# High Altitude Baking 

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## INTRODUCTION

Many a high altitude cook has had to take another deep breath of the thin air surrounding him or her to keep from exploding with frustration at the culinary failure that just occurred in the kitchen. Problems with high altitude food preparation have puzzled cooks in the Rocky Mountain region since the early pioneers first pushed westward. Although many foods pose few problems, other than somewhat longer cooking time, recipes for baked products developed at sea level can present a real challenge.

The reason for most baking problems is lower atmospheric pressure due to a thinner blanket of air above. This decreased pressure affects food preparation in three related ways: 1) leavening gases expand more, 2) moisture evaporates faster from foods at a given temperature, and 3) water and other liquids boil at lower temperatures. In addition, because the climate of high altitude areas usually is drier than at lower elevations, flour may be drier and doughs therefore may require more liquid to reach the proper consistency. There are no definite rules to use when modifying a sea level recipe for use at high altitudes. However, some general guidelines are worth consideration.

## ADJUSTING RECIPES FOR USE AT HIGH ALTITUDES

## Cakes

Many cake recipes perfected for sea level need no modification up to an altitude of 3,000 feet. Above that, decreased atmospheric pressure may cause a cake to rise too quickly, causing its cell structure to overexpand. At best, the result will be a cake with a coarse texture; at worst, the cell walls will break before the cake sets and result in a fallen cake with overspilled cake batter.

The problem usually can be corrected by decreasing the amount of leavening by one-eighth at 3,000 feet to three-fourths at 10,000 feet. Also, increasing the baking temperature 15 degrees to 25 degrees F helps "set" the batter before the cells formed by the leavening agent have time to expand too much. Increasing the baking temperature also helps compensate for the lower crust temperature and subsequent lighter crust color that results from faster evaporation of moisture at higher altitudes.

Fast and excessive evaporation of water at high altitudes leads to a higher concentration of sugar, which weakens the cell structure. To counterbalance this problem, many high altitude bakers decrease sugar by 1 to 3 tablespoons and increase liquid by 1 to 4 tablespoons per cup of sugar and liquid called for in the cake recipe. Fat, like sugar, weakens cell structure. Rich cakes made at high altitudes may need less fat ( 1 to 2 tablespoons per cup) than when made at sea level. On the other hand, because eggs strengthen cell structure, the addition of an egg may help prevent a "too-rich" cake from falling.

Angel food and sponge cakes present special high altitude problems. The leavening gas for these cakes is largely air. It is important not to beat too much air into the eggs. They should be beaten only until they form a peak that falls over, not until they are stiff and dry. Overbeating causes too much expansion of air cells and leads to their collapse. Using less
sugar, more flour, and a higher baking temperature also helps strengthen the cell structure of foam-type cakes.

## Cookies

Although many sea-level cookie recipes yield acceptable results at high altitudes, they often can be improved by a slight increase in baking temperature, a slight decrease in baking powder or soda, fat, and sugar, and/or a slight increase in liquid ingredients and flour. Many cookie recipes contain a higher proportion of sugar and fat than necessary, even at low altitudes. For more nutritious cookies with fewer calories, up to one-fourth of the sugar called for often can be replaced with nonfat dry milk powder without loss in product quality.

## Quick Breads

Quick breads vary from muffin-like to cake-like in cell structure.
The cell structure of biscuits and muffins or muffin-type quick breads is firm enough to withstand the increased internal pressure at high altitudes quite well without adjustment. However, a bitter or alkaline flavor may result from inadequate neutralization of baking soda or powder. In such cases, a slight decrease in the baking soda or baking powder usually improves results.

Quick breads with a cake-like texture are more delicately balanced and usually benefit from adjustments for altitude. Characteristics of a quick bread that has not been adjusted properly for altitude include a porous, sugary crust; a coarse, gummy, or oily texture; and a low volume in proportion to weight. These characteristics usually can be improved by a slight reduction in the proportion of leavening agents, sugar, and fat, and/or a slight increase in the proportion of flour, eggs, and liquid ingredients. Appropriate selection of pan size and baking temperature also are important.

## Yeast Breads

High altitude has its most pronounced effect on the rising time of yeast breads. Yeast bread dough rises more rapidly at high altitudes and may become overproofed. Watch it carefully and allow it to rise only until doubled in bulk. Since the development of a good flavor in bread partially depends on the length of rising time, use less yeast or punch the dough down, allow to rise a second time, and punch down again before molding into loaves or rolls.

Flours tend to be drier and able to absorb more liquid in high, dry climates; therefore, less flour may be needed to reach the proper dough consistency. No guidelines for the amount of difference can be given, however, because changes in humidity will affect the dryness of the flour and subsequently the amount of liquid needed.

The yeast dough recipe included in this bulletin is designed for home bakers with relatively short periods of time available in the kitchen. Once made, the dough can be
refrigerated for use up to five days later. Additional information and recipes for yeast breads are available in CSU Bulletin 526S, Making Yeast Breads at High Altitudes.

## GENERAL GUIDELINES FOR SUCCESSFUL BAKING AT HIGH ALTITUDES

1. Read carefully all directions before starting; follow them step by step.
2. Weigh or carefully measure ingredients with standard measuring equipment.
3. Use large eggs and double-acting baking powder for the recipes in this bulletin.
4. When measuring flour and baking powder, do not pack; spoon lightly and level off. Unless otherwise noted, flour used in these recipes does not need to be sifted before measuring.
5. Pack brown sugar lightly into the cup or spoon before leveling off.
6. Weigh shortening or pack into the specified measuring cup or spoon and level off with a knife.
7. Instructions for preparation of pans are given with each recipe. Do not grease the sides of the pan unless specified.
8. After cake or other thin batters have been poured into the pan, it is advisable to cut through the batter several times with a spatula or to tap the pan lightly on a flat surface to release trapped air.
9. Proper oven temperature is a must for successful baking. Check the oven with an accurate oven thermometer from time to time.
10. Bake batters and doughs in preheated ovens. To conserve energy, preheat ovens only 10 minutes before baking.
11. Place pans so the baking products are centered in the oven. Do not allow pans to touch each other or the sides of the oven.
12. Baking times may vary, depending on the accuracy of the oven. Remove the product when it appears done, whether or not the specified baking time has expired. Test cakes for doneness by pressing the surface lightly; if it springs back, the cake is done. Cakes also indicate doneness when they pull away from the pan sides and when a toothpick inserted into the center of the cake "comes out clean." Test quick breaks for doneness by the toothpick method.
13. Since most of the recipes included in this bulletin are relatively low in sugar and fat, store in a tightly covered container to prevent loss of moisture. Cool; wrap securely in moisture-vapor proof bags, containers, or paper; label; and freeze for later use that portion of any product that will not be used within a few days.

## FEATURES OF RECIPES IN THIS BULLETIN

The recipes included in this bulletin are designed to complement those provided in other CSU bulletins on high altitude cooking. Most of the recipes are lower in sugar and fat than comparable recipes found in many cookbooks. Many of the recipes feature fruits and vegetables for increased nutritional value and fiber. In addition, many are made with
vegetable oil rather than hydrogenated shortening, margarine, or butter to decrease saturated fat intake.

Nutrition information per serving (as calculated from ingredients) is provided at the back of the bulletin for each basic recipe. Reconstituted nonfat dry milk was used in testing the recipes and in calculating the nutrition information per serving. If whole milk is used when making the products, the fat and calorie content information should be increased accordingly.

Each recipe was developed and tested for use at 5,000 feet. However, most of the recipes should yield good results between 3,000 feet and 7,000 feet. Above 7,000 feet, alterations may be needed as discussed in the preceding sections.

## CAKES

## Banana Cake

A light, fine-grained cake.
Oven temperature: 350 degrees F
Yield: Approximately 12 servings
Pan: Grease and flour two 9 -inch layer pans or one $9 \times 13$-inch cake pan.
$21 / 2$ cups sifted cake flour
$11 / 3$ cups sugar
$3 / 4$ tsp. baking powder
$1 / 2$ tsp. baking soda
1/4 tsp. salt
$1 / 2$ cup vegetable oil
1 tsp. almond extract
$2 / 3$ cup buttermilk
3 large mashed ripe bananas
2 eggs or egg substitute
$2 / 3$ cup chopped nuts (optional)

1. Sift together cake flour, sugar, baking powder, soda, and salt into large mixing bowl.
2. Add oil, almond extract, half of the buttermilk, and mashed bananas. Beat 1 minute on low speed.
3. Add eggs and rest of buttermilk. Beat 2 minutes on medium speed.
4. Fold in chopped nuts, if desired.
5. Pour batter into prepared pan(s).
6. Bake 35-45 minutes or until toothpick inserted in center of cake comes out clean.
7. Remove from oven and cool in pan 10-12 minutes.
8. Remove from pans and allow to finish cooling on rack.

## Buttermilk Chocolate Cake

Light and luscious.
Oven temperature: 350 degrees F
Yield: Approximately 20 servings
Pan: Grease bottom of one $11 \times 16$-inch sheet cake pan.
2 cups all-purpose flour
$13 / 4$ cups sugar
1 tsp. baking soda
$1 / 2$ tsp. salt
3/4 cup margarine
2 Tbsp. cocoa
1 cup water
1/2 cup buttermilk
1 tsp. vanilla
2 eggs

1. Sift together flour, sugar, baking soda, and salt; set aside.
2. Mix margarine, cocoa, and water together in saucepan; bring mixture to a boil; remove from heat.
3. Mix buttermilk, vanilla, and eggs together in large bowl.
4. Blend in chocolate mixture.
5. Stir in dry ingredients until well blended.
6. Pour into prepared pan and bake 20 minutes or until done.
7. Remove from oven and frost with Chocolate Icing* while still hot.
8. Slice into pieces and serve from pan.

## *Chocolate Icing

1/4 cup margarine, melted
2 Tbsp. cocoa
1 tsp. vanilla
3/4 cup confectioners sugar
2 Tbsp. milk or water
$1 / 2$ cup chopped nuts (optional)
$1 / 2$ cup shredded coconut (optional)

1. Blend all ingredients together until smooth.
2. Spread over cake while still hot.

## Chocolate Applesauce Cake

A versatile cake that utilizes garden or orchard produce.
Oven temp.: 375 degrees $F$
Yield: Approx. 12 servings
Pan: Grease bottom of one $9 \times 13$-inch cake pan.
2 cups all-purpose flour
1/2 cup cocoa
1 tsp . baking powder
$1 / 2$ tsp. baking soda
$11 / 4$ cups sugar
$1 / 2$ tsp. salt
1 tsp. cinnamon
$1 / 2$ cup vegetable oil
2 eggs
$11 / 4$ cups applesauce
1 tsp. vanilla
$1 / 2$ cup chopped nuts (optional)

1. Sift together flour, cocoa, baking powder, baking soda, sugar, salt, and cinnamon in large bowl.
2. Add oil, eggs, applesauce, and vanilla; beat at medium speed until well blended (about 2 minutes).
3. Stir in chopped nuts, if desired.
4. Pour into prepared pan. Bake 30-35 minutes or until toothpick inserted in center of cake comes out clean.
5. Remove from oven; cool in pan on rack.
6. Ice or sprinkle with powdered sugar if desired and serve from pan.

## Variations

Chocolate Mashed Potato Cake: Omit baking soda; use 2 tsp. baking powder. Increase sugar to $11 / 2$ cups. Substitute 1 cup mashed potatoes for applesauce. Add $1 / 2$ cup milk with moist ingredients.

Zucchini Cake: Omit cocoa. Increase sugar to $11 / 2$ cups. Increase cinnamon to 2 tsp. Omit applesauce. Stir in 2 cups grated, unpeeled zucchini into batter with nuts.

## Pineapple Sheet Cake

A moist, pineapple-flavored snacking cake.
Oven temperature: 350 degrees F
Yield: Approximately 20 servings.
Pan: Grease bottom of one $11 \times 16$-inch sheet cake pan.
2 cups all-purpose flour
1 cup sugar
1 tsp. baking soda
1 tsp. salt
2 eggs
1/2 cup vegetable oil
$1151 / 4-\mathrm{oz}$. can crushed pineapple, undrained
1 tsp. vanilla

1. Stir flour, sugar, soda, and salt together in bowl.
2. Add eggs, oil, crushed pineapple, and vanilla.
3. Mix until well blended.
4. Pour batter into prepared cake pan.
5. Bake 20-25 minutes or until pick inserted in center of cake comes out clean.
6. Remove from oven and frost with Coconut-Nut Topping* while still hot.
7. Cut into slices and serve from pan.
*Coconut-Nut Topping
1 cup sugar
1/4 cup margarine
2/3 cup evaporated milk
1 cup shredded coconut
1 cup chopped nuts
1 tsp. vanilla
8. Combine sugar, margarine, and evaporated milk together in saucepan.
9. Cook over medium-low heat, stirring constantly, until thick (approximately 10 minutes). Remove from heat.
10. Stir in shredded coconut, chopped nuts, and vanilla.
11. Pour and spread over hot cake.

## Quick Pound Cake

A light, moist cake that is good served with fruits or sauces.
Oven temperature: 350 degrees F
Yield: Approximately 16 servings
Pan: Grease and flour one 10 -inch tube cake pan.
3 cups cake flour, unsifted, or $22 / 3$ cups all-purpose flour
$13 / 4$ cups sugar
1 tsp. baking powder
1 tsp. salt
3/4 cup butter or margarine
4 eggs plus enough milk to make 1 cup
3/4 cups milk
1 tsp . lemon peel
$11 / 2$ tsp. vanilla, or 1 tsp. each vanilla and imitation butter flavoring

1. Sift flour, sugar, baking powder, and salt together in large bowl.
2. Add butter or margarine and egg mixture. Beat 3 minutes at medium speed with electric mixer or 300 strokes by hand.
3. Add milk and flavorings. Beat 2 minutes at medium speed or 200 strokes by hand.
4. Pour batter into greased and floured pan.
5. Bake approximately 1 hour or until pick inserted in center comes out clean.
6. Remove from oven and cool upright completely before removing cake from pan.

## Whole Wheat Carrot Cake

Whole wheat flour, pineapple, carrots and raisins star in this moist, flavorful cake.
Oven temp.: 350 degrees F
Yield: Approx. 24 servings
Pan: Grease bottom and sides of bundt cake pan.
3/4 cup vegetable oil
$11 / 2$ cups sugar
4 eggs
$1 / 2$ cup milk
2 cups shredded carrots
18-oz. can crushed pineapple, undrained
$21 / 2$ cups whole wheat flour
2 tsp. cinnamon
1 tsp. baking soda
$1 / 2$ tsp. salt
$1 / 2$ cup raisins

1. Mix together vegetable oil, sugar, eggs, milk, carrots, and pineapple in large bowl.
2. Stir together whole wheat flour, cinnamon, baking soda, and salt.
3. Add dry ingredients to liquid mixture and mix until well blended.
4. Blend in raisins.
5. Pour batter into prepared pan.
6. Bake 40 to 45 minutes or until toothpick inserted in center comes out clean.
7. Remove from oven and cool in pan 30 minutes.
8. Remove from pan and frost with Cream Cheese Frosting,* if desired.

## *Cream Cheese Frosting

3 oz. cream cheese, softened
$11 / 2$ tsp. milk or cream
1 tsp. vanilla
3/4 cup sifted confectioners sugar

1. Blend cream cheese, milk, and vanilla together.
2. Gradually beat in powdered sugar.
3. Spread on cooled cake.

## COOKIES

## Applesauce Dream Bars

Keep these refrigerated.
Oven temperature: 375 degrees F
Yield: 36 bars
Pan: Grease one $9 \times 13$-inch cake pan.
$1 / 2$ cup butter or margarine
$1 / 2$ cup firmly packed brown sugar
$1 / 2$ cup nonfat dry milk solids
$11 / 4$ cups all-purpose flour
1 tsp. cinnamon
$1 / 2$ tsp. salt
$1 / 2$ tsp. baking soda
$11 / 2$ cups quick rolled oats
$11 / 2$ cups applesauce

1. Beat together butter or margarine and sugar until light and fluffy.
2. Mix together dry milk, flour, cinnamon, salt, and soda in separate bowl. Stir in oats.
3. Blend dry ingredients with butter-sugar mixture to make a fine crumb.
4. Press half of crumb mixture into bottom of pan.
5. Spread with applesauce; sprinkle with remaining crumb mixture. Press firmly.
6. Bake 30 minutes or until golden brown. Cool. Cut into bars.

## Apple Raisin Bars

A quick bar cookie with a soft, cake-like texture.
Oven temperature: 375 degrees F
Yield: 36 bars
Pan: Grease bottom of one $9 \times 13$-inch cake pan.
3/4 cup sugar
1/3 cup vegetable oil
2 eggs
3 Tbsp. milk
$11 / 2$ tsp. vanilla
$12 / 3$ cup all-purpose flour
$1 / 2$ tsp. baking soda
3/4 tsp. salt
1 tsp. cinnamon
3/4 cup chopped peeled apples
3/4 cup raisins
$1 / 3$ cup chopped nuts (optional)

1. Mix sugar, oil, eggs, milk, and vanilla together in large bowl.
2. Stir together flour, soda, salt, and cinnamon.
3. Add dry ingredients to liquid mixture and mix until blended.
4. Blend in chopped apples, raisins, and nuts.
5. Spread in prepared pan and bake 15-20 minutes or until top springs back when touched lightly in center.
6. Remove from oven. Cool slightly. Frost with Spice Frosting.*
7. Cut into bars and remove from pan.

## *Spice Frosting

1/4 cup brown sugar, packed
3 Tbsp. margarine
2 Tbsp. milk
1/4 tsp. cinnamon
$1 / 8$ tsp. ginger
$1 / 8$ tsp. cloves
1 tsp. vanilla
1 cup sifted confectioners sugar

1. Combine brown sugar, margarine, milk, and spices in sauce pan.
2. Cook over medium-low heat until mixture bubbles, stirring constantly.
3. Remove from heat; stir in vanilla.
4. Slowly beat in confectioners sugar until frosting is of spreading consistency.

## Variations

Spicy Pumpkin Bars: Substitute 1 cup cooked or canned pumpkin for milk. Add 1/2 tsp. cloves and $1 / 4$ tsp. ginger to dry ingredients. Omit apple and raisins.

Double Chocolate Cake Brownies: Reduce flour to $11 / 3$ cups; omit cinnamon, if desired, and add $1 / 3$ cup cocoa to dry ingredients. Substitute $3 / 4$ cup chocolate chips for chopped apples and raisins.

Granola Bar Cookies: Decrease sugar to $1 / 2$ cup. Substitute 6 Tbsp. orange juice for milk. Add $1 / 2$ tsp. almond extract to liquid ingredients. Substitute $3 / 4$ cup granola or quick rolled oats for chopped apple.

## Fruit-Nut Energy Bars

These make great trail snacks.
Oven temperature: 350 degrees F
Yield: Approx. 36 bars
Pan: Grease bottom of $9 \times 13$-inch cake pan.
$13 / 4$ cups whole wheat flour
1/2 cup sugar
$1 / 2$ cup nonfat dry milk solids
1/4 cup wheat germ
1 tsp . baking powder
3/4 tsp. salt
$1 / 2$ cup vegetable oil
2 eggs
1/4 cup honey
1/4 cup molasses
1 cup raisins
3/4 cup chopped dried fruit
$1 / 2$ cup sunflower seeds

1. Stir together whole wheat flour, sugar, nonfat dry milk solids, wheat germ, baking powder, and salt.
2. Add oil, eggs, honey, and molasses; mix until well blended.
3. Stir in raisins, fruit, and sunflower seeds.
4. Pour into prepared pan.
5. Bake 30-40 minutes or until done.
6. Remove from oven and cool in pan.
7. Cut into bars and remove from pan.

## Basic Drop Cookies

Easy drop cookie with seven variations.
Oven temperature: 375 degrees F
Yield: 5 to 6 dozen cookies
Pan: Ungreased cookie sheet
$1 / 2$ cup granulated sugar
$1 / 2$ cup brown sugar
$2 / 3$ cup hydrogenated shortening or $1 / 2$ cup vegetable oil
2 eggs
1 tsp. vanilla
2 cups all purpose flour
1 tsp. salt
1 tsp. baking powder

1. Cream or mix sugar with shortening or oil in large bowl.
2. Add eggs and vanilla; beat until smooth and creamy.
3. Stir flour, salt, and baking powder together.
4. Add dry ingredients to creamed mixture a little at a time, mixing thoroughly after each addition.
5. Drop slightly rounded teaspoons of dough on ungreased cookie sheet, placing mounds about $11 / 2$ inches ( 3.8 cm ) apart.
6. Bake 10 to 12 minutes or until lightly browned.
7. Remove cookies from sheet immediately and allow to cool on rack.

## Variations

Spice: Add 1 tsp. nutmeg and 1 tsp. cinnamon to dry ingredients. Stir 1 cup peeled, finely chopped apple into dough.

Banana Nut: Stir 1 cup diced bananas and $1 / 2$ cup chopped nuts into dough.
Carrot: Add 1 cup grated raw carrots and 4 tsp. grated orange peel with eggs and vanilla.

Chocolate Chip: Stir $1 / 2$ cup chocolate chips into dough.
Honey Spice: Omit brown sugar and vanilla. Add $1 / 3$ cup honey with eggs. Add 1/2 tsp. each cinnamon, nutmeg, allspice and cloves with dry ingredients.

Maraschino Cherry-nut: Blend $1 / 2$ cup chopped, drained maraschino cherries and $1 / 2$ cup chopped nuts into dough.

Pineapple-raisin: Add $1 / 2$ cup drained, crushed pineapple and $1 / 2$ cup seedless raisins into dough.

## Carrot-Raisin Cookies

A nutritious treat.
Oven temperature: 375 degrees $F$
Yield: 4 dozen 2-inch cookies
Pan: Lightly greased cookie sheet
$1 / 3$ cup hydrogenated shortening
$1 / 3$ cup brown sugar
1/4 cup molasses
1 egg
1/4 cup water or milk
1 cup all-purpose flour
$1 / 4$ cup nonfat dry milk solids
1 tsp. cinnamon
$1 / 2$ tsp. cloves
$1 / 2$ tsp. salt
1/4 tsp. baking soda
$11 / 2$ cups quick rolled oats
1 cup raw grated carrots
1/2 cup raisins
1 tsp. grated lemon rind (optional)

1. Beat together shortening, sugar, molasses, egg, and water or milk in large bowl.
2. Stir together flour, dry milk, spices, salt, baking soda, and rolled oats.
3. Add dry ingredients to liquid mixture a little at a time, mixing thoroughly after each addition.
4. Stir in grated carrot, raisins, and lemon rind until well mixed.
5. Drop by teaspoonful onto lightly greased cookie sheet.
6. Bake 10-15 minutes or until lightly browned.
7. Remove cookies from sheet immediately and allow to cool on rack.

## Oatmeal Cookies

Crisp cookie with a softer fruit or vegetable variation.
Oven temperature: 375 degrees F
Yield: 5-6 dozen cookies
Pan: Ungreased cookie sheet
2/3 cup hydrogenated shortening
1/3 cup granulated sugar
$2 / 3$ cup brown sugar
1 egg
$1 / 2$ tsp. vanilla
$11 / 3$ cups all-purpose flour
$1 / 4$ cup nonfat dry milk solids
$1 / 2$ tsp. baking soda
$1 / 2$ tsp. salt
$1 / 4$ tsp. nutmeg
$1 / 2$ tsp. cinnamon
2 cups quick rolled oats
$1 / 2$ cup chopped nuts (optional)

1. Cream shortening and sugars in large bowl.
2. Beat in egg and vanilla.
3. Stir flour, nonfat dry milk, baking soda, salt, and spices together.
4. Add dry ingredients to creamed mixture a little at a time, mixing thoroughly after each addition.
5. Stir in rolled oats and chopped nuts.
6. Drop by teaspoonfuls onto ungreased cookie sheet $11 / 2$ inches apart and bake 12-15 minutes.
7. Remove cookies from sheet immediately and allow to cool on rack.

## Variations

Pumpkin-Oatmeal Cookies: Increase white sugar to $1 / 2$ cup. Add 1 cup cooked pumpkin during step 2. Add $1 / 4$ tsp. each cloves and ginger to dry ingredients.

Banana-Oatmeal Cookies: Add 1 cup mashed banana in step 2.

## Zucchini Cookies

Another way to use that prolific plant.
Oven temperature: 375 degrees F
Yield: 4 dozen 2-inch cookies
Pan: Greased cookie sheet
1 cup grated unpeeled zucchini
3/4 cup sugar
$1 / 2$ cup hydrogenated shortening or vegetable oil
1 egg , beaten
1 tsp. vanilla
1 cup all-purpose flour
1 cup whole wheat flour
1 tsp. baking soda
$1 / 2$ tsp. salt
$1 / 2$ tsp. nutmeg
$1 / 2$ tsp. cloves
1 tsp. cinnamon
1 cup raisins
$1 / 2$ cup chopped nuts

1. Beat grated zucchini, sugar, shortening, egg and vanilla together in large bowl.
2. Sift or stir flour, soda, salt and spices together. Add to liquid mixture and mix thoroughly.
3. Blend in raisins and nuts.
4. Drop by teaspoonfuls onto greased baking sheet.
5. Bake for 12-15 minutes.
6. Remove to rack to cool.

## QUICK BREADS AND COFFEE CAKES

## Boston Brown Bread

A dark, moist bread featuring three types of flours.

## Steamed

Yield: Approximately 12 slices
Pan: Grease and flour one 1-lb coffee can.
$1 / 2$ cup all-purpose flour
$1 / 2$ cup yellow cornmeal
$1 / 2$ cup whole wheat flour
$1 / 2$ tsp. salt
$1 / 2$ tsp. baking soda
$1 / 2$ tsp. baking powder
6 Tbsp. dark molasses
1 cup buttermilk
$1 / 2$ cup raisins
$1 / 2$ cup chopped nuts

1. Mix flours, salt, soda, and baking powder together in large bowl.
2. Add molasses and buttermilk and beat until well blended.
3. Stir in raisins and nuts.
4. Pour batter into prepared coffee can.
5. Cover the top of the can with aluminum foil and set inside a slow cooker, steamer, or on a trivet in a saucepan large enough to leave a space all around the can.
6. Fill cooker or steamer with water halfway up the coffee can.
7. Cover the slow cooker or steamer. Steam over low heat or cook in slow cooker on 150 watt setting (high) for 4 to 5 hours or until toothpick inserted in center of bread comes out clean.
8. Remove can from steamer or slow cooker and let cool on rack before removing bread from coffee can mold.

## Basic Quick Bread, Cake Type

Very fine, moist cake-like texture. A quick bread which features flavors from applesauce to zucchini.

Oven temp.: 350 degrees F
Yield: Approx. 15 slices
Pan: Grease bottom of one $81 / 2 \times 41 / 2$ inch loaf pan
$13 / 4$ cup all-purpose flour
$1 / 2$ tsp. salt leavening*
spice*
1/2 cup oil
1 cup less 1 Tbsp. sugar
3 eggs
1 tsp. vanilla fruit or vegetable pulp*

* See variation for type and amount

1. Sift or stir flour, salt, leavening and spices together.
2. Beat oil, sugar and eggs together in large bowl until light and fluffy.
3. Add vanilla and fruit or vegetable pulp to oil-sugar mixture; mix about 30 strokes with a spoon or 30 seconds on low speed of electric mixer.
4. Add dry ingredients to above mixture and combine, using about 30 strokes with a spoon or 30 seconds on low speed of mixer.
5. Pour batter into prepared pan and cut through two or three times with knife or spatula to remove trapped air.
6. Bake for $65-70$ minutes or until done.
7. Remove from oven; let loaf stand in pan 10 minutes; remove from pan to cool on rack.

## Variations

Applesauce Bread: Leavening: 1 tsp. baking soda; spices: 1 tsp. cinnamon, $1 / 4$ tsp. nutmeg, and $1 / 4 \mathrm{tsp}$. cloves; change: reduce sugar to $3 / 4$ cup; fruit pulp: $3 / 4$ cup applesauce.

Banana Bread: Leavening: 1 tsp. baking soda; spices:none; fruit pulp: 1 cup mashed bananas.

Pumpkin Bread: Leavening: $1 / 2$ tsp. baking powder and $1 / 2$ tsp. baking soda; spices: $1 / 2$ tsp. cloves, $1 / 2$ tsp. cinnamon, $1 / 4$ tsp. nutmeg; fruit or vegetable pulp: 1 cup cooked or canned, strained pumpkin.

Zucchini Bread: Leavening: $1 / 2$ tsp. baking powder and $1 / 2$ tsp. baking soda; spice: 1 tsp. cinnamon; fruit or vegetable pulp: 1 cup grated, unpeeled zucchini.

## Basic Quick Bread, Muffin Type

Lower in sugar and fat than many fruit or vegetable quick breads. Moist, coarse-grained texture.

Oven temp.: 350 degrees F
Yield: Approx. 15 slices
Pan: Grease bottom of one $9 \times 5$ inch loaf pan.
$1 / 2$ cup sugar
$1 / 3$ cup vegetable oil
2 eggs
1/4 cup milk
$11 / 2$ tsp. grated orange or lemon peel (optional)
2 cups all-purpose flour
1 tsp. baking powder
$1 / 2$ tsp. baking soda
$1 / 2$ tsp. salt
1 tsp. cinnamon
1 cup fruit or vegetable pulp

1. Mix sugar, oil, eggs, milk, and orange or lemon peel together in large bowl.
2. Sift or stir flour, baking powder, baking soda, salt, and spices together.
3. Blend dry ingredients into sugar-oil mixture.
4. Blend in fruit or vegetable pulp.
5. Pour batter into prepared pan and cut through 2 or 3 times with knife or spatula.
6. Bake 50-60 minutes or until toothpick inserted in center comes out clean.
7. Remove from oven. Let cool in pan 10 minutes. Remove to finish cooling on rack.

## Variations

Applesauce Bread: Substitute $1 / 2 \mathrm{tsp}$. vanilla for $1 / 2 \mathrm{tsp}$. orange peel. Add $1 / 2 \mathrm{tsp}$. nutmeg to dry ingredients. Use 1 cup applesauce for fruit pulp.

Banana Bread: Add 1 cup mashed bananas to liquid mixture.
Carrot Bread: Increase milk to $1 / 3$ cup. Use 1 cup grated carrot for vegetable pulp.
Zucchini Bread: Use 1 packed cup grated, unpeeled zucchini for vegetable pulp.

## Biscuits

Handle lightly for really delicious biscuits. Stir as little as possible and fold dough over easy.

Oven temp.: 450 degrees F
Yield: 15 2-inch biscuits
Pan: Ungreased baking sheet
2 cups all-purpose flour
2 tsp. baking powder
$1 / 2$ tsp. salt
$1 / 4$ cup hydrogenated shortening or $1 / 4$ cup margarine
3/4 to $7 / 8$ cup milk

1. Sift flour, baking powder, and salt into mixing bowl.
2. Cut shortening into dry ingredients with pastry blender or 2 knives until mixture resembles coarse meal.
3. Make a "well" in center of flour mixture; add milk.
4. Stir with fork until soft dough is formed (about 20-30 strokes).
5. Form dough into a ball and place on lightly floured board. Roll over and knead lightly 10 to 15 times. Finish with unbroken side on top.
6. Roll or pat out to about $1 / 2$-inch thickness and cut with floured cutter.
7. Bake on ungreased baking sheet 12 to 14 minutes.

## Variations

Cheese Biscuits: Use margarine as fat ingredient. Mix $1 / 2$ cup grated cheddar cheese into flour-fat mixture before adding milk.

Buttermilk Biscuits: Substitute $7 / 8$ cup buttermilk for $7 / 8$ cup milk. Use 1 tsp. baking powder and $1 / 2 \mathrm{tsp}$. baking soda in place of 2 tsp . baking powder.

Whole Wheat Biscuits: Substitute 3/4 cup whole wheat flour for 1 cup all-purpose flour.

Oil Biscuits: Substitute $1 / 4$ cup vegetable oil for $1 / 4$ cup shortening or margarine. Combine oil with milk and add to dry ingredients.

## Cake Doughnuts

A quick doughnut recipe with potato or applesauce variations.
Cooking oil temperature: 365-370 degrees F
Yield: 14 doughnuts
Pan: Heavy saucepan, deep skillet, or deep-fat fryer.
$21 / 4$ cups all-purpose flour
2 tsp. baking powder
$1 / 2$ tsp. salt
1/4 tsp. nutmeg
$1 / 4$ tsp. cinnamon
1 egg
1/2 cup sugar
1 Tbsp. vegetable oil
$1 / 2$ cup milk
$1 / 2$ tsp. vanilla

1. Sift flour, baking powder, salt, nutmeg, and cinnamon together; set aside.
2. Beat egg in large bowl. Gradually beat in sugar.
3. Blend in oil, milk, and vanilla. Add dry ingredients and stir until blended.
4. Chill dough 20 minutes.
5. Knead dough on floured board approximately 4 times.
6. Roll dough out to $3 / 8$-inch thickness.
7. Cut into doughnut shapes and fry in heated oil, turning often until golden brown (about $21 / 2$ minutes).
8. Remove and drain on paper towels.
9. Roll in sugar or dip in powdered sugar glaze.

## Variations

Applesauce Cake Doughnuts: Substitute $1 / 2$ cup applesauce for $1 / 2$ cup milk.
Mashed Potato Cake Doughnuts: Increase baking powder to $21 / 2 \mathrm{tsp}$. Reduce milk to $3 / 8$ cup. Add $1 / 2$ cup mashed potatoes to liquid mixture before blending in dry ingredients.

## Corn Bread

Choose Northern, Southern, or Southwestern style.
Oven temperature: 425 degrees F
Yield: 9 servings
Pan: Grease generously bottom and sides of 8-inch square pan.
1 cup all-purpose flour
1 cup cornmeal
2 1/2 tsp. baking powder
1 tsp. salt
2 eggs, slightly beaten
2 Tbsp. vegetable oil
2 Tbsp. sugar
1 1/4 cups milk

1. Stir flour, cornmeal, baking powder, and salt together in mixing bowl.
2. Blend beaten eggs, oil, sugar, and milk together in separate bowl.
3. Make a "well" in center of dry ingredients. Add liquid mixture and stir quickly with a fork until mixture is just blended.
4. Pour into prepared pan and bake for 20 to 25 minutes or until golden brown and toothpick inserted in center of bread comes out clean.
5. Cut into pieces and serve warm.

## Variations

Southern-Style Buttermilk Cornbread: Reduce flour to $1 / 2$ cup; increase cornmeal to $11 / 2$ cups; reduce baking powder to 1 tsp.; add $1 / 2$ tsp. baking soda in step 2.
Substitute $11 / 4$ cups buttermilk for sweet milk in step 3.
Jalapeno Cornbread: Omit salt. Add the following to the liquid mixture before stirring into the dry ingredients:
$1 / 3$ cup chopped dehydrated onions
1 cup cream style corn
2 Tbsp. chopped jalapino peppers
3/4 cup grated cheddar cheese
1/4 cup crumbled bacon bits
$1 / 8$ tsp. garlic salt
2 Tbsp. pimento
Bake in greased $8 \times 12$-inch casserole dish at 400 degrees F for $30-35$ minutes. Serve warm with a salad for a light supper.

## Crepes

A thin French pancake to wrap around appetizer, main dish, vegetable, or dessert fillings.

Medium to high heat.
Yield: 6-8 crepes
Pan: 6-8-inch skillet or crepe pan.
1 egg
$1 / 2$ cup milk
2 tsp. vegetable oil
$1 / 3$ cup all-purpose flour
1/8 tsp. salt

1. Beat egg slightly. Add remaining ingredients and beat until smooth.
2. If possible, refrigerate the batter $1 / 2$ to 1 hour or more before cooking. This allows the flour to absorb the liquid for more tender crepes.
3. Cook on upside-down crepe griddle or in traditional pan.
A. Traditional pan method:
1) "Permanently" seasoned pans or pans with a non-stick coating do not need to be greased. Brush others with oil or butter as needed to prevent sticking.
2) Heat pan over medium to high heat until added drops of water dance and sizzle.
3) Pour 2 Tbsp . of batter into center of 6-inch pan, 3 Tbsp . for 8 -inch pan. Quickly rotate the pan to spread the batter evenly over the bottom of skillet.
4) Cook on one side only, until bottom is lightly browned with a lacy look.
5) Loosen edges and carefully lift crepe from pan onto stack on plate.
B. Upside-down pan method:
6) Dip preheated griddle into batter in 9-inch pie pan.
7) Gently lift griddle up and turn over. (If cooking surface is too hot, crepe batter will partly adhere to surface, then fall back into dipping dish.)
8) Immediately return griddle to heat. Cook until batter loses its wet look.
9) Remove from heat. Turn griddle over and loosen crepe onto stack on plate.

## Variations

Low-Calorie Crepes: Use skim milk; omit oil.
Egg-Substitute Crepes: Substitute 4 tsp. cholesterol-free egg substitute for eggs.
Dessert Crepe: Add 1 tsp. sugar plus $1 / 2$ tsp. vanilla or other flavoring to basic crepe batter.
Whole-Wheat, Wheat Germ, or Corn Meal Crepes: For $1 / 3$ cup flour substitute:
-- 3 Tbsp. whole wheat and 3 Tbsp. white flour;
-- 4 tsp. wheat germ and $1 / 4$ cup white flour; or
-- 3 Tbsp. corn meal and 3 Tbsp. white flour.

## Cream Puffs

Elegant, yet simple to whip up. Can be frozen for later use.
Oven temperature: 425 degrees F
Yield: 18 medium cream puffs
Pan: Greased baking sheet
1 cup all-purpose flour
1/8 tsp. salt
1 Tbsp. sugar
1 cup water
$1 / 3$ cup butter or margarine
4 eggs at room temperature

1. Mix together flour, salt, and sugar.
2. Bring water and butter to a boil in a heavy saucepan.
3. Add flour mixture at once and stir continuously with wooden spoon until the mixture forms a smooth, dry paste which does not cling to the sides of the spoon or pan. Do not overcook.
4. Remove the pan from the heat and cool 2 minutes.
5. Add eggs, one at a time, beating thoroughly after each addition, until dough no longer looks slippery. Dough should stand erect when scooped up on spoon after last egg has been incorporated.
6. Spoon or drop into desired shapes onto lightly greased baking sheet.
7. Sprinkle a few drops of water over each puff or shape.
8. Bake 20 minutes. Turn off oven and let sit in oven an additional 20 minutes before removing.
9. When completely cool, slice in half and fill with custard, pudding, ice cream, yogurt, or meat salad.

## Muffins

Try plain muffins or a variation to perk up any meal. Perfect muffins require little stirring. The batter will be lumpy.

Oven temperature: 425 degrees F
Yield: 12 muffins
Pan: Greased muffin tin cups.
2 cups all-purpose flour
1/4 cup sugar
2 tsp. baking powder
$1 / 2$ tsp. salt
1 large egg, beaten
1 cup milk
$1 / 4$ cup vegetable oil

1. Stir together flour, sugar, baking powder, and salt in mixing bowl.
2. Blend beaten egg, milk, and oil together in separate bowl.
3. Make a "well" in center of dry ingredients. Add liquid mixture and stir quickly in circular motion with a fork until flour mixture is moistened (about 12-15 strokes).
4. Dip batter with tablespoon and push into greased muffin cups with second tablespoon, filling cups $2 / 3$ full.
5. Bake for 20-25 minutes or until golden brown.
6. Remove from pan and serve hot.

## Variations

Less-Rich Muffins: Reduce oil and sugar to 2 Tbsp. each.
Orange Muffins: Substitute $1 / 2$ cup orange juice and $1 / 2$ cup milk for 1 cup milk. Use 1 tsp. baking powder and $1 / 2$ tsp. baking soda in place of 2 tsp. baking powder.

Date-Nut Muffins: Add $1 / 2$ cup chopped walnuts and $1 / 2$ cup chopped dates during final 7 strokes.

Jam or Jelly Surprise Muffins: Prepare basic recipe. Fill greased muffin tin $1 / 3$ full. Add 1 tsp. jam or jelly to center of each cup. Top with remaining batter, filling muffin cups $2 / 3$ full.

Apple Spice Muffins: Add $1 / 4$ tsp. allspice to dry ingredients. Blend 1 cup peeled, diced apples and $1 / 4$ cup raisins into batter during final 7 strokes.

Whole Wheat-Honey Muffins: Substitute 2 cups whole wheat flour for 2 cups all-purpose flour. Add $1 / 4$ tsp. baking soda to dry ingredients. Substitute $1 / 4$ cup honey for $1 / 4$ cup sugar. Increase milk to $11 / 2$ cups.

Bran Muffins: Reduce flour to 1 cup. Soak 2 cups $40 \%$ bran flakes with milk for 1-2 minutes to soften. Mix in egg and oil and add to dry ingredients.

Blueberry Muffins: Lightly fold 1 cup fresh or well-drained, canned or frozen blueberries into batter during last 7 strokes.

Cornmeal Muffins: Substitute 1 cup corn meal for 1 cup flour. Use 1 tsp. baking powder and $1 / 2 \mathrm{tsp}$. baking soda in place of 2 tsp . baking powder. Substitute 1 cup buttermilk for 1 cup sweet milk.

Corn Fritter Muffins: Use $1 / 2$ tsp. baking soda and 1 tsp. baking powder instead of 2 tsp. baking powder. Add $11 / 2$ cups well-drained canned corn and 1 Tbsp . chopped pimento to egg-milk mixture.

Oatmeal Muffins: Presoak 1 cup rolled oats with 1 cup milk for 15 minutes. Reduce flour to 1 cup. Blend oatmeal-milk mixture with egg and oil; add to dry ingredients.

## Flour Tortillas

Flat, round bread that is a basic ingredient in Mexican cooking.
Griddle temperature: 380 degrees F
Yield: Eight 11-inch or eleven 7-inch tortillas
Pan: Ungreased griddle
2 cups all-purpose flour
3/4 tsp. baking powder
1 tsp. salt
1/4 cup hydrogenated shortening
3/4 cup warm water

1. Stir together flour, baking powder, and salt in mixing bowl.
2. Cut in shortening with a fork or pastry blender until mixture is crumbly.
3. Add warm water to make a medium stiff dough.
4. Form dough into a ball and knead on lightly floured surface until smooth and flecked with air bubbles.
5. Form into balls and roll as for pie crust into $1 / 16$-inch thick circles.
6. Place on hot ungreased griddle and bake until lightly browned with flecks on one side (approximately 20 seconds); turn and bake on second side.

## Pancakes

Serve hot off the griddle.
Griddle temperature: 375 degrees F
Yield: Eight 4 1/2-inch pancakes
Pan: Grease griddle or electric skillet lightly.
1 cup all-purpose flour
1 tsp. baking powder
$1 / 2$ tsp. salt
1 Tbsp. sugar
1 large egg, beaten
3/4 cup milk
2 Tbsp. vegetable oil

1. Mix flour, baking powder, salt, and sugar together in medium-sized bowl.
2. Blend egg, milk, and oil together.
3. Add to dry ingredients and blend together until smooth.
4. Pour or spoon batter in desired size onto hot, slightly greased griddle.
5. When top of pancake is well covered with bursting bubbles (about 2 minutes), turn pancake and bake 1 minute on other side. Turn only once.
6. Serve immediately or freeze and reheat in toaster, bun warmer, or oven.

## Variations

Whole Wheat Molasses Pancakes: Substitute 7/8 cup whole wheat flour for all purpose flour. Omit sugar and add 1 Tbsp. molasses with liquid ingredients.

Waffles: Increase baking powder to $11 / 4$ tsp. Add 1 tsp. vanilla. Bake in preheated waffle iron until brown and crisp.

## Oatmeal Pancakes

Griddle temperature: 375 degrees F
Yield: Ten 4-inch pancakes
Pan: Grease griddle or electric skillet slightly.
1 egg
$11 / 4$ cups buttermilk
1 Tbsp. honey
2 Tbsp. vegetable oil
$1 / 2$ cup rolled oats
2/3 cup whole wheat flour
2 Tbsp. wheat germ
$1 / 2$ tsp. baking soda
$1 / 4$ tsp. salt

1. Combine egg, buttermilk, honey, and oil in mixing bowl; beat well.
2. Add remaining ingredients and stir until well blended.
3. Pour or spoon in desired size onto hot, slightly greased griddle.
4. When top of pancake is well covered with bursting bubbles (about 2 minutes), turn pancake and bake 1 minute on other side. Turn only once.
5. Serve immediately or freeze and reheat in toaster, bun warmer, or oven.

## Variation

Waffles: Increase oil to $1 / 4$ cup. Bake in preheated waffle iron until brown and crisp.

## Popovers

One of life's real eating excitements.
Oven temperature: 450 degrees F
Yield: 11 medium popovers
Pan: Grease popover cup or muffin tin cups.
1 cup sifted all-purpose flour
1 tsp. sugar
$1 / 4$ tsp. salt
1 cup milk
2 large eggs
1 Tbsp. margarine or butter, melted

1. Sift together flour, salt, and sugar.
2. Combine milk, eggs, and butter or margarine. Add to dry ingredients.
3. Beat until smooth and well blended (1-4 minutes).
4. Pour batter into greased popover or deep muffin pans, filling each cup $1 / 2$ full.
5. Bake for 15 minutes. Reduce heat to 325 degrees F and continue baking for 25
minutes. Popovers are done when side walls are firm.

## Variation

Cheese Popovers: Prepare popover recipe above. Grate $1 / 2$ cup cheddar or parmesan cheese in separate bowl. Put 1 Tbsp. of batter into each prepared popover cup. Cover with a few teaspoons of grated cheese and another tablespoon of batter. Bake as directed for popovers above.

## Raisin-Nut Loaf

A versatile loaf bread that tastes great spread with cream cheese.
Oven temperature: 350 degrees F
Yield: Approximately 15 slices
Pan: Grease bottom of one $9 \times 5$ inch loaf pan.
3/4 cup sugar
1/4 cup margarine
1 egg
1 Tbsp. grated orange rind
2 cups all-purpose flour
1 tsp. baking powder
$1 / 2$ tsp. baking soda
1/2 tsp. salt
1 cup milk
1 cup raisins
$1 / 2$ cup chopped nuts

1. Beat sugar, fat, egg, and orange rind until creamy.
2. Mix dry ingredients thoroughly. Add alternately with milk to sugar mixture. Blend well.
3. Stir in raisins and nuts.
4. Pour into prepared loaf pan.
5. Bake for 55 minutes or until done.
6. Let cool in pan 10 minutes. Turn out and finish cooling on rack.

## Variations

Date-Nut Loaf: Omit grated orange rind. Substitute 1 cup chopped dates for raisins.
Date Cheese Loaf: Reduce sugar to $1 / 2$ cup. Omit grated orange rind. Substitute 1 cup chopped dates for raisins. Blend $1 / 2$ cup grated cheese into batter with dates.

## Whole Wheat Quick Bread

Coarse-textured, rib-sticking, quick bread with a choice of fruit flavor.
Oven temperature: 350 degrees F
Yield: Approximately 15 slices
Pan: Grease bottom of one $9 \times 5$ inch loaf pan.
1/4 cup shortening
$1 / 2$ cup sugar
1 egg
$3 / 4$ cup unsweetened, cooked, mashed prune, apricot, or cranberry pulp or freshly grated apple
$1 / 4$ cup juice of fruit used
$11 / 2$ cups all-purpose flour
$11 / 2$ cups whole wheat flour
$1 / 2$ tsp. salt
1 tsp. baking soda
1 cup buttermilk
$1 / 2$ cup chopped nuts

1. Cream shortening and sugar together in large bowl.
2. Beat egg into creamed mixture.
3. Blend in fruit pulp and juice.
4. Sift or stir flours, salt, and soda together.
5. Add dry ingredients alternately with buttermilk to liquid mixture, blending after each addition.
6. Fold in chopped nuts.
7. Place batter in prepared pan and bake for 1 hour and 15 minutes or until done.
8. Remove from oven and cool in pan.

## Zucchini-Carrot Bread

Whole wheat quick bread which features garden vegetables.
Oven temperature: 350 degrees F
Yield: Approximately 15 slices
Pan: Grease bottom of one $9 \times 5$-inch loaf pan.
2 eggs
$1 / 3$ cup vegetable oil
$1 / 2$ cup brown sugar
$1 / 2$ cup grated, unpeeled zucchini
$1 / 2$ cup grated carrots
1 tsp. vanilla
$11 / 4$ cups whole wheat flour
1/4 cup all-bran
$1 / 2$ tsp. salt
$1 / 2$ tsp. baking soda
$11 / 2$ tsp. cinnamon
$1 / 2$ cup chopped nuts

1. Beat eggs, oil, and sugar in mixing bowl.
2. Stir in grated zucchini, carrots, and vanilla.
3. Mix flour, bran, salt, soda, cinnamon, and nuts together in separate bowl.
4. Add dry ingredients to liquid mixture and mix until blended.
5. Stir in nuts.
6. Bake one hour or until done.
7. Remove from oven; let stand in pan 15 minutes; remove to cool on rack.

## Quick Coffee Cake

Quick and easy; make it plain or with fruit.
Oven temperature: 375 degrees F
Yield: Approximately 8 servings
Pan: Grease sides and bottom of one 9 -inch round cake pan.
Cake Ingredients
2 cups all-purpose flour
1/2 cup sugar
$1 / 2$ tsp. salt
2 tsp. baking powder
1 tsp. nutmeg or cinnamon
1 egg , well blended or $1 / 4 \mathrm{c}$ egg substitute
1 cup milk
$1 / 4$ cup vegetable oil
Topping Ingredients:
1/4 cup sugar
$1 / 2$ tsp. cinnamon
1 Tbsp. margarine

1. Thoroughly mix flour, sugar, salt, baking powder, and spice together in large bowl.
2. Combine egg, milk, and oil in separate bowl.
3. Add egg mixture to dry ingredients and blend by hand with a few quick strokes (about 20).
4. Turn into prepared pan.
5. Combine topping ingredients and sprinkle over batter.
6. Bake 20-25 minutes or until toothpick inserted in center of cake comes out clean.
7. Remove from oven and cool in pan on rack.

## Variation

Fruit Coffee Cake: Increase topping ingredients to $1 / 2$ cup sugar, 2 tsp. cinnamon, and 2 Tbsp. margarine or butter.

Peel, core, or pit and slice $11 / 2$ cups apples, peaches, apricots, or bananas. Mix batter as directed above. Spread one-half of batter in greased 9 -inch cake pan. Arrange fruit slices in rows on batter. Sprinkle with one-half of topping mixture. Pour remaining batter into pan and sprinkle with other half of topping. Bake at 375 degrees F 30-35 minutes.

Whole Wheat Applesauce Coffee Cake
Moist, flavorful morning treat.
Oven temperature: 375 degrees F
Yield: Approximately 16 servings
Pan: Grease bottom of 9 -inch square cake pan.
$1 / 3$ cup butter or margarine, melted
$11 / 2$ cups applesauce
1 egg
3/4 cup brown sugar, firmly packed
$11 / 2$ cups whole wheat flour
3/4 tsp. baking soda
$11 / 2$ tsp. cinnamon
$1 / 2$ tsp. allspice
$1 / 2$ tsp. salt
$1 / 2$ cup raisins

1. Melt butter or margarine in saucepan.
2. Add applesauce, egg, and brown sugar; mix well.
3. Sift or stir whole wheat flour, baking soda, spices, and salt together in large bowl.
4. Add liquid mixture and mix well.
5. Stir in raisins.
6. Pour into prepared pan.
7. Combine topping ingredients* and sprinkle over batter.
8. Bake 45 minutes or until top springs back when touched lightly in center.

## *Topping Ingredients

1/4 cup brown sugar, firmly packed
2 Tbsp. whole wheat flour
1/8 tsp. cinnamon
1/8 tsp. nutmeg
1 Tbsp. margarine or butter, softened
1/4 cup chopped nuts

## Refrigerator Yeast Rolls

Oven temperature: 375 degrees F
Yield: 3-4 dozen rolls or doughnuts; 2 coffee cakes; or 4 dozen sopaipillas
1 package dry yeast
1 Tbsp. sugar
1 cup warm water (105-115 degrees F)
1 cup milk
7 cups all-purpose flour, approximately
2 eggs, well beaten
$1 / 3$ cup shortening or $1 / 3$ cup margarine
$1 / 2$ cup sugar
1 tsp. salt

1. Stir yeast and sugar to dissolve in warm water in bowl large enough to accommodate raised dough.
2. Scald milk. Cool to lukewarm (80-85 degrees F).
3. Add milk and 3 cups flour to yeast mixture. Beat 130 strokes or until smooth. Let stand $1 / 2$ hour at about 80 degrees F .
4. Add beaten eggs, shortening, sugar, salt, and enough flour (approximately 4 cups) to form soft dough. Knead dough well, approximately 350 times (7-8 minutes), until smooth and satiny.
5. Cover and let dough stand in warm place ( 80 degrees F ) until double in bulk (approximately 45 minutes).
6. Punch down. Put in large container. Cover tightly. Place in refrigerator. Punch down as needed to prevent dough from overrising. Will keep approximately 5 days.
7. Remove dough from refrigerator when ready to use. Punch down. Let warm to room temperature.
8. Shape into rolls, doughnuts, coffee cakes, etc. as suggested below.

## Variation

Whole Wheat Refrigerator Yeast Rolls: Substitute 3 cups whole wheat flour for 3 cups of all-purpose flour used in step 3.

## Cinnamon Rolls (1/3 of dough):

1. Roll or pat dough into a $6 \times 12$-inch rectangle, $1 / 4$-inch thick.
2. Brush with 1 Tbsp. melted butter; sprinkle with mixture of $1 / 2$ tsp. cinnamon and 2 Tbsp. sugar.
3. Roll up as for a jelly roll, starting at the longer edge.
4. Cut into 1-inch slices and place close together in a greased pan, cut side down.
5. Let rise in warm place (80-85 degrees $F$ ) until double in bulk.
6. Brush tops with melted butter or margarine and sprinkle with more cinnamon and sugar.
7. Bake at 375 degrees F 20 minutes or until golden brown.

## Crescent Rolls (1/3 of dough):

1. Roll or pat dough into a circle about 10 inches in diameter and $1 / 4$-inch thick.
2. Cut dough into 12 pie-shaped pieces and brush with margarine or butter.
3. Beginning at the outer edge, roll dough to the point and press together.
4. Curve rolled dough slightly to form a crescent and place, point side underneath, on a greased baking sheet.
5. Cover and let rise in warm place (80-85 degrees F) until doubled in size.
6. Bake 15 minutes or until golden brown. May brush with oil, margarine, or milk.

## Doughnuts:

1. Roll dough to $1 / 2$-inch thickness.
2. Cut with doughnut cutter.
3. Cover and let rise in warm place (80 degrees F ) until about double in size (25-30 minutes).
4. Fry in deep fat heated to approximately 360 degrees F until golden brown, about 1-2 minutes per side.

## Round Dinner Rolls (1/3 of the dough):

1. Form dough into 14 small balls of $1 / 3$ the size desired.
2. Place close together in greased round pan. Let rise until doubled (approximately 1 hour).
3. Bake for 15 minutes or until golden brown. Remove from oven and rub margarine over tops of rolls.

## Sopaipillas:

1. Roll dough to $1 / 8$-inch thickness.
2. Cut into 4 -inch squares.
3. Fry in hot fat until golden brown and puffy, approximately 1 to $11 / 2$ minutes per side. (Fat will be right temperature when a small piece of dough dropped into it sinks to the bottom of the fryer and then immediately rises to the top.)

TABLE 1. NUTRIENTS PER SERVING OF RECIPES CONTAINED IN THIS BULLETIN

| Food Product | Size of Serving | Cal. | Prot (g) | Carbohydrate (g) | Total Fat (g) | Satur. Fat (g) | Cholesterol (g) | $\begin{gathered} \text { Sodium } \\ (\mathbf{m g}) \end{gathered}$ | Dietary Fiber (mg) | Vit A (IU) | $\begin{gathered} \text { Vit C } \\ (\mathbf{m g}) \end{gathered}$ | $\begin{gathered} \text { Calcium } \\ (\mathrm{mg}) \end{gathered}$ | Iron (mg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Banana Cake | 1 slice; 1/12 | 329 | 4.3 | 47.4 | 14.4 | 1.9 | 41 | 104 | 0.7 | 80 | 3 | 52 | 1 |
| Buttermilk Choc. Cake/frosting | 1 slice; 1/20 | 266 | 3.2 | 33.4 | 14.1 | 4.0 | 28 | 195 | 1.4 | 414 | 0 | 32 | 1 |
| Chocolate Applesauce Cake | 1 slice; 1/12 | 301 | 4.7 | 41.6 | 14.1 | 2.1 | 45 | 146 | 1.6 | 62 | 0 | 43 | 2 |
| Pineapple Cake/topping | 1 slice; 1/20 | 296 | 3.9 | 33.9 | 16.9 | 5.6 | 30 | 175 | 2.3 | 165 | 1 | 47 | 1 |
| Quick Pound Cake | 1 slice; 1/16 | 258 | 3.6 | 38.1 | 10.4 | 2.2 | 69 | 286 | 0.4 | 455 | 0 | 41 | 0 |
| Wheat Carrot Cake/frosting | 1 slice; 1/24 | 211 | 3.4 | 30.1 | 9.5 | 2.1 | 50 | 90 | 1.8 | 1129 | 2 | 34 | 1 |
| Applesauce Dream Bars | 1 bar ; 1/36 | 79 | 1.6 | 12.1 | 2.8 | 0.5 | 0 | 45 | 0.8 | 112 | 0 | 32 | 1 |
| Apple Raisin Bars | 1 bar ; 1/36 | 106 | 1.3 | 16.7 | 4.0 | 0.6 | 15 | 69 | 0.5 | 62 | 0 | 13 | 1 |
| Fruit Nut Bars | 1 bar; 1/36 | 109 | 2.6 | 15.8 | 4.5 | 0.6 | 15 | 71 | 1.2 | 132 | 0 | 43 | 1 |
| Basic Drop Cookie/shortening | 1 cookie; 1/66 | 46 | 0.6 | 6.0 | 2.2 | 0.6 | 8 | 43 | 0.1 | 8 | 0 | 6 | 0 |
| Carrot Raisin Cookies | 1 cookie; 1/48 | 51 | 1.2 | 7.9 | 1.8 | 0.4 | 6 | 34 | 0.6 | 263 | 0 | 21 | 0 |
| Oatmeal Cookies | 1 cookie; 1/66 | 56 | 1.0 | 6.7 | 2.9 | 0.6 | 4 | 24 | 0.5 | 7 | 0 | 12 | 0 |
| Zucchini Cookies | 1 cookie; 1/48 | 70 | 1.0 | 9.5 | 3.3 | 0.7 | 6 | 33 | 0.7 | 17 | 1 | 10 | 0 |
| Boston Brown Bread | 1 slice; 1/12 | 137 | 3.3 | 24.2 | 3.5 | 0.4 | 1 | 154 | 1.9 | 34 | 1 | 120 | 3 |
| Banana Quick Bread - <br> Cake | 1 slice; 1/15 | 194 | 2.9 | 26.7 | 8.6 | 1.3 | 56 | 112 | 0.9 | 65 | 1 | 22 | 1 |
| Banana Quick Bread Muffin | 1 muffin; 1/15 | 155 | 2.9 | 23.0 | 5.9 | 0.9 | 38 | 120 | 1.0 | 56 | 2 | 34 | 1 |
| Biscuits | 1 biscuit; 1/15 | 100 | 2.2 | 13.4 | 4.1 | 1.1 | 1 | 124 | 0.6 | 25 | 0 | 43 | 1 |
| Cake Doughnuts | $1 \text { doughnut; }$ $1 / 14$ | 242 | 2.9 | 22.7 | 15.8 | 2.1 | 21 | 136 | 0.7 | 37 | 0 | 44 | 1 |
| Cornbread | 1 slice; 1/9 | 181 | 5.2 | 27.4 | 5.4 | 1.2 | 65 | 375 | 1.9 | 197 | 0 | 105 | 2 |
| Crepes | 1 crepe; 1/7 | 76 | 4.6 | 9.0 | 2.3 | 0.5 | 42 | 99 | 0.2 | 41 | 1 | 113 | 0 |
| Cream Puffs | 1 puff; 1/18 | 76 | 2.1 | 6.1 | 4.7 | 2.5 | 71 | 67 | 0.2 | 186 | 0 | 9 | 1 |
| Muffins | 1 muffin; 1/12 | 149 | 3.4 | 21.0 | 5.6 | 1.0 | 25 | 163 | 0.7 | 64 | 0 | 63 | 1 |
| Flour Tortillas | 1 tortilla; 1/11 | 128 | 2.4 | 17.3 | 5.3 | 1.3 | 0 | 232 | 0.7 | 0 | 0 | 18 | 1 |
| Pancakes | 1 pancake; 1/8 | 115 | 3.2 | 14.7 | 4.8 | 0.9 | 37 | 203 | 0.5 | 80 | 0 | 59 | 1 |
| Oatmeal Pancakes | 1 pancake, $1 / 10$ | 98 | 3.7 | 12.2 | 4.2 | 0.8 | 29 | 113 | 1.5 | 41 | 0 | 55 | 1 |
| Popovers | 1 popover, 1/11 | 78 | 3.1 | 10.2 | 2.7 | 0.8 | 52 | 90 | 0.4 | 139 | 0 | 35 | 1 |
| Raisin-Nut Loaf | 1 slice; $1 / 15$ | 196 | 3.7 | 32.0 | 6.4 | 1.1 | 20 | 158 | 1.4 | 179 | 1 | 54 | 1 |
| Whole Wheat Quick Bread | 1 slice; 1/15 | 188 | 4.5 | 27.7 | 7.1 | 1.4 | 19 | 120 | 2.0 | 28 | 1 | 46 | 1 |
| Zucchini Carrot Bread | 1 slice; 1/15 | 145 | 3.0 | 16.4 | 8.3 | 1.1 | 37 | 111 | 1.7 | 499 | 2 | 31 | 1 |
| Quick Coffee Cake | 1 slice; 1/8 | 284 | 5.1 | 43.7 | 10.0 | 1.8 | 37 | 263 | 1.0 | 159 | 0 | 97 | 2 |
| Wheat Applesauce Coffee Cake | 1 slice; 1/16 | 175 | 2.6 | 29.0 | 6.4 | 1.1 | 17 | 150 | 2.1 | 212 | 1 | 38 | 1 |
| Refrigerator Yeast Rolls | 1 roll; 1/42 | 108 | 2.7 | 18.8 | 2.4 | 0.6 | 14 | 62 | 0.7 | 25 | 0 | 12 | 1 |


[^0]:    1. Pat Kendall, Colorado State University Cooperative Extension specialist and professor; Willene Dilsaver, lab technician; food science and human nutrition. 4/92. ©Colorado State University Cooperative Extension. 1992. For more information contact your county Cooperative Extension office. Sincere appreciation is extended to Jennifer Anderson and Kathy Stubblefield for their technical assistance in preparing this bulletin.
