That is while it is going through the first rising period. The longest safe time to be away from whole wheat dough is less than 1 hour.

WATCH THE CLOCK

You will have variations in the time it takes the dough to go through the first rising period. Remember, you read how the temperature and the stiffness of the dough influence the time it takes it to get ready for the first punch down. The rest of the rising periods are regulated by the clock. Set your alarm clock to ring about the time you need to start making the ripe test in the rising dough. Then set the clock, or use a timer, to remind you when to punch the dough at the end of the remaining rising periods.

JOT IT DOWN

Keep a pad and pencil close by while you make bread. You might use a black wax crayon and record the time schedule right on the container which holds the dough.



Crock

Make a note of the time when you first put the dough into the bowl or crock to rise. If you use a container with straight sides, make a note of the height of the dough when it first goes in to rise. Then write the height it will be when you need to start watching closely.

Record the time when it has had its first punch down. Then put down the time for each of the following punches according to the time chart with the recipes.

All of these timing and measuring details may sound like a lot of bother as you read them. Many Utah homemakers have adopted these routines with ease and comfort. They report much better quality bread with much less guess work.

KNOW YOUR FLOUR

When you read the recipes you will notice the number or cups of flour listed is followed with (about). Flour is the variable ingredient in any bread recipe. Flour gradually loses some of its moisture as it stands after it is milled. Any brand of flour dries out quickly in Utah's dry climate. There is much variation in the amount of moisture which white flour from different bags will absorb when you make it into dough. This variation is even greater with whole wheat flour.

You may find when you make your first batch of bread from a new bag of flour that you cannot knead in all of the flour the recipe calls for without making the dough too stiff. This results in a small loaf of bread. While you are using that bag of flour add one or two extra tablespoons of milk for each loaf.

SIFT FLOUR BEFORE MEASURING

Always sift the flour before measuring it lightly into the measuring cup. When sifting whole wheat flour, put bran which does not go through the sieve, back into sifted flour. Use a spoon or scoop to lift the sifted flour into the cup. Do not shake the flour down, nor try to pack it tightly. You will have much more flour than the recipe calls for if you pack it down while you measure it.

Recipe for Enriched White Bread

(Makes Two Loaves)

7 cups sifted enriched white flour (about)

½ cake yeast softened in ¼ cup lukewarm water 85° to 90°F, or ½ tablespoon dry granular yeast softened in ¼ cup warm water, 110°F

Place in mixing bowl:

2½ cups scalded milk

3 tablespoons shortening

3 tablespoons sugar

1 tablespoon salt

When milk mixture is cooled to 90°F (100°F in cold weather) add: 4 cups of sifted flour. Beat well. Then add the softened yeast. Add enough more flour to make a soft dough. Mix until the dough forms in an elastic ball in the bowl. Cover and let rest 10 or 15 minutes. This rest will relax the dough and make it easier to knead.

Prepare the kneading canvas

Put 1 cup of the measured flour onto the kneading canvas and rub it into the portion where you will do the kneading. Turn the rested dough out onto the prepared kneading canvas.

Before you start kneading, use your scraper and roll the ball of dough on the flour so it has a film of flour over the entire surface. The dough will be less sticky to handle.

Keep the dough as soft as you can handle it. Knead 10 to 15 minutes according to directions on page 10. When the dough is smooth and satiny, and small blisters develop just under the dough skin, you have kneaded it sufficiently.

Put the ball of dough into a lightly oiled bowl or crock. Roll the ball around and turn it over so it will have a thin film of fat all over its surface. If you use the straight sided crock and the plastic ruler to measure the height, flatten the dough so you can take a level measurement.

Cover the bowl or crock tightly. Keep the fermenting dough in a warm place 80°F to 85°F away from drafts, until it is almost tripled in bulk and shows the ripe test described on page 13. This will take about 1 hour and 40 or 50 minutes for white dough.

When the white dough shows the ripe test:

- Punch it down, turn it over, cover and let rise 40 minutes.
- Punch it down, turn it over, cover and let rise 20 minutes.
- Divide into balls for loaves. Cover and rest dough 10 minutes.
- Mold into loaves and put into pans as directed on page 15.

Cover the loaves with a damp cloth and keep in a warm place 80° to 85° F until ready for baking. Read tests for baking on page 17.

Bake in a 450°F oven. Bread will bake at this temperature in 35 minutes at elevations up to 4,500 feet. Bread baked at higher elevations will need 40 to 45 minutes in a 450°F oven.

Try this milk topping on your bread. When it has only 5 minutes left to bake, take it out and brush the top of each loaf with milk. Then put the bread back into the oven to finish. The milk gives an interesting glaze to the crust.

When the bread is baked, turn it out onto wire cooling racks. When it is cooled, wrap each loaf separately. Store in a cool pace in a tightly closed bread can. Bread needs much protection to prevent staling in our dry climate.

Recipe For Whole Wheat Bread

(About two-thirds whole wheat)

(Makes two loaves)

4½ cups sifted whole wheat flour

2 cups sifted enriched white flour (about)

Keep whole wheat and white flour separate until recipe calls for mixing.

 $\frac{1}{2}$ cake yeast softened in $\frac{1}{4}$ cup lukewarm water 80° to 85° F or $\frac{1}{2}$ tablespoon active dry yeast softened in $\frac{1}{4}$ cup warm water 110° F.

Place in mixing bowl:

2½ cups scalded milk

3 tablespoons shortening

3 tablespoons sugar

1 tablespoon salt

When milk mixture is cooled to 90°F (100°F in cold weather) add: 3 cups of the whole wheat flour. Beat well. Then add the softened yeast. Add the remaining whole wheat flour. Beat until all the whole wheat is thoroughly mixed into the dough. Then add enough of the white flour to make a soft dough. Mix until the dough forms in an elastic ball in the bowl. Cover and let rest 10 to 15 minutes.

This rest will relax the dough and make it easier to knead.

Put one cup of the measured white flour onto the kneading canvas and rub it into the portion of the canvas where you will do the kneading.

Keep the whole wheat dough as soft as you can possibly handle it. Stiff dough dries out quickly after it is baked, and gets too crumbly.

Follow kneading directions given with the recipe for white bread. Use the same method for putting the whole wheat bread to rise.

Whole wheat dough ferments much faster than does a white dough. If it once gets too light, the finished bread will be coarse and crumbly.



Dough That Is Too Stiff Will Crack During Baking

The ripe test will come much sooner after the whole wheat dough is put to rise than it does in white dough. Whole wheat dough usually will be just slightly more than doubled in bulk when it is "ripe" for the first punch down. It may take slightly less or slightly more than 1 hour for the first rising.

When the whole wheat dough shows the ripe test:

- Punch it down, turn it over, cover and let rise 30 minutes.
- Punch it down, turn it over, cover and let rise 20 minutes.
- Divide into balls for loaves. Cover and rest dough 10 minutes.
- Mold into loaves and put into pans as directed on page 15.

Cover the loaves with a damp cloth and keep in a warm place 80°F to 85°F until ready for baking.

The whole wheat dough in the pans will be ready for baking in a shorter time than will the white dough. Notice the difference in the height of the white and whole wheat loaves when they are ready for the oven. You will find this test for baking on page 17.

Bake in a 450°F oven. Bread will bake at this temperature in 35 minutes at elevations up to 4,500 feet. Bread baked at higher elevations will need 40 to 45 minutes in a 450°F oven.

Try this milk topping on your bread. When it has only 5 minutes left to bake, take it out and brush the top of each loaf with milk. Then put the bread back into the oven to finish. The milk gives an interesting glaze to the crust.

Follow directions on caring for white loaves from this point on.

Fancy Yeast Breads

You can make many different and interesting creations from the Basic Beaten Batter and from the Foundation Recipe for Sweet Yeast Dough. These fancy breads are easy to make. They are quite inexpensive. They are nutritious as well as delicious.

You can add variety by using whole wheat flour for one-third to one-half of the flour called for in the recipes.

Some of the fancy breads and rolls described here are a bit fussy. They will take a little extra time to make. They are some of the special things we do for holidays and birthdays, particularly where there are children.

When you are ready to make your fancy breads and rolls, let the children help you. Children love to work with dough. Give the boys and girls a chance to mold the kind of rolls they like best. Let them learn to mix and learn to knead the dough.

Read the fundamental facts for bread-making before you try any of these recipes for fancy breads. The basic principles for making good "staff of life" bread also apply to the Fancy Yeast Breads.

We have the same dry air and high altitude problems with both varieties. You want the right equipment and ingredients for both.

Correct temperatures from start to finish are equally important for all breads. They only temperature difference is in the final baking. We bake the fancy breads at 375°F instead of 450°F. These breads with more sugar will get much too brown if they are baked at the higher temperature.

The two kinds of dough take the same kneading methods. We use the same ripe test to tell when either one is ready for its first punch down.

The molding methods are similar. The main difference is in the final shaping of the loaves or rolls.

There are many recipes for different types of batters and doughs for fancy breads. The ones included here are those which have been tested in Utah. They have been adapted to overcome our altitude and dry air problems.

You will find recipes in the next pages for:

- 1. BATTERS
- 2. TOPPINGS FOR BREADS FROM BATTERS AND DOUGHS
- 3. SWEET YEAST DOUGH
- 4. REFRIGERATOR DOUGH

You will find, also, directions for molding the Sweet Yeast Dough into many different types of rolls and breads.

Make Some Batter Breads

You will be delighted with the delicious flavor of the batter breads and rolls. They are quick and easy to make.

Batter, as the name implies, is not so stiff as kneaded dough. Yeast batter breads are ready to serve in about 2 hours from the time they are started.

The batter breads have a slightly more open grain and thinner crust than to the breads from doughs which are kneaded.

BASIC BEATEN BATTER

1 yeast cake softened in ½ cup luke warm water 85°F, or 1 package (1 tablespoon) active dry yeast softened in ½ cup warm water 110°F.

1 cup milk

½ cup sugar

1/3 to 1/2 cup softened shortening

1 teaspoon salt

2 eggs, beaten

21/4 to 23/4 cups enriched white flour, part whole wheat if desired

(½ teaspoon vanilla or 1 teaspoon grated lemon rind, if desired)

Soften yeast in lukewarm water. Scald milk. Add sugar and salt. Cool to lukewarm. Add 1 cup flour and beat well. Add yeast and eggs. Beat well. Add shortening. Mix well. Add flour to make a stiff batter. Add flavoring. Beat thoroughly until smooth and elastic. Cover and let rise



Beaten Batter Breads. Crumble Topping Left. Crushed Peanut Topping Right.

until bubbly. Stir down and add ½ cup currents, raisins, chopped dates or fruit cake mix if desired. Drop by spoonfuls into oiled muffin pans or spread into two oiled 8-inch cake pans. Sprinkle with desired topping. Let rise until dough is doubled in bulk. Bake in moderate oven 375°F for 20 to 30 minutes. Yield 2½ dozen 2-inch puffs (or muffins) or 2 coffee cakes, 8 inches in diameter.

TOPPINGS FOR BEATEN BATTER AND FANCY BREADS

Salted Peanut Topping

Crush ½ cup salted Spanish peanuts. After the batter is in the baking pans, brush the top with milk. Then sprinkle the crushed nuts over the batter. Use scraper to pat nuts into surface of batter.

Streusel Coffee Cake Topping

1/4 cup butter
1/2 cup sifted flour
1/4 cup sugar
3/4 teaspoon cinnamon

Mix together and sprinkle over the top of the beaten batter.

Crumble Topping

1/4 cup sifted flour
1/2 teaspoon cinnamon
1/4 cup dry bread crumbs
2 tablespoons butter

Mix flour, bread crumbs, sugar and cinnamon. Rub butter into this mixture until crumbly.

Almond Topping—for almond puffs

½ cup sliced almonds ½ teaspoon cinnamon ¼ cup sugar

Mix together and sprinkle over beaten batter in muffin tins.

Cake Trim of different colors makes an attractive topping for fancy breads. You find it at your grocers as very tiny, colored candy balls.

Orange Sugar

1/4 cup grated orange peel 1 cup sugar

Use a fine grater and grate the yellow peel from the oranges. Do not take off any of the white portion of the skin. Keep the grated peel free from orange juice. Rub the grated orange peel into the sugar.

Orange sugar will keep indefinitely in your refrigerator if it is covered tightly and if the peel is kept free from juice.

Grate the peel from all the oranges you buy. Make it into orange sugar immediately and store it for future use. Orange sugar makes a delightful topping for any of the fancy breads. It also is very good on toast. Make the orange sugar toast the same as you would cinnamon toast.

Egg Yolk Topping

1 egg yolk2 tablespoons milk

Beat together. Brush over top of rolls before baking.

Foundation Recipe For Sweet Yeast Dough

1 yeast cake softened in ¼ cup luke warm water 85°F, or 1 package (1 tablespoon) active dry yeast softened in ¼ cup warm water 110°F

1 cup milk, scalded
1½ teaspoon salt
¼ to ½ cup sugar
⅓ to ½ cup shortening
1 or 2 eggs, beaten
1 teaspoon grated lemon rind, if desired
4¼ cups sifted flour (about)
Part whole wheat if desired

Soften the yeast in the lukewarm water. Scald the milk, cool to 90°F. Add shortening, salt and sugar. Add flour to make a thick batter. Add yeast, eggs and lemon rind. Beat well. Add enough more flour to make a soft dough. Cover and let rest 10 to 15 minutes. Turn out on a lightly floured canvas-covered kneading board. Knead well until the surface is smooth and satin, and is covered with tiny blisters. Place in an oiled bowl. Cover tightly and let rise till slightly more than doubled in bulk. Use the ripe test described on page 13 to tell when the dough is ready to punch down. Punch down and let rise 30 minutes. This second rising makes rolls with finer texture. Punch down and let rest 10 minutes.

When the sweet yeast dough has had its 10 minute rest period after the final punch down, divide it into two or three portions for the different things you want to make. Keep the part of the dough you are not working on immediately, covered tightly. If it must wait more than 20

minutes, give it another punch down. Dough at this stage can get too light while it waits to be shaped into rolls or loaves.

Shape into desired rolls. Cover and let rise in a warm place 80°F to 85°F until doubled in bulk. Bake in a moderate oven 375°F 20 to 25 minutes for small or medium sized rolls. Bake the coffee cakes and loaves 25 to 35 minutes. Yield—about 3½ dozen rolls or three small coffee cakes.

REFRIGERATOR SWEET DOUGH

Use the same recipe as above. As soon as the dough is kneaded sufficiently, put it in an oiled container. Cover tightly and put into the refrigerator. If you plan to use the dough on two separate days, store it in two small containers instead of the larger one.

When the dough in the refrigerator has doubled, punch it down and leave it in the coldest part of the refrigerator until you want to use it. Keep the dough punched down. Do not let it get too light. It will keep 2 or 3 days.

When you want to use it, remove the dough or part of it from the refrigerator. Punch it down and divide it into small portions. Cover and let stand in a warm room for about 30 minutes. Mold as desired.

SHAPE FANCY ROLLS THIS WAY

All of the fancy rolls, breads and coffee cakes described in the following pages can be made from the Foundation Recipe for Sweet Yeast Dough.

After the dough has had all of its rising periods and the final 10 minutes rest period, it is ready to mold into any of the fancy rolls or breads you may want to make.

You will find directions for four different methods of shaping the dough for these fancy breads and rolls.

- 1. Long thin rolls of dough.
- 2. Dough formed into balls.
- 3. Cinnamon roll type.
- 4. Dough rolled flat.

See page 24 for recipes for toppings and fillings.

Let the Dough Relax. You may find as you work with the same piece of dough under your hands or the rolling pin for a few minutes, that it gets tense. It loses its stretch. It fails to keep the form in which you shaped it. This can happen to the long rolls you make under your hands or to the balls you roll between your hands. You find it, also, in the oblong pieces you roll with the rolling pin or flatten with your hands.

Do not try to make the long rolls of dough with one rolling. As soon as one roll gets tightened up so it will not stretch any longer, put it aside to rest while you work on another piece. After a rest, the dough relaxes and can be rolled farther. It's true when you roll dough into a flat piece with a rolling pin, as well as when you roll or flatten it with your hands.

Use the Pastry Brush. Keep two pastry brushes on hand when you mold the fancy rolls and breads. Use one in the softened fat to oil your baking tins. Use the other to brush the molded dough with milk before you sprinkle the toppings over them.

After you have molded your fancy doughs or breads, and placed them onto the oiled pans, use your pastry brush and work a little melted fat into the crevices and onto any cut surfaces of

the rolls and breads. This will help to keep their forms distinct while they rise and bake.

Keep the fat off the top of the dough if you are using any of the sugar, nut, or seed toppings. They will not stick to the dough if it has been brushed with the fat.

Milk or unbeaten egg white brushed over the top of the dough after the rolls are molded, will help these toppings to stick onto the dough.

Cover the unbaked rolls and breads with a thin damp cloth. If they have toppings which might stick onto the cloth, stand two or three tooth picks in the dough to keep the cloth from touching the toppings.

If the molded rolls or breads have no other topping, brush them lightly with melted fat before you put them to rise.

Let the molded dough rise in a warm place 80°F to 85°F away from drafts until they have doubled in bulk. Press your little finger gently into the side of the dough. If the dent stays in, the rolls or bread are ready to bake.

BREADS AND ROLLS FROM LONG THIN ROLLS OF DOUGH

Use the Foundation Sweet Yeast Dough when it is ready for molding. Cut off several pieces about the size of an egg. Roll each piece back and forth under your hands on the kneading canvas until it is long and thin. If you want dainty little birds or trees or braids, make the long rolls as thin as a pencil. If you want larger ones, use more dough and keep the rolls thicker.

Following are some of the fancy rolls and breads that can be made from the long rolls of dough.

BOW KNOTS

Make the rolls of dough ½ inch thick. Cut in pieces about 6 inches long. Tie in knots. Place on oiled baking sheets. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 20 to 25 minutes.

ROSETTES

Tie the rolls of dough the same as for bow knots but leaving longer ends. Bring the lower end up and push it down



Shaping Bow Knot Rolls

through the center of the knot. Pull the top end around to the bottom and push it up through the center. Bake same as Bow Knots.

BIRDS

Tie a knot in the dough and put it on the oiled baking sheet. The end of the dough that sticks up makes the head. The one that turns down makes the tail. Pinch the head end of the dough between your thumb and finger. Use a tooth pick and make a hole from side to side through the head to hold the eyes. Cut a thin sliver from a raisin or a piece of citron. Push this through the hole in the dough so one end sticks out on each side of the head. Then take your kitchen scissors and cut a few snips on each side of the body to make the wings. Take the handle of a table knife and press two or three dents to look like the long feathers in the tail. Brush milk on the head and wings, and sprinkle a few grains of the colored sugar (cake trim) on these spots. Place on oiled baking sheets. Cover with a thin damp cloth and let rise in a warm place (80°F to

85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

NUT TWISTS

Cut rolls of dough about 8 inches long. Brush each roll with milk. Roll in finely chopped nuts and twist into figure eights with the ends of the dough in the center of the figure eight. Place on oiled baking sheet and let rise 10 or 15 minutes. Then press a candied cherry half or piece of date into the center. Cover with a thin damp cloth and finish rising in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

INITIALS

Children love to make their initials. Form the letters on the oiled baking sheets. Brush with milk and sprinkle with orange sugar or cake trim or chopped nuts or whatever the children like best. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

CHRISTMAS TREES

Take one of the long thin rolls of dough and start with the top of the tree farthest from you. Zigzag the dough back and forth into a cone shape, on the oiled baking sheet. One end of the dough points up to make the top of the tree. The other end turns down at the lower center to make the trunk. Cut small pieces of different colored fruit cake mix. Push these in between the rolls of dough, to represent the tree decorations. Brush the milk over the entire surface of the tree and sprinkle with green cake trim. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 20 to 25 minutes for small trees.

BRAIDS

Braids can be small for individual rolls or large for a loaf size pan. Take three long thin rolls of dough. Braid them loosely from the center toward each end. Pinch each end. Put the braid onto an oiled sheet or into a loaf tin. Brush the top with milk. Sprinkle with orange or cinnamon sugar or some of the colored cake trim. You can put chopped dates or raisins or nuts or fruit cake mix, if you like, between the strands after you put the braid onto the baking pan. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F



Bread from Center Toward Ends

oven 20 to 25 minutes for small braids and 25 to 30 minutes for larger ones.

BOHEMIAN BRAID

Use one half of the dough from the Sweet Yeast recipe. Knead in ¼ cup raisins chopped dates or citron if desired. Divide in half. Take one half and divide into three equal portions. Roll each piece into a long thin roll. Place the rolls on an oiled baking sheet. Braid from center toward each end. Pinch ends to hold braid. Make a trench down the center of this braid with the edge of your hand.

Divide two-thirds of remaining dough into three equal parts. Roll each piece into a long

thin roll and make a second braid. Lay this braid in the trench in the first braid. Make a braid from the remaining dough. Put this in the trench in the second braid.

Brush with milk and sprinkle with orange sugar. Cover with a thin damp cloth. Let rise in a warm place 80°F to 85°F until doubled in bulk. Bake in 375°F oven 25 to 35 minutes.



Bohemian Braid

SNAILS

Make rolls of dough 10 or 15 inches long and ½ inch or less in diameter. Brush rolls with milk and roll them in crushed salted peanuts or other nuts. Twist slightly as you roll them. Coil the rolls in shape of snails. Put on oiled baking sheet. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

BREAD STICKS

Make rolls of dough ½ inch thick. Cut into 4 inch lengths. Brush with milk and roll in crushed salted peanuts or orange sugar or cake trim, or leave plain. Twist slightly. Put on oiled baking sheet. Cover with thin damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 15 to 20 minutes.

HONEY TWIST

Use one-third of the finished dough from the Foundation Recipe for Sweet Yeast Dough. Roll the dough into a long roll about 1 inch in diameter. Brush a 9-inch round pan or 8-inch square pan with melted fat. Coil the long roll of dough loosely into the pan, beginning at the outer edge. Brush melted fat on the dough between the coils but not on the top. Cover with a thin damp cloth and let rise in a warm place (80° to 85° F) 15 to 20 minutes. If you put the honey topping on before the dough has risen, the topping will go to the bottom of the pan. Then cover with the honey topping.



Honey Twist

Finish rising in a warm place (80°F to 85°F) until doubled in bulk. Bake in 375°F oven about 30 minutes.

Honey Topping

½ cup softened butter

²/₃ cup powdered sugar

1 egg white (unbeaten)

2 tablespoons honey

Combine all ingredients and mix until smooth.

ROLLS FROM DOUGH MADE INTO BALLS

You can make Christmas Trees or Valentines or Initials or whatever shape the occasion calls for, from small balls of dough.

When the dough is ready for molding, roll pieces of dough under your hands into long rolls about 1 inch in diameter. Cut the rolls into short even lengths to make the size balls you want. Roll the small pieces of dough between your hands to make the ball.

If you want Jack Horner rolls, put a candied cherry or piece of date inside the dough before you make it into a ball.

Use your pastry brush and paint the design with melted fat onto the baking sheet. This gives a boundary line for the design you are creating with the balls of dough.

VALENTINES

Paint a heart onto the baking sheet with the melted fat, the size you want the finished bread to be.

Dip top of ball in milk. Then dip that part of each ball into the red cake trim. Put the red topped balls onto the heart you painted on the baking sheet. Make the outside edge of the heart first. Then fill in the center. Leave a little space between the balls to allow for the expansion while they rise and bake. Cover with a thin damp cloth and let rise in a warm place (80°F to 85°F) away



Valentines

from drafts until doubled in bulk. Bake in 375°F oven 20 to 25 minutes. Use this same procedure for Christmas Trees or other shapes you want to make from balls of dough.

CLOVER LEAF ROLLS

Mold dough into long thin rolls. Cut into pieces to make balls about one inch in diameter. Put three balls into each cup of the oiled muffin tins. Brush melted fat between the balls. Cover with a thin damp cloth. Let rise at 80°F to 85°F away from drafts until doubled in bulk. Bake at 375°F for 20 to 25 minutes.

LUCKY CLOVERS

Mold dough into a roll about 9 inches long. Cut each roll into nine equal pieces. Shape each piece into a ball. Put one ball into each section of the oiled



Cutting Lucky Clovers

muffin tins. Cover and let rise about 15 minutes. Use your kitchen shears and cut each ball in half, from the top down nearly to the bottom of the dough. Then cut in quarters. Brush the cut surfaces lightly with melted fat. Cover with a thin damp cloth. Keep away from drafts. Let rise at (80°F to 85°F) until doubled in bulk. Bake at 375°F for 20 to 25 minutes.

BUBBLE LOAF

Place a layer of small balls about ½ inch apart in an oiled loaf pan or ring mold. Brush top of balls with melted fat. Put a second layer of balls on top of the first layer. Cover with a thin damp cloth until doubled in bulk.

Then cover the balls with a caramel glaze and bake in a 375°F oven 20 to 25 minutes.

Caramel Glaze

1/4 cup dark corn syrup

1 tablespoon melted butter

½ teaspoon lemon extract

1/4 teaspoon vanilla extract

Combine ingredients and pour over bubble loaf.

CINNAMON ROLL TYPE OF FANCY BREADS AND ROLLS

When the Foundation Sweet Yeast Dough is ready for molding, roll it into long narrow sheets ½ to ½ inch thick and 6 to 8 inches wide. Use the stocking covered rolling pin, or pat the dough to the desired size with the palms of your hands. If the dough reaches the stage where it will no longer stretch, nor stay the length to which you have rolled it, let rest 2 or 3 minutes. After it relaxes you can roll it some more.

Brush the top of the rolled out dough with melted fat. Leave a strip free from fat one inch wide on one of the long edges. This leaves a good surface to seal the outside edge of the dough after it is rolled up.

Spread the filling over the part of the dough which was brushed with fat. Roll the filled dough up, jelly roll fashion, and seal the edge. Cut into the size slices for the type of rolls you are making.

FLOWER PETAL COFFEE CAKE

Use orange sugar on the rolled out dough for the flower petals. After the filled dough is rolled up, jelly roll fashion, cut in half inch pieces. Place a row of these with the cut side up, near the outer edge of an oiled pie plate. Overlap the slices slightly so they all are tilted the same direction. Make a second row of the slices, overlapping this row in the opposite way. Continue until the plate is filled. Sprinkle orange sugar on the top. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 25 to 35 minutes.



Flower Petal Coffee Cake

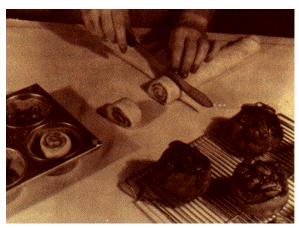
BUTTER SCOTCH PECAN ROLLS

One recipe Sweet Yeast Dough

½ cup melted butter or other shortening ½ cups brown sugar 1 cup Pecan halves

Put ½ teaspoon butter, 1 teaspoon brown sugar and three or four pecan halves into each cup of the oiled muffin tins.

Roll dough into long narrow sheets ½ inch thick and 8 inches wide. Brush with melted fat and sprinkle with brown sugar. Roll up, jelly roll fashion. Cut into 1 inch slices. Place slices, cut



Butter Scotch Pecan Rolls

edge down, into prepared muffin tins. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 20 to 25 minutes. Let rolls stand in pan 1 minute before turning out.

BUTTERFLY ROLLS

Roll the filled dough jelly roll fashion. Cut into 2 or 3 inch pieces. If you use the muffin tins with the small size cups, cut the rolls into 2 inch sections. If the larger muffin cups are used, cut the rolls into 3 inch pieces. Use a knife handle and press the center of the cut strips down. Place the rolls in the oiled muffin tins with the cut ends up. If you want the butterfly wings colored, brush with milk and sprinkle with the colored cake trim. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 20 to 25 minutes.

SWEDISH TEA RING

Use one-half recipe of Sweet Yeast Dough rolled to one-half inch thick and three times as long as it is wide.

Use orange sugar or other desired filling. Roll filled dough like jelly roll and seal the edge. Cut small piece of dough off each end to make a fresh cut on both ends. Form into ring on

oiled baking sheet. Press cut surfaces together to close the ring. With scissors, cut through the ring almost to the center, starting one-half inch from sealed end. Cut slices one inch thick, three-fourths of the way through the ring. Brush melted fat between cut slices. Turn each slice so part of cut surface is flat on baking sheet. Brush with milk and sprinkle with cake trim or orange sugar or brush with melted fat. Cover with thin damp cloth. Let rise until double in bulk. Bake in 375°F oven 20 to 25 minutes.



Swedish Tea Ring

Variations:

PALM LEAF ROLLS

Cut rolled filled dough into 2-inch lengths. Make two cuts two-thirds of way through each strip. Turn cut sections flat on pan in fan shape.

CINNAMON ROLL LOAF

Roll dough into oblong 14 x 8 x ¼ inches. Brush with fat and sprinkle with cinnamon sugar or other desired filling. Roll up and cut into one-half inch slices. Pack the slices standing up in an oiled loaf pan. Slant them slightly toward one end. Brush melted fat between slices. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in 375°F oven 30 to 40 minutes.

CHERRY NUT ROLLS

Use a filling of brown sugar and almond nuts cut in large pieces. Cut rolled filled dough into 1inch pieces. Place the cut end down into oiled muffin tins. Cover with a thin damp cloth

and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Just before they are ready to bake, press a candied cherry into the center of each roll. Bake in 375°F oven 20 to 25 minutes.

PIN WHEEL ROLLS

Make the pin wheel rolls by rolling out two of dough into long narrow sheets about 5 inches wide and ¼ inch thick. Brush the first sheet with fat and sprinkle with cinnamon or orange sugar, or with brown sugar and nuts. Press the second sheet firmly on top of the first one. Brush this with melted fat and sprinkle with the sugar mixture and with chopped raisins or chopped fruit cake mix. Roll this up, jelly roll fashion, into a long thin roll. Seal the edge and cut into one inch slices. Put cut side down into oiled muffin tins. Brush with milk and sprinkle with cinnamon or orange sugar.

ROSEBUD OR ORANGE ROLLS

Use the finished dough from one recipe of Sweet Yeast Dough. Roll in two oblong sheets 16 x 8 x ½ inches. Spread orange filling or apricot or other jam over surface. Roll filled dough like jelly roll and seal the edge. Cut into half inch slices and place in oiled muffin tins, cut side down. Cover with a thin damp cloth. Let rise 15 minutes, then cut crosses ½ inch deep. Finish rising in warm place (80°F to 85°F) away from drafts, until doubled in bulk. Bake in 375°F oven 25 to 35 minutes.



Rosebud Rolls

Orange Filling

1/3 cup melted butter 2/3 cup sugar 2 tablespoons orange juice Grated rind from 3 oranges

Mix together and cook until thick enough to spread. Cool before spreading.

OTHER ROLLS AND BREADS FROM DOUGH ROLLED FLAT

Use the Foundation Sweet Yeast Dough after it is ready for molding.

ORANGE OR CINNAMON TWISTS

Orange or Cinnamon Twists are made from rectangular sheets of dough 9 x 12 x ¼ inches. Brush melted fat over the center third of the sheet of dough and sprinkle with orange or cinnamon sugar. See page 25 for Orange Sugar recipe. Fold one of the outside sections over the center part to cover the sugar mixture. Pat this down tightly with the palm of your hand. Brush this section with melted fat and



Making Cinnamon or Orange Twists

sprinkle with more of the sugar mix. Then fold the last third on top of this layer of sugar and pat it down firmly.

Let the dough rest. You will end up with a piece about 4 inches wide and 9 inches long. Now use the rolling pin the long way of the dough, and roll it to about ¼ inch thick. Keep the width to about 4 inches.

Let this prepared piece of dough rest while you work a fresh piece up to the same stage. After the first dough has rested long enough to relax it, use your kitchen scissors and cut crosswise into strips ½ inch wide. Twist each strip two or three times and place on an oiled baking sheet. Flatten the ends of each strip onto the baking sheet.

If the dough does not have a rest period after all this rolling pin work, the twists will not stay twisted. They will straighten out again when you put them on the baking sheet. You may form the twists into circles or leave them straight. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

Cinnamon Sugar

Mix together:

1 cup sugar

1 tablespoon cinnamon

CRESCENTS

Roll the ball of dough into a circular shape ¼ inch thick. Cut into pie shaped pieces. Brush with melted fat and roll up, beginning at the wide end. Place on oiled baking sheet with the points down on the pan. Curve into crescents. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

CROSSETTES

Use half the finished dough from one recipe of Sweet Yeast Dough. Roll into an oblong 16 x 8 x ½ inches. Brush with melted fat. Cut into 4-inch squares. Cut



Shaping Crescent Rolls

each square in half to make triangles. Fold the base of the triangle to within one-half inch from the top point. Fold the point of the triangle over the roll and seal firmly. Place on oiled baking sheets about one inch apart. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

TRIPLE DECKERS

Use half the finished dough from the Recipe of Sweet Yeast Dough. Roll into an oblong sheet about 18 x 9 x ½ inches. Brush with melted fat. Fold lengthwise to make three layers. Cut crosswise into ½ inch strips. Seal ends firmly. Place on oiled baking sheet about one inch apart. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

TWO IN ONE TWISTS

Use half of the finished dough from the Recipe of Sweet Yeast Dough. Roll into an oblong about 12 x 9 x ¼ inches. Brush with melted fat. Fold in half lengthwise. Cut crosswise with scissors or sharp knife into strips ¾ inch wide. Take hold of each end of cut strip and twist into a coil. Seal ends firmly. Place on oiled baking sheets about 2 inches apart. You may form the twists into circles or leave them straight. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.



Two in One Twists

CURLICUES

Use half the finished dough from the Sweet Yeast Dough recipe. Roll into oblong sheet 12 x 9 inches. Brush with melted fat. Cut into 12 equal strips one inch wide. Hold one end of strip tightly and wind strip around the end to form a coil. Tuck the other end firmly underneath. Place on oiled baking sheets about 2 inches apart. Cover with a damp cloth and let rise in a warm place (80°F to 85°F) away from drafts until doubled in bulk. Bake in a 375°F oven 20 to 25 minutes.

DOWNY CUSHIONS

Roll dough into a square about ½ inch thick. Cut into 2-inch squares with sharp knife. Place on oiled baking sheet. Cover with a damp cloth. Let rise until doubled. Make diagonal cut across each roll. Bake in 375°F oven 20 to 25 minutes.

Some Causes of Poor Quality Bread

Reasons for these and other common bread faults are all discussed in Part I.

POOR SHAPE

- Uneven Top with lumps and bulges comes from poor methods of molding dough into loaves.
- Shell Crack comes from uneven oven temperature or from putting the pans of dough so close together that the heat cannot circulate evenly. The shell crack comes on the side of the loaf where the temperature is lowest. It may be 3 or 4 inches wide.
- **Shell top** may come if you leave a large gas bubble under the top of the loaf when you mold it. If the top of the loaf gets too dry or if the dough gets too light, the crust separates from the rest of the loaf and the shell top develops.
- Over Hang has the sides of the loaf hanging over the edges of the pan. This may come from letting the dough get too light before it goes into the oven. It also may be caused by putting the loaves into an oven that is not hot enough.
- Deep Cracks in Sides or Top of Loaf (not shell crack). Cracks of this type usually come from dough that is too stiff. It may come from dough that is under kneaded.

POOR CRUST

• **Thick Crust** may come from dough getting too light before baking or from dough which is under kneaded.

POOR TEXTURE

- Thick Cell Walls come from too little kneading or too short a fermentation period or both.
- **Crumbly Bread** usually is caused by using too much flour which makes the dough too stiff, or from letting the dough get too light.
- Streaks may be caused by adding flour to the dough while molding loaves. Using fat on the hands while molding loaves may also cause streaks.
- **Compact Texture** at the bottom of the loaf may come from leaving the pans with the molded loaves on a cold surface while rising before baking. It may also come from too low temperature at the bottom of the oven.
- Coarse Texture may come from too little kneading, too short a fermentation period or from letting the dough get too light at any stage.