

Master Mix

Grains/Breads

Grains/Breads

B-01

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	5 lb 4 oz	1 gal 3 ¼ cups	10 lb 8 oz	2 gal 1 ⅝ qt	1. Place flour, baking powder, salt, cream of tartar, and dry milk in a mixing bowl. Mix with paddle attachment for 3 minutes on low speed. 2. Add shortening to dry ingredients and mix with paddle attachment for 5 minutes on low speed, or until evenly distributed. Mixture will be crumbly. 3. Store in tightly covered container, in the refrigerator. 4. Use Master Mix in recipes.
Baking powder	4 ¾ oz	⅔ cup	9 ½ oz	1 ⅓ cup	
Salt		2 Tbsp	2 ⅝ oz	¼ cup	
Cream of tartar		1 Tbsp 1 ½ tsp		3 Tbsp	
Instant nonfat dry milk	6 oz	2 ½ cups	12 oz	1 qt 1 cup	
Shortening	1 lb 5 oz	3 cups 2 Tbsp	2 lb 10 oz	1 qt 2 ¼ cups	

SERVING:	YIELD:	VOLUME:
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1/2 cup
(See individual alternate recipes that use Master Mix)

50 Servings: 7 lb 6 oz

50 Servings: 1 gallon 2 ¼ quarts

100 Servings: 14 lb 12 oz

100 Servings: 3 gallons 2 cups

Edited 2004

Special Tip:

A 10-qt mixer may be used to produce 1 gal 2 ¼ qt of Master Mix. A 20-qt mixer may be used to produce 3 gal of Master mix.

Cooking Macaroni, Noodles, and Spaghetti

Grains/Breads

Grains/Breads

B-02

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Water, boiling		5 gal		10 gal	1. Add salt to boiling water.
Salt		2 Tbsp 2 tsp	3 ½ oz	⅓ cup	
Enriched elbow macaroni OR	2 lb 10 oz OR	2 qt 1 ¼ cups OR	5 lb 4 oz OR	1 gal 2 ½ cups OR	2. Slowly stir in macaroni, noodles, or spaghetti until water boils again.
Enriched noodles, ¼ inch or wider	2 lb 8 oz	1 gal 3 ½ qt	5 lb	3 gal 3 qt	
OR Enriched spaghetti	OR 4 lb 12 oz	OR 1 gal	OR 9 lb 8 oz	OR 2 gal	
					3. Cook uncovered until tender-firm, about 10 minutes for macaroni, 8 minutes for noodles, and 12 minutes for spaghetti. DO NOT OVERCOOK.
					4. Drain well.
					5. Pour into steamtable pans (12" x 20" x 2 ½"). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
					6. CCP: Hold for hot service at 135° F or higher. OR CCP: Cool to 70° F within 2 hours and from 70° F to 41° F or lower within an additional 4 hours. Portion with No. 8 scoop (½ cup).

SERVING:	YIELD:	VOLUME:
½ cup (No. 8 scoop) provides 1 serving of grains/breads.	50 Servings: 2 steamtable pans	50 Servings: about 1 gallon 2 ¼ quarts

100 Servings: 4 steamtable pans **100 Servings:** about 3 gallons 2 cups

Tested 2004

Special Tip:

To cook the day before: After draining, run under cold water 3 minutes. Let stand in strainer for 5 minutes. Toss with 1 oz oil for each pound of dry pasta.

Cooking Rice (Oven or Steamer)

Grains/Breads

Grains/Breads

B-03

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					1. Do not rinse enriched rice.
Enriched white rice, medium grain, regular OR Enriched white rice, long grain, regular OR Enriched white rice, long grain, parboiled	3 lb 12 oz OR 3 lb 6 oz OR 3 lb 10 oz	2 qt ½ cup OR 2 qt OR 2 qt 1 ¼ cups	7 lb 8 oz OR 6 lb 12 oz OR 7 lb 4 oz	1 gal 1 cup OR 1 gal OR 1 gal 2 ½ cups	2. Place 1 lb 14 oz medium grain, or 1 lb 11 oz long grain, or 1 lb 13 oz par boiled rice in each steamtable pan (12" x 20" x 2 ½"). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Water, boiling		3 qt		1 gal 2 qt	3. Add salt to boiling water. Pour water over rice. (1 qt 2 cups per steamtable pan).
Salt		2 tsp		1 Tbsp 1 tsp	
					4. Cover pans tightly.
					5. Bake: Conventional oven: 350° F for 30 minutes Convection oven: 325° F for 30 minutes Steamer: 5 lb pressure for 25 minutes
					6. Remove from oven or steamer.
					7. CCP: Hold for hot service at 135° F or higher. OR CCP: Cool to 70° F within 2 hours and from 70° F to 41° F or lower within an additional 4 hours. Portion with No. 8 scoop (½ cup).

SERVING:	YIELD:	VOLUME:
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½ cup (No. 8 scoop) provides 1 serving of grains/breads.

50 Servings: 2 steamtable pans

50 Servings: about 1 gallons 2 ¼ quarts

100 Servings: 4 steamtable pans

100 Servings: about 3 gallons 2 cups

Tested 2004

Cooking Rice (Oven or Steamer)

Grains/Breads

Grains/Breads

B-03

Special Tip:

Cooking Brown Rice, long grain, regular

For 50 Servings, use 5 lb 12 oz brown rice and 1 gal 1 ½ qt boiling water and 2 tsp salt. Place 2 lb 14 oz of rice and 2 qt 3 cups of water in each steamtable pan (12" x 20" x 2 ½") use 2 pans. Cover and bake at 350° F or steam at 5 lb pressure for 50 minutes.

For 100 servings, use 11 lb 8 oz brown rice and 2 gal 3 qt boiling water and 1 Tbsp 1 tsp salt. Place 2 lb 14 oz of rice and 2 qt 3 cups of water in each steamtable pan (12" x 20" x 2 ½") use 4 pans. Cover and bake at 350° F or steam at 5 lb pressure for 50 minutes.

Baking Powder Biscuits

Grains/Breads

Grains/Breads

B-04

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	3 lb	2 qt 3 cups	6 lb	1 gal 1 ½ qt	<ol style="list-style-type: none"> Blend flour, dry milk, baking powder, and salt in mixer for 1 minute at low speed. Add shortening and blend into dry ingredients for 2 minutes at low speed. Mixture will be crumbly. Add water and mix for approximately 1 minute on low speed to form soft dough. Scrape bowl as necessary during mixing. Turn out onto lightly floured surface. For 50 servings, knead ball of dough lightly for 1 minute. For 100 servings, divide dough in half and knead each half lightly for 1 minute. Roll or pat out each ball of dough to ½" thickness. Cut with floured 2 ½" biscuit cutter and place on sheet pan (18" x 26" x 1") in rows of 5 across and 10 down. For 50 servings, use 1 pan. For 100 servings, use 2 pans. Bake until lightly browned: Conventional oven: 450° F for 12-14 minutes Convection oven: 400° F for 8-10 minutes
Instant nonfat dry milk	3 oz	1 ¼ cups	6 oz	2 ½ cups	
Baking powder	2 ¾ oz	¼ cup 2 ½ Tbsp	5 ½ oz	¾ cup 1 Tbsp	
Salt		1 Tbsp		2 Tbsp	
Shortening	11 ½ oz	1 ¾ cups	1 lb 7 oz	3 ½ cups	
Water, cold		3 ¾ cups		1 qt 3 ½ cups	

SERVING:

1 biscuit provides 1 ½ servings of grains/breads.

YIELD:

50 Servings: 1 sheet pan

100 Servings: 2 sheet pans

VOLUME:

50 Servings: 50 2 ½ inch biscuits

100 Servings: 100 2 ½ inch biscuits

Edited 2004

Baking Powder Biscuits

Grains/Breads

Grains/Breads

B-04

Variations:

A. Baking Powder Biscuits (Using Master Mix B-01)

For 50 servings, omit steps 1 and 2. Use 3 lb 12 oz (3 qt) Master Mix. Continue with steps 3-6.

For 100 servings, omit steps 1 and 2. Use 7 lb 8 oz (6 qt) Master Mix. Continue with steps 3-6.

B. Cheese Biscuits

For 50 servings, follow steps 1 and 2. In step 3, add 12 oz (3 ½ cups) shredded reduced fat Cheddar cheese to soft dough. Mix lightly to distribute cheese. Continue with steps 4-6.

For 100 servings, follow steps 1 and 2. In step 3, add 1 lb 8 oz (1 qt 3 cups) shredded reduced fat Cheddar cheese to soft dough. Mix lightly to distribute cheese. Continue with steps 4-6.

C. Drop Biscuits

For 50 servings, follow steps 1 and 2. In step 3, use 1 qt ¾ cup cold water. Omit step 4. In step 5, portion with level No. 16 scoop (¼ cup) onto 1 sheet pan (18" x 26" x 1") in rows of 10 down and 5 across. Continue with step 6.

For 100 servings, follow steps 1 and 2. In step 3, use 2 qt 1 ½ cups cold water. Omit step 4. In step 5, portion with level No. 16 scoop (¼ cup) onto 2 sheet pans (18" x 26" x 1") in rows of 5 across and 10 down. Continue with step 6.

D. Wheat Biscuits

For 50 servings, in step 1, use 2 lb 4 oz (2 qt) enriched all-purpose flour and 12 oz (2 ¾ cups) whole wheat flour. Continue with steps 2-6.

For 100 servings, in step 1, use 4 lb 8 oz (4 qt) enriched all-purpose flour and 1 lb 8 oz (1 qt 1 ½ cups) whole wheat flour. Continue with steps 2-6.

Baking Powder Biscuits

Grains/Breads

Grains/Breads

B-04

Nutrients Per Serving

Calories	164	Saturated Fat	1.68 g	Iron	1.44 mg
Protein	3.41 g	Cholesterol	0 mg	Calcium	117 mg
Carbohydrate	22.09 g	Vitamin A	40 IU	Sodium	315 mg
Total Fat	6.80 g	Vitamin C	0.1 mg	Dietary Fiber	0.7 g

Banana Bread Squares

Grains/Breads

Grains/Breads

B-05

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	1 lb 12 oz	1 qt 2 ½ cups	3 lb 8 oz	3 qt 1 cup	1. Blend flour, sugar, dry milk, baking powder, baking soda, and salt in mixer for 1 minute at low speed.
Sugar	1 lb 1 oz	2 ½ cups	2 lb 2 oz	1 qt 1 cup	
Instant nonfat dry milk		¼ cup		½ cup	
Baking powder		1 Tbsp 2 ¼ tsp		3 Tbsp 1 ½ tsp	
Baking soda		1 tsp		2 tsp	
Salt		1 tsp		2 tsp	
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	7 oz	¾ cup 2 Tbsp OR 4 each	14 oz	1 ⅔ cups OR 8 each	2. Combine eggs and water. Add shortening and liquid mixture to dry ingredients. Blend for 30 seconds on low speed. Beat for 1 minute on medium speed.
Water		1 ¼ cups		2 ½ cups	
Shortening	6 ½ oz	1 cup	13 oz	2 cups	
*Fresh bananas, mashed	1 lb 10 oz	2 ¾ cups	3 lb 4 oz	1 qt 1 ½ cups	3. Add mashed bananas and nuts (optional). Blend for 30 seconds on low speed. Beat for 1 minute on medium speed. DO NOT OVERMIX. Batter will be lumpy.
Chopped walnuts (optional)	6 ½ oz	1 ½ cups	13 oz	3 cups	
					4. Pour 5 lb 10 oz (2 qt 2 cups) batter into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
					5. Bake until browned: Conventional oven: 350° F for 35-45 minutes Convection oven: 300° F for 25-35 minutes
					6. Cool. Cut each pan 5 x 10 (50 pieces per pan).
					7. For loaf pans: Pour 1 lb 14 oz (3 ⅓ cups) batter into each loaf pan (4" x 10" x 4") which has been lightly coated with pan release spray. For 50 servings, use 3 loaf pans. For 100 servings, use 6 loaf pans.
					Bake until browned: Conventional oven: 350° F for 50-60 minutes Convection oven: 300° F 40-50 minutes

Banana Bread Squares

Grains/Breads

Grains/Breads

B-05

Remove from pans. Cool completely.

Cut each loaf into 17 slices, about 1/2" thick.

Comments:

*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Bananas	2 lb 9 oz	5 lb 2 oz

SERVING:

1 piece provides 1 serving of grains/breads.

YIELD:

50 Servings: 1 steamtable pan
OR
3 loaves

100 Servings: 2 steamtable pans
OR
6 loaves

Edited 2004

VOLUME:

50 Servings: about 2 quarts 2 cups (batter)
50 pieces

100 Servings: about 1 gallon 1 quart (batter)
100 pieces

Special Tip:

For 50 servings, use 2 oz (2/3 cup) dried whole eggs and 2/3 cup water in place of eggs.

For 100 servings, use 4 oz (1 1/3 cups) dried whole eggs and 1 1/3 cups water in place of eggs.

Variations:

A. Banana Bread Squares (Using Master Mix B-01)

50 servings: Omit step 1. Blend 2 lb 7 1/2 oz (2 qt) Master Mix with 1 lb 1 oz (2 1/2 cups) sugar. In step 2, omit shortening. Continue with steps 3-6.

100 servings: Omit steps 1. Blend 4 lb 15 oz (4 qt) Master Mix with 2 lb 2 oz (1 qt 1 cup) sugar. In step 2, omit shortening. Continue with steps 3-6.

Banana Bread Squares

Grains/Breads

Grains/Breads

B-05

Nutrients Per Serving

Calories	149	Saturated Fat	1.10 g	Iron	0.90 mg
Protein	2.41 g	Cholesterol	17 mg	Calcium	38 mg
Carbohydrate	25.56 g	Vitamin A	45 IU	Sodium	130 mg
Total Fat	4.31 g	Vitamin C	1.4 mg	Dietary Fiber	0.8 g

Bread Stuffing

Grains/Breads

Grains/Breads

B-06

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched soft bread cubes	4 lb 11 oz	3 gal 1 ½ qt	9 lb 6 oz	6 gal 3 qt	1. Combine bread cubes, celery, onions, raisins (optional), poultry seasoning, pepper, granulated garlic, margarine or butter, and thyme (optional). Mix lightly until well blended. 2. Add chicken stock to bread mixture. Mix gently to moisten. 3. Spread 6 lb 7 oz (3 qt 3 cups) of stuffing evenly into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans. 4. Bake: Conventional oven: 350° F for 30-40 minutes Convection oven: 300° F for 20-30 minutes CCP: Heat to 165° F or higher for at least 15 seconds. 5. CCP: Hold for hot service at 135° F or higher. Cut each pan 5 x 5 (25 pieces). 6. If desired, serve with Chicken or Turkey Gravy (see G-03A).
*Fresh celery, chopped	1 lb	3 ¾ cups 2 Tbsp	2 lb	1 qt 3 ¾ cups	
*Fresh onions, chopped OR Dehydrated onions	12 oz OR 2 ¼ oz	2 cups OR ⅓ cup	1 lb 8 oz OR 4 ½ oz	1 qt OR ⅔ cup	
†Raisins, plumped (optional)	6 ½ oz	2 ¼ cups	13 oz	1 qt ½ cup	
Poultry seasoning		1 Tbsp		2 Tbsp	
Ground black or white pepper		1 ½ tsp		1 Tbsp	
Granulated garlic		1 Tbsp		2 Tbsp	
Margarine or butter, melted	10 ½ oz	1 ⅓ cups	1 lb 5 oz	2 ¾ cups	
Dried thyme (optional)		2 Tbsp		¼ cup	
Chicken stock, non-MSG		3 qt		1 gal 2 qt	

Bread Stuffing

Grains/Breads

Grains/Breads

B-06

Comments:
*See Marketing Guide.

†To plump raisins, cover the fruit with very hot tap water. Soak 2-5 minutes. DO NOT OVERSOAK. Drain well before using.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Celery	1 lb 4 oz	2 lb 8 oz
Mature onions	14 oz	1 lb 12 oz

SERVING:

1 piece provides 1 ½ servings of grains/breads.

YIELD:

50 Servings: 2 steamtable pans

100 Servings: 4 steamtable pans

VOLUME:

50 Servings: about 1 gallon ½ cup
50 pieces

100 Servings: about 2 gallons 1 cup
100 pieces

Tested 2004

Nutrients Per Serving

Calories	165	Saturated Fat	1.23 g	Iron	1.40 mg
Protein	3.97 g	Cholesterol	1 mg	Calcium	56 mg
Carbohydrate	22.65 g	Vitamin A	226 IU	Sodium	327 mg
Total Fat	6.45 g	Vitamin C	1.0 mg	Dietary Fiber	1.2 g

Cornbread Stuffing

Grains/Breads

Grains/Breads

B-06A

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched soft bread cubes	2 lb 5 ½ oz	1 gal 1 ½ qt	4 lb 11 oz	2 gal 3 qt	1. Combine bread cubes, crumbled cornbread, celery, onions, poultry seasoning, pepper, granulated garlic, margarine or butter, and thyme (optional). Mix lightly until well blended.
Cornbread (B-09), crumbled	2 lb 5 ½ oz	2 qt 2 ½ cups	4 lb 11 oz	1 gal 1 ¼ qt	
*Fresh celery, chopped	1 lb	3 ¾ cups	2 lb	1 qt 3 ½ cups	2. Add chicken stock to bread mixture. Mix gently to moisten. 3. Spread 6 lb 7 oz (3 qt 3 cups) of stuffing evenly into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans. 4. Bake: Conventional oven: 350° F for 30-40 minutes Convection oven: 300° F for 20-30 minutes CCP: Heat to 165° F or higher for at least 15 seconds. 5. CCP: Hold for hot service at 135° F or higher. Cut each pan 5 x 5 (25 pieces). 6. If desired, serve with Chicken or Turkey Gravy (see G-03A).
*Fresh onions, chopped OR	12 oz OR	2 cups OR	1 lb 8 oz OR	1 qt OR	
Dehydrated onions	2 ¼ oz	⅓ cup	4 ½ oz	⅔ cup	
Poultry seasoning		1 Tbsp		2 Tbsp	
Ground black or white pepper		1 ½ tsp		1 Tbsp	
Granulated garlic		1 Tbsp		2 Tbsp	
Margarine or butter, melted	10 ½ oz	1 ⅓ cups	1 lb 5 oz	2 ⅔ cups	
Dried thyme (optional)		2 Tbsp		¼ cup	
Chicken stock, non-MSG		3 qt		1 gal 2 qt	

Cornbread Stuffing

Grains/Breads

Grains/Breads

B-06A

Comments:
*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Celery	1 lb 4 oz	2 lb 8 oz
Mature onions	14 oz	1 lb 12 oz

SERVING:

1 piece provides 1 ½ servings of grains/breads.

YIELD:

50 Servings: 2 steamtable pans

100 Servings: 4 steamtable pans

VOLUME:

50 Servings: about 1 gallon ½ cup
50 pieces

100 Servings: about 2 gallons 1 cup
100 pieces

Edited 2004

Nutrients Per Serving

Calories	162	Saturated Fat	1.34 g	Iron	1.20 mg
Protein	3.59 g	Cholesterol	7 mg	Calcium	68 mg
Carbohydrate	21.19 g	Vitamin A	230 IU	Sodium	289 mg
Total Fat	7.10 g	Vitamin C	1.0 mg	Dietary Fiber	1.2 g

Brown Bread

Grains/Breads

Grains/Breads

B-07

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	8 oz	1 ¾ cups 2 Tbsp	1 lb	3 ¾ cups	<ol style="list-style-type: none"> Blend flour, whole wheat flour, cornmeal, baking soda, and salt in mixer for 1 minute on low speed. Combine milk and lemon juice or vinegar (to sour the milk). Let stand for 5 minutes. Add molasses and vegetable oil to milk mixture. Blend well. Add liquid mixture and raisins (optional) to dry ingredients. Blend for 3 minutes on low speed. DO NOT OVERMIX. Batter will be lumpy. Pour 5 lb (2 qt ½ cup) batter into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans. Bake or steam until a knife inserted near center comes out clean: Conventional oven: 375° F for 40-50 minutes Convection oven: 325° F for 25-35 minutes Steamer: 5 lb pressure for 55-65 minutes Cool. Cut each pan 5 x 10 (50 pieces per pan). For loaf pans: Pour 2 lb 8 oz (approximately 1 qt ¼ cup) batter into each loaf pan (4" x 10" x 4") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Whole wheat flour	8 oz	2 cups	1 lb	1 qt	
Cornmeal	12 oz	2 ¾ cups 2 Tbsp	1 lb 8 oz	1 qt 1 ¾ cups	
Baking soda		1 Tbsp		2 Tbsp	
Salt		1 tsp		2 tsp	
Instant nonfat dry milk, reconstituted		1 qt		2 qt	
Frozen lemon juice concentrate, reconstituted OR White vinegar		¼ cup OR ¼ cup		½ cup OR ½ cup	
Molasses	1 lb	1 ½ cups	2 lb	3 cups	
Vegetable oil		2 Tbsp		¼ cup	
†Raisins, plumped (optional)	8 oz	1 ¾ cups	1 lb	2 ½ cups	

Brown Bread

Grains/Breads

Grains/Breads

B-07

	<p>Bake or steam until knife inserted near center comes out clean: Conventional oven: 375° F for 60 minutes Convection oven: 325° F for 45 minutes Steamer: 5 lb pressure for 1 hour 10 minutes</p>
	<p>Remove from pans. Cool completely. Cut each loaf into 25 slices, about $\frac{3}{8}$"-$\frac{1}{2}$" thick.</p>

Comments:

†To plump raisins, cover the fruit with very hot tap water. Soak 2-5 minutes. DO NOT OVERSOAK. Drain well before using.

SERVING:	YIELD:	VOLUME:
1 piece provides 1 serving of grains/breads.	50 Servings: 1 steamtable pan OR 2 loaves 100 Servings: 2 steamtable pans OR 4 loaves	50 Servings: about 2 quarts $\frac{1}{2}$ cup (batter) 50 pieces 100 Servings: about 1 gallon 1 cup (batter) 100 pieces

Edited 2004

Nutrients Per Serving					
Calories	92	Saturated Fat	0.13 g	Iron	1.08 mg
Protein	2.29 g	Cholesterol	0 mg	Calcium	44 mg
Carbohydrate	19.27 g	Vitamin A	28 IU	Sodium	137 mg
Total Fat	0.88 g	Vitamin C	0.5 mg	Dietary Fiber	1.2 g

Cinnamon Rolls

Grains/Breads

Grains/Breads

B-08

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Active dry yeast (see Special Tip)		½ cup	3 ¼ oz	½ cup 2 Tbsp	1. Dissolve dry yeast in warm water. Let stand for 4-5 minutes.
Water, warm (110° F)		1 ½ cups		3 cups	
Enriched all-purpose flour	3 lb 10 oz	3 qt 1 ½ cups	7 lb 4 oz	1 gal 2 ¾ qt	2. Place flour, dry milk, sugar, and salt in mixer bowl. Blend with dough hook for approximately 2 minutes on low speed.
Instant nonfat dry milk	3 ¼ oz	1 ½ cups	6 ½ oz	2 ¾ cups	
Sugar	5 ¾ oz	¾ cup 2 Tbsp	11 ½ oz	1 ½ cups 2 Tbsp	
Salt		2 Tbsp	2 ½ oz	¼ cup	
Vegetable oil		¾ cup 2 Tbsp		1 ¾ cups	3. Add oil and blend for approximately 2 minutes on low speed.
Water (68° F)		2 ½ cups		1 qt 1 cup	4. Add water. Mix for 1 minute on low speed.
					5. Add dissolved yeast and mix for 2 minutes on low speed.
					6. Knead dough on medium speed for 8 minutes, or until dough is smooth and elastic.
					7. Place in warm area (about 90° F) for 45-60 minutes.
					8. Place dough on lightly floured surface. Divide into balls, 3 lb 2 oz each. For 50 servings, divide into 2 balls. For 100 servings, divide into 4 balls.
Ground cinnamon		¼ cup		½ cup	9. Combine cinnamon and sugar. Mix well. Set aside for step 11.
Sugar	5 ¼ oz	¾ cup	10 ½ oz	1 ½ cups	
					10. Roll each ball of dough into a rectangle 25" x 10", ¼" thick.
Vegetable oil		1 Tbsp		2 Tbsp	11. Lightly brush each rectangle with oil. Sprinkle approximately ½ cup cinnamon-sugar mixture over each rectangle.
Raisins	10 oz	2 cups	1 lb 4 ½ oz	1 qt	12. Sprinkle 1 cup raisins over cinnamon-sugar mixture on each rectangle.

Cinnamon Rolls

Grains/Breads

Grains/Breads

B-08

			13. Roll each rectangle on the long side to form a long slender roll. Cut each roll into 25 uniform pieces 1" thick.
			14. Place in rows of 5 across and 10 down on sheet pan (18" x 26" x 1") which has been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
			15. Place in a warm area (about 90° F) until double in size, 30-50 minutes.
			16. Bake until lightly browned: Conventional oven: 400° F for 18-20 minutes Convection oven: 350° F for 12-14 minutes
Margarine or butter, melted (optional)	1 Tbsp	2 Tbsp	17. Optional: Brush lightly with melted margarine or butter (approximately 1 Tbsp per pan) while warm.

SERVING:	YIELD:	VOLUME:
1 roll provides 2 servings of grains/breads.	50 Servings: 6 lb 4 oz (dough) 1 sheet pan	50 Servings: about 50 rolls
	100 Servings: 12 lb 8 oz (dough) 2 sheet pans	100 Servings: about 100 rolls

Tested 2004

Special Tip:

To use high-activity (instant) yeast, follow directions below or manufacturer's instructions.

For 50 servings, omit step 1. In step 2, add ¼ cup high-activity (instant) yeast. Continue with step 3. In step 4, add 1 qt water (110° F). Omit step 5. In step 6, knead for 10 minutes. Continue with steps 7-17.

For 100 servings, omit step 1. In step 2, add 2 ½ oz (¼ cup 3 ⅔ Tbsp) high-activity (instant) yeast. Continue with step 3. In step 4, add 2 qt water (110° F). Omit step 5. In step 6, knead for 10 minutes. Continue with steps 7-17.

Cinnamon Rolls

Grains/Breads

Grains/Breads

B-08

Nutrients Per Serving

Calories	209	Saturated Fat	0.65 g	Iron	2.08 mg
Protein	4.73 g	Cholesterol	0 mg	Calcium	39 mg
Carbohydrate	37.70 g	Vitamin A	46 IU	Sodium	292 mg
Total Fat	4.53 g	Vitamin C	0.5 mg	Dietary Fiber	1.7 g

Cornbread

Grains/Breads

Grains/Breads

B-09

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	1 lb	3 ¾ cups	2 lb	1 qt 3 ½ cups	1. Blend flour, cornmeal or corn grits, sugar, baking powder, and salt in mixer for 1 minute on low speed. 2. Mix eggs, milk, oil, cheese (optional), and chili peppers (optional). Add to dry ingredients and blend for 30 seconds on low speed. Beat until dry ingredients are moistened for 2-3 minutes on medium speed. DO NOT OVERMIX. Batter will be lumpy. 3. Pour 2 lb 7 oz (1 qt 1 cup) batter into each sheet pan (18" x 26" x 1") which has been lightly coated with pan release spray. For 50 servings use 2 pans. For 100 servings, use 4 pans 4. Bake until lightly browned: Conventional oven: 400° F for 30-35 minutes Convection oven: 350° F for 20-25 minutes 5. Cut each sheet pan 5 x 5 (25 pieces per pan).
Cornmeal OR Enriched corn grits	1 lb OR 1 lb	3 ¾ cups OR 2 ¾ cups	2 lb OR 2 lb	1 qt 3 ½ cups OR 1 qt 1 ½ cups	
Sugar	5 ¼ oz	¾ cup	10 ½ oz	1 ½ cups	
Baking powder		2 Tbsp 2 tsp	2 oz	⅓ cup	
Salt		1 ¼ tsp		2 ½ tsp	
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	5 ¼ oz	¾ cup OR 3 each	10 ½ oz	1 ¼ cups OR 6 each	
Instant nonfat dry milk, reconstituted		3 ¾ cups		1 qt 3 ½ cups	
Vegetable oil		½ cup		1 cup	
Reduced fat Cheddar cheese, shredded (optional)	12 oz	3 cups	1 lb 8 oz	1 qt 2 cups	
*Fresh green chili peppers, chopped (optional)	4 oz	¾ cup 3 Tbsp	8 oz	1 ¾ cups 2 Tbsp	

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Green chili peppers	5 oz	10 oz

Cornbread

Grains/Breads

Grains/Breads

B-09

SERVING:

1 piece provides 1 serving of grains/breads.

YIELD:

50 Servings: 4 lb 14 oz (batter)
2 sheet pans

100 Servings: 9 lb 12 oz (batter)
4 sheet pans

VOLUME:

50 Servings: about 2 quarts 2 cups (batter)
50 pieces

100 Servings: 1 gallon 1 quart (batter)
100 pieces

Edited 2004

Special Tip:

For 50 servings, use 1 ½ oz (½ cup) dried whole eggs and ½ cup water in place of eggs.

For 100 servings, use 3 oz (1 cup) dried whole eggs and 1 cup water in place of eggs.

Nutrients Per Serving

Calories	108	Saturated Fat	0.45 g	Iron	0.90 mg
Protein	2.65 g	Cholesterol	13 mg	Calcium	68 mg
Carbohydrate	18.03 g	Vitamin A	51 IU	Sodium	151 mg
Total Fat	2.82 g	Vitamin C	0.1 mg	Dietary Fiber	1.0 g

Fried Rice

Meat/Meat Alternate-Vegetable-Grains/Breads

Grains/Breads

B-10

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Vegetable oil		¼ cup		½ cup	1. Heat oil. Add onions. Cook for 3-5 minutes.
*Fresh onions, chopped OR Dehydrated onions	8 oz OR 1 ½ oz	1 ½ cups OR ¾ cup	1 lb OR 3 oz	2 ⅔ cups OR 1 ½ cups	
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	2 lb 13 oz	1 qt 1 ½ cups OR 26 each	5 lb 10 oz	2 qt 2 ⅔ cups OR 52 each	
*Cooked enriched white rice	11 lb 13 oz	1 gal 3 ¼ qt	23 lb 10 oz	3 gal 2 ½ qt	
Frozen peas	1 lb 2 oz	2 ¾ cups	2 lb 4 oz	1 qt 1 ½ cups	3. For cooked rice, use Cooking Rice recipe (see B-03). Combine rice, peas, soy sauce, and carrots. Pour into medium steamtable pans (12" x 20" x 4"). For 50 servings, use 2 pans. For 100 servings, use 4 pans.
Low-sodium soy sauce		1 ½ cups		2 ⅔ cups	
Frozen diced carrots	1 lb 2 oz	2 ¾ cups 2 Tbsp	2 lb 4 oz	1 qt 1 ¾ cups	
					4. Cover.
					5. Bake: Convection oven: 325° F for 25 minutes Conventional oven: 350° F for 35 minutes CCP: Heat to 165° F or higher for at least 15 seconds.
					6. CCP: Hold for hot service at 135° F or higher. Portion with 6 oz portioning spoon (¾ cup).

Comments:

*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 servings	100 servings
Mature onions	10 oz	1 lb 4 oz
White rice, medium grain	4 lb 5 oz	8 lb 10 oz
White rice, long grain	3 lb 14 oz	7 lb 12 oz
White rice, long grain parboiled	4 lb 3 oz	8 lb 6 oz

Fried Rice

Meat/Meat Alternate-Vegetable-Grains/Breads

Grains/Breads

B-10

SERVING:	YIELD:	VOLUME:
¾ cup (6 oz portioning spoon) provides 1 oz equivalent meat/meat alternate, ½ cup of vegetable, and 1 serving of grains/breads.	50 Servings: about 17 lb	50 Servings: about 2 gallons 1 ½ quarts 2 steamtable pans
	100 Servings: about 34 lb	100 Servings: about 4 gallons 3 quarts 4 steamtable pans

Tested 2004

Special Tip:

For 50 servings, use 13 oz (1 qt ⅓ cup) dried whole eggs and 1 qt ⅓ cup water in place of eggs.

For 100 servings, use 1 lb 10 oz (2 qt ⅔ cup) dried whole eggs and 2 qt ⅔ cup water in place of eggs.

Nutrients Per Serving			
Calories	184	Saturated Fat	1.02 g
Protein	6.73 g	Cholesterol	108 mg
Carbohydrate	29.38 g	Vitamin A	1873 IU
Total Fat	3.95 g	Vitamin C	1.5 mg
		Iron	1.83 mg
		Calcium	29 mg
		Sodium	409 mg
		Dietary Fiber	1.4 g

Italian Bread

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Active dry yeast (see Special Tip)		2 Tbsp 2 tsp		½ cup	1. Dissolve dry yeast in warm water. Let stand for 4-5 minutes.
Water, warm (110° F)		1 cup		2 cups	
Enriched all-purpose flour	3 lb 12 oz	3 qt 2 cups	7 lb 8 oz	1 gal 3 qt	2. Place flour, dry milk, sugar, and salt in mixer bowl. Blend with dough hook for approximately 2 minutes on low speed.
Instant nonfat dry milk	3 oz	1 ¼ cups	6 oz	2 ½ cups	
Sugar		¼ cup	3 ½ oz	½ cup	
Salt		1 Tbsp		2 Tbsp	
Water (70-75° F)		3 cups		1 qt 2 cups	3. Add water and mix for 1 minute on low speed.
					4. Add dissolved yeast and mix for 2 minutes on low speed.
Shortening		¼ cup	3 ¼ oz	½ cup	5. Add shortening and mix for 2 minutes on low speed.
					6. Knead dough for 8 minutes on medium speed or until dough is smooth and elastic.
					7. Place dough in warm area (about 90° F) for 45-60 minutes.
					8. Punch down dough to remove air bubbles and let rest 15 minutes.
					9. Divide dough into pieces, 3 lb 6 oz each. For 50 servings, divide into 2 pieces. For 100 servings, divide into 4 pieces. Shape each piece into a smooth roll 24" long.
Cornmeal		2 Tbsp		¼ cup	10. Place lengthwise on sheet pans (18" x 26" x 1") which have been lightly coated with pan release spray and sprinkled with cornmeal, approximately 2 Tbsp per sheet pan. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
					11. Place sheet pans in a warm area (about 90° F) until double in size, 30-50 minutes.

Italian Bread

Grains/Breads

Grains/Breads

B-11

Water, as needed	12. Brush top of each loaf with water. Using scissors or a very sharp knife, cut 5 or 6 diagonal slits ¼" deep on top of each loaf.
	13. Bake until browned: Conventional oven: 400° F for 25 minutes Convection oven: 350° F for 20 minutes
	14. Cool. Cut each loaf into 25 slices, ⅛" thick.

SERVING:	YIELD:	VOLUME:
1 slice provides 2 servings of grains/breads.	50 Servings: 6 lb 12 oz (dough) 2 loaves	50 Servings: 50 pieces
	100 Servings: 13 lb 8 oz (dough) 4 loaves	100 Servings: 100 pieces

Tested 2004

Special Tip:

To use high-activity (instant) yeast, follow directions below or manufacturer's instructions.

For 50 servings, omit step 1. In step 2, add 2 Tbsp high-activity (instant) yeast. In step 3, add 1 qt water (110° F). Omit step 4. Continue with step 5. In step 6, knead for 10 minutes. Continue with steps 7-14.

For 100 servings, omit step 1. In step 2, add ¼ cup high-activity (instant) yeast. In step 3, add 2 qt water (110° F). Omit step 4. Continue with step 5. In step 6, knead for 10 minutes. Continue with steps 7-14.

Italian Bread

Grains/Breads

Grains/Breads

B-11

Nutrients Per Serving

Calories	145	Saturated Fat	0.32 g	Iron	1.70 mg
Protein	4.37 g	Cholesterol	0 mg	Calcium	27 mg
Carbohydrate	28.23 g	Vitamin A	41 IU	Sodium	150 mg
Total Fat	1.40 g	Vitamin C	0.1 mg	Dietary Fiber	1.1 g

Muffin Squares

Grains/Breads

Grains/Breads

B-12

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	1 lb 12 oz	1 qt 2 ½ cups	3 lb 8 oz	3 qt 1 cup	<p>1. Blend flour, dry milk, baking powder, sugar, and salt in mixer for 5 minutes on low speed. Add raisins (optional).</p> <p>2. Combine eggs and water. Add slowly to dry ingredients while mixing on low speed. Mix only until dry ingredients are moistened, 15-20 seconds.</p> <p>3. Add oil slowly while mixing approximately 40 seconds on low speed. DO NOT OVERMIX. Batter will be lumpy.</p> <p>4. Pour 4 lb 7 oz (2 qt 2 cups) batter into each steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans.</p> <p>5. Bake until lightly browned: Conventional oven: 425° F for 25 minutes Convection oven: 350° F for 15 minutes</p> <p>6. Cut each pan 5 x 10 (50 portions per pan).</p> <p>For muffin pans: Portion batter with No. 20 scoop (3 ½ Tbsp) into muffin pans lightly coated with pan release spray. Fill no more than ¾ full.</p> <p>Bake until lightly browned: Conventional oven: 400° F for 18-20 minutes Convection oven: 350° F for 12-15 minutes</p> <p>To cool, remove muffins from pans immediately and place on cooling racks.</p>
Instant nonfat dry milk		¾ cup	3 ½ oz	1 ½ cups	
Baking powder		3 Tbsp 2 tsp	3 oz	¼ cup 3 ⅓ Tbsp	
Sugar	7 oz	1 cup	14 oz	2 cups	
Salt		2 tsp		1 Tbsp 1 tsp	
†Raisins, plumped (optional)	8 oz	2 ⅔ cups	1 lb	1 qt 1 ⅓ cups	
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	5 ¼ oz	⅔ cup OR 3 each	10 ½ oz	1 ¼ cups OR 6 each	
Water		2 ¾ cups		1 qt 1 ½ cups	
Vegetable oil		¾ cup		1 ½ cups	

Muffin Squares

Grains/Breads

Grains/Breads

B-12

Comments:

†To plump raisins, cover the fruit with very hot tap water. Soak 2-5 minutes. DO NOT OVERSOAK. Drain well before using.

SERVING:	YIELD:	VOLUME:
1 piece provides 1 serving of grains/breads.	50 Servings: 4 lb 7 oz (batter) 1 steamtable pan	50 Servings: about 2 quarts 2 cups (batter) 50 pieces or 50 muffins
	100 Servings: 8 lb 14 oz (batter) 2 steamtable pans	100 Servings: about 1 gallon 1 quart (batter) 100 pieces or 100 muffins

Edited 2004

Special Tip:

For 50 servings, use 1 ½ oz (½ cup) dried whole eggs and ½ cup water in place of eggs.

For 100 servings, use 3 oz (1 cup) dried whole eggs and 1 cup water in place of eggs.

Variations:

A. Muffin Squares (Using Master Mix)

50 servings: Omit step 1. Blend 2 lb 7 ½ oz (2 qt) Master Mix with 7 oz (1 cup) sugar. Continue with step 2. Omit step 3. Continue with step 4-6.

100 servings: Omit step 1. Blend 4 lb 15 oz (4 qt) Master Mix with 14 oz (2 cups) sugar. Continue with step 2. Omit step 3. Continue with steps 4-6.

B. Wheat Muffin Squares

50 servings: In step 1, use 1 lb 5 oz (1 qt ¾ cup) enriched all-purpose flour and 7 oz (1 ½ cups 2 Tbsp) whole wheat flour. Continue with steps 2-6.

100 servings: In step 1, use 2 lb 10 oz (2 qt 1 ½ cups) enriched all-purpose flour and 14 oz (3 ¼ cups) whole wheat flour. Continue with steps 2-6.

Muffin Squares

Grains/Breads

Grains/Breads

B-12

Nutrients Per Serving

Calories	110	Saturated Fat	0.58 g	Iron	0.88 mg
Protein	2.36 g	Cholesterol	13 mg	Calcium	66 mg
Carbohydrate	16.87 g	Vitamin A	42 IU	Sodium	193 mg
Total Fat	3.73 g	Vitamin C	0.1 mg	Dietary Fiber	0.4 g

Pancakes

Grains/Breads

Grains/Breads

B-13

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	2 lb	1 qt 3 ½ cups	4 lb	3 qt 3 cups	1. Blend flour, baking powder, salt, dry milk, and sugar in mixer for 3 minutes on low speed.
Baking powder		¼ cup	3 ¼ oz	½ cup	
Salt		1 ½ tsp		1 Tbsp	2. Combine eggs, water, and oil. Add to dry ingredients.
Instant nonfat dry milk	2 ½ oz	1 cup	5 oz	2 cups	
Sugar	2 ¼ oz	⅓ cup	4 ½ oz	⅔ cup	3. Blend for 2 minutes on low speed. Batter will be lumpy. DO NOT OVERMIX.
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	14 oz	1 ⅔ cups OR 8 each	1 lb 12 oz	3 ½ cups OR 16 each	
Water		1 qt 1 ¼ cups		2 qt 2 ½ cups	4. If desired, lightly coat griddle surface with pan release spray. Portion batter with level No. 20 scoop (3 Tbsp 1 tsp) onto griddle, which has been heated to 375° F.
Vegetable oil		1 cup		2 cups	
					5. Cook until surface of pancakes is covered with bubbles and bottom side is lightly browned, approximately 2 minutes. Turn and cook until lightly browned on other side, approximately 1 minute.
					6. Serve immediately or reheat in covered steamtable pans (12" x 20" x 2 ½"): Conventional Oven: 350° F for 10-15 minutes Convection Oven: 300° F for 8-10 minutes

SERVING:	YIELD:	VOLUME:
1 pancake provides 1 serving of grains/breads.	50 Servings: 50 (4 inch) pancakes	50 Servings: about 2 quarts 2 cups (batter)
	100 Servings: 100 (4 inch) pancakes	100 Servings: about 1 gallon 1 quart (batter)

Pancakes

Grains/Breads

Grains/Breads

B-13

Edited 2004

Special Tip:

For 50 servings, use 4 oz (1 $\frac{1}{3}$ cups) dried whole eggs and 1 $\frac{1}{3}$ cups water in place of eggs.

For 100 servings, use 8 oz (2 $\frac{2}{3}$ cups) dried whole eggs and 2 $\frac{2}{3}$ cups water in place of eggs.

Variation

A. Pancakes (Using Master Mix)

50 servings: Omit step 1. Use 2 lb 13 oz (2 qt 1 cup) Master Mix and 2 $\frac{1}{4}$ oz ($\frac{1}{3}$ cup) sugar. In step 2, omit oil. In step 3, blend for 3 minutes on medium speed. Continue with steps 4-6.

100 servings: Omit step 1. Use 5 lb 10 oz (4 qt 2 cups) Master Mix and 4 $\frac{1}{2}$ oz ($\frac{2}{3}$ cup) sugar. In step 2, omit oil. In step 3, blend for 3 minutes on medium speed. Continue with steps 4-6.

Nutrients Per Serving

Calories	127	Saturated Fat	0.89 g	Iron	1.09 mg
Protein	3.36 g	Cholesterol	34 mg	Calcium	89 mg
Carbohydrate	16.26 g	Vitamin A	84 IU	Sodium	205 mg
Total Fat	5.34 g	Vitamin C	0.1 mg	Dietary Fiber	0.5 g

Pizza Crust

Grains/Breads

Grains/Breads

B-14

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Enriched all-purpose flour	3 lb 8 oz	3 qt 1 cup	7 lb	1 gal 2 ½ qt	1. Place flour, salt, sugar, and dry yeast in large mixer bowl. Mix with a dough hook for 30 seconds on low speed.
Salt		1 ½ tsp		1 Tbsp	
Sugar		2 Tbsp 1 tsp	2 oz	¼ cup 2 tsp	2. Combine warm water and oil. Add liquids to the dry ingredients. Mix on low speed for 6 minutes.
Active dry yeast (see Special Tip)		2 Tbsp 1 ½ tsp	2 oz	¼ cup 1 Tbsp	
Water, warm (130° F)		1 qt ¼ cup		2 qt ½ cup	3. Divide and shape dough. For 50 servings, divide into 2 balls, 2 lb 6 oz each and one ball, 1 lb 3 oz. For 100 servings, divide into 5 balls, 2 lb 6 oz each. Let rest for 20 minutes.
Vegetable oil		⅓ cup		⅔ cup	
Cornmeal	2 ½ oz	½ cup 2 Tbsp	5 oz	1 ¼ cups	4. Lightly coat sheet pans (18" x 26" x 1") and half-sheet pan (13" x 18" x 1") with pan release spray. For 50 servings, use 2 pans and 1 half-pan. For 100 servings, use 5 pans. Sprinkle each pan with 1 oz (3 Tbsp) cornmeal and each half-pan with ½ oz (1 Tbsp 1 ½ tsp) cornmeal.
					5. Place 2 lb 6 oz dough ball in center of each pan and 1 lb 3 oz dough ball in center of half-pan. Flatten dough by rolling or spreading dough ⅛" thick to rim of pans. Keep edges thicker than center.
					6. For topping, baking, and portioning directions, see Pizza With Ground Beef Topping (D-31) or Pizza With Cheese Topping (D-30).
					Cut each sheet pan 4 x 5 (20 pieces). Cut each half-sheet pan 2 x 5 (10 pieces).

Pizza Crust

Grains/Breads

Grains/Breads

B-14

SERVING:

1 portion provides 2 servings of grains/breads.

YIELD:

50 Servings: about 5 lb 15 oz

100 Servings: about 11 lb 14 oz

Tested 2004

VOLUME:

50 Servings: 2 sheet pans and 1 half-sheet pan

100 Servings: 5 sheet pans

Special Tip:

To use high-activity (instant) yeast, follow manufacturer's instructions.

Nutrients Per Serving

Calories	137	Saturated Fat	0.26 g	Iron	1.62 mg
Protein	3.61 g	Cholesterol	0 mg	Calcium	6 mg
Carbohydrate	26.11 g	Vitamin A	3 IU	Sodium	71 mg
Total Fat	1.83 g	Vitamin C	0.0 mg	Dietary Fiber	1.1 g

Pourable Pizza Crust

Grains/Breads

Grains/Breads

B-15

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Active dry yeast (see Special Tip)		3 Tbsp	2 ½ oz	¼ cup 2 Tbsp	1. Mix dry yeast, flour, dry milk, sugar, and salt together.
Enriched all-purpose flour	3 lb 8 oz	3 qt 1 cup	7 lb	1 gal 2 ½ qt	
Instant nonfat dry milk	9 ¼ oz	3 ¾ cups 2 Tbsp	1 lb 2 ½ oz	1 qt 3 ¾ cups	
Sugar	5 ¼ oz	¾ cup	10 ½ oz	1 ½ cups	
Salt		1 ¼ tsp		2 ½ tsp	
Vegetable oil		2 Tbsp		¼ cup	2. Add oil to dry mixture blend for 4 minutes on low speed.
Water, warm (130° F)		2 qt		1 gal	
Cornmeal	2 ½ oz	½ cup 2 Tbsp	5 oz	1 ¼ cups	4. For 50 servings, lightly coat 2 sheet pans (18" x 26" x 1") and 1 half-sheet pan (13" x 18" x 1") with pan release spray. For 100 servings, lightly coat 5 sheet pans (18" x 26" x 1") with pan release spray. Sprinkle each full sheet pan with 1 oz (approximately ¼ cup) cornmeal and sprinkle each half-sheet pan with ½ oz (approximately 2 Tbsp) cornmeal.
					6. Prebake until crust is set: Conventional oven: 475° F for 10 minutes Convection oven: 425° F for 7 minutes
					7. Top each prebaked crust with desired topping or use Pizza With Ground Beef Topping (D-31), or Pizza With Cheese Topping (D-30).
					8. Bake until heated through and cheese is melted: Conventional oven: 475° F for 10-15 minutes Convection oven: 425° F for 5 minutes
					9. Portion by cutting each sheet pan 4 x 5 (20 pieces per pan). Portion by cutting each half-sheet pan 2 x 5 (10 pieces per pan).

Pourable Pizza Crust

Grains/Breads

Grains/Breads

B-15

SERVING:

1 piece provides 2 servings of grains/breads.

YIELD:

50 Servings: about 8 lb 8 oz

100 Servings: about 17 lb

VOLUME:

50 Servings: 2 sheet pans and 1 half-sheet pan

100 Servings: 5 sheet pans

Tested 2004

Special Tip:

To use high-activity (instant) yeast, follow manufacturer's instructions.

Nutrients Per Serving

Calories	158	Saturated Fat	0.16 g	Iron	1.67 mg
Protein	5.51 g	Cholesterol	1 mg	Calcium	71 mg
Carbohydrate	31.31 g	Vitamin A	127 IU	Sodium	89 mg
Total Fat	0.96 g	Vitamin C	0.3 mg	Dietary Fiber	1.1 g

Rolls (Yeast)

Grains/Breads

Grains/Breads

B-16

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Active dry yeast (see Special Tip)		½ cup	3 ¼ oz	½ cup 2 Tbsp	1. Dissolve dry yeast in warm water. Let stand for 4-5 minutes.
Water, warm (110° F)		1 ½ cups		3 cups	
Enriched all-purpose flour	3 lb 10 oz	3 qt 1 ½ cups	7 lb 4 oz	1 gal 2 ¾ qt	2. Place flour, dry milk, sugar, and salt in mixer bowl. Blend with dough hook for approximately 2 minutes on low speed.
Instant nonfat dry milk	3 ¼ oz	1 ½ cups	6 ½ oz	2 ⅔ cups	
Sugar	5 ¾ oz	¾ cup 2 Tbsp	11 ½ oz	1 ¾ cups	
Salt		2 Tbsp	2 ½ oz	¼ cup	
Vegetable oil		¾ cup 2 Tbsp		1 ⅔ cups	3. Add oil and blend for approximately 2 minutes on low speed.
Water (68° F)		2 ½ cups		1 qt 1 cup	4. Add water. Mix for 1 minute on low speed.
					5. Add dissolved yeast and mix for 2 minutes on low speed.
					6. Knead dough on medium speed for 8 minutes, or until dough is smooth and elastic.
					7. Place dough in warm area (about 90° F) for 45-60 minutes.
					8. Punch down dough to remove air bubbles.
					9. Form rolls from dough by pinching off 2 oz pieces and shaping. Place rolls in rows of 5 across and 10 down on sheet pans (18" x 26" x 1") which have been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
					10. Place in a warm area (about 90° F) until double in size, 30-50 minutes.
					11. Bake until lightly browned: Conventional oven: 400° F for 18-20 minutes Convection oven: 350° F for 12-14 minutes
Margarine or butter, melted (optional)		1 Tbsp		2 Tbsp	12. Optional: Brush lightly with melted margarine or butter (approximately 1 Tbsp per pan) while warm.

Rolls (Yeast)

Grains/Breads

Grains/Breads

B-16

SERVING:	YIELD:	VOLUME:
1 roll provides 2 servings of grains/breads.	50 Servings: about 6 lb 4 oz (dough)	50 Servings: about 50 rolls
	100 Servings: about 12 lb 8 oz (dough)	100 Servings: about 100 rolls

Tested 2004

Special Tip:

To use high-activity (instant) yeast, follow directions below or manufacturer's instructions.

For 50 servings, omit step 1. In step 2, add ¼ cup high-activity (instant) yeast. Continue with step 3. In step 4, add 1 qt water (110° F). Omit step 5. In step 6, knead for 10 minutes. Continue with steps 7-12.

For 100 servings, omit step 1. In step 2, add 2 ½ oz (½ cup) high-activity (instant) yeast. Continue with step 3. In step 4, add 2 qt water (110° F). Omit step 5. In step 6, knead for 10 minutes. Continue with steps 7-12.

Variations:

A. Frankfurter Rolls

50 and 100 servings: Follow steps 1-8. In step 9, shape 2 oz pieces of dough to approximately 2 ½" x 6 ½ ". Place rolls in rows of 8 down and 4 across on sheet pans which have been lightly coated with pan release spray. Continue with steps 10-12.

B. Hamburger Rolls

50 and 100 servings: Follow steps 1-8. In step 9, shape and flatten 2 oz pieces of dough to approximately 4" in diameter. Place rolls in rows of 6 down and 4 across on sheet pans which have been lightly coated with pan release spray. Continue with steps 10-12.

C. Wheat Rolls

50 servings: Follow step 1. In step 2, use 1 lb 13 oz (1 qt 2 ½ cups) enriched all-purpose or bread flour and 1 lb 13 oz (1 qt 2 ¾ cups) whole wheat flour. Continue with steps 3-12.

100 servings: Follow step 1. In step 2, use 3 lb 10 oz (3 qt 1 cup) enriched all-purpose or bread flour and 3 lb 10 oz (3 qt 1 ½ cups) whole wheat flour. Continue with steps 3-12.

Rolls (Yeast)

Grains/Breads

Grains/Breads

B-16

Nutrients Per Serving

Calories	176	Saturated Fat	0.60 g	Iron	1.75 mg
Protein	4.53 g	Cholesterol	0 mg	Calcium	29 mg
Carbohydrate	29.80 g	Vitamin A	44 IU	Sodium	291 mg
Total Fat	4.21 g	Vitamin C	0.1 mg	Dietary Fiber	1.2 g

Spanish Rice

Vegetable-Grains/Breads

Grains/Breads

B-17

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Vegetable oil		2 Tbsp		¼ cup	1. Heat oil. Add onions, green peppers, and celery. Cook for 5 minutes.
*Fresh onions, chopped OR Dehydrated onions	7 ½ oz OR 1 ½ oz	1 ¼ cups OR ½ cup	15 oz OR 3 oz	2 ½ cups OR 1 cup	
*Fresh green pepper, chopped	6 oz	1 ¼ cups	12 oz	2 ½ cups	2. Add beef stock or water and seasonings. Bring to boil.
*Fresh celery, chopped	8 oz	2 cups	1 lb	1 qt	
Beef stock, non-MSG or water		1 qt 2 cups		3 qt	3. Stir in rice, salt, and pepper. Return to boil. Boil for 5 minutes. Reduce heat and cover tightly. Cook over low heat for 10 minutes. CCP: Heat to 165° F or higher for at least 15 seconds.
†Seasonings Chili powder Ground cumin Paprika Onion powder		1 Tbsp 2 ¼ tsp ¾ tsp ¾ tsp		2 Tbsp 1 Tbsp 1 ½ tsp 1 ½ tsp 1 ½ tsp	
Enriched white rice, long grain, regular OR Enriched white rice, long grain, parboiled	1 lb 11 oz OR 1 lb 13 oz	1 qt OR 1 qt ¾ cup	3 lb 6 oz OR 3 lb 10 oz	2 qt OR 2 qt 1 ½ cups	4. Stir in diced tomatoes, tomato paste, and water. Cook over low heat for 10-15 minutes. Pour 8 lb (about 1 gallon ¾ cup) into a steamtable pan (12" x 20" x 2 ½") which has been lightly coated with pan release spray. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
Salt		2 tsp		1 Tbsp 1 tsp	
Ground black or white pepper		1 tsp		2 tsp	5. CCP: Hold for hot service at 135° F or higher. Portion with No. 12 scoop (⅓ cup).
Canned diced tomatoes, with juice	1 lb 3 ½ oz	1 ¾ cups	2 lb 7 oz	3 ½ cups	
Canned tomato paste	7 oz	¾ cup 1 Tbsp	14 oz	1 ½ cups 2 Tbsp	
Water		1 cup		2 cups	

Spanish Rice

Vegetable-Grains/Breads

Grains/Breads

B-17

Comments:
*See Marketing Guide.

†Mexican Seasoning Mix (see G-01A, Sauces, Gravies, and Seasonings Mixes) may be used to replace these ingredients. For 50 servings, use 2 Tbsp 1 tsp Mexican Seasoning Mix. For 100 servings, use ¼ cup 1 ½ tsp Mexican Seasoning Mix.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Mature onions	9 oz	1 lb 2 oz
Green peppers	8 oz	1 lb
Celery	10 oz	1 lb 4 oz

SERVING:

½ cup (No. 12 scoop) provides ⅛ cup of vegetable and ½ serving of grains/breads.

YIELD:

50 Servings: about 8 lb

100 Servings: about 16 lb

VOLUME:

50 Servings: about 1 gallon ¾ cup
1 steamtable pan

100 Servings: about 2 gallons 1 ½ cups
2 steamtable pans

Tested 2004

Nutrients Per Serving

Calories	69	Saturated Fat	0.15 g	Iron	0.78 mg
Protein	1.58 g	Cholesterol	0 mg	Calcium	14 mg
Carbohydrate	13.69 g	Vitamin A	266 IU	Sodium	134 mg
Total Fat	0.84 g	Vitamin C	6.7 mg	Dietary Fiber	0.7 g

Sweet Potato-Plum Bread Squares

Vegetable/Fruit-Grains/Breads

Grains/Breads

B-18

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched all-purpose flour	2 lb 14 oz	2 qt 2 ½ cups	5 lb 12 oz	1 gal 1 ¼ qt	1. Blend flour, sugar, brown sugar, dry milk, baking powder, baking soda, salt, allspice, nutmeg (optional), cinnamon, and shortening in a mixer for 3-5 minutes on low speed. 3. Add ½ of the sweet potatoes and mix for 2 minutes on low speed. 4. Add eggs and water. Mix for 1 minute on low speed. 5. Add dehydrated plums, remaining sweet potatoes, and nuts (optional). Mix for 3 minutes on low speed. 6. Lightly coat steamtable pans with pan release spray. Pour 10 lb 10 oz (3 qt 1 cup) batter into each steamtable pan (12" x 20" x 2 ½"). For 50 servings, use 1 pan. For 100 servings, use 2 pans. 7. Bake: Conventional oven: 350° F for 1 hour. Convection oven: 300° F for 40 minutes
Sugar	14 ½ oz	2 cups	1 lb 13 oz	1 qt	
Brown sugar, packed	15 oz	3 ½ cups	1 lb 14 oz	1 qt 3 cups	
Instant nonfat dry milk		¼ cup 2 Tbsp	1 ¾ oz	¾ cup	
Baking powder		2 Tbsp ½ tsp	2 oz	¼ cup 1 tsp	
Baking soda		3 Tbsp	2 ¾ oz	¼ cup 2 Tbsp	
Salt		1 ½ tsp		1 Tbsp	
Ground allspice		1 ½ tsp		1 Tbsp	
Ground nutmeg (optional)		1 ½ tsp		1 Tbsp	
Ground cinnamon		2 tsp		1 Tbsp 1 tsp	
Shortening	15 oz	2 ¼ cups	1 lb 14 oz	1 qt ½ cup	
Canned mashed sweet potatoes OR Canned cut sweet potatoes, drained, mashed	3 lb 4 oz OR 3 lb 4 oz	1 qt 2 ¼ cups (½ No. 10 can) OR 1 qt 2 ¼ cups	6 lb 8 oz OR 5 lb 8 oz	3 qt ½ cup (1 No. 10 can) OR 3 qt ½ cup	
Frozen whole eggs, thawed OR Fresh large eggs (see Special Tip)	8 oz	¾ cup 3 Tbsp OR 5 each	1 lb	1 ¾ cups 2 Tbsp OR 9 each	
Water		2 cups		1 qt	
Dehydrated plums without pits (prunes), chopped OR †Raisins, plumped	7 ½ oz OR 5 oz	1 ¼ cups OR 1 ½ cups	15 oz OR 10 oz	2 ½ cups OR 2 ⅔ cups	
Chopped walnuts (optional)	6 ½ oz	1 ½ cups 2 Tbsp	13 oz	3 ¼ cups	

Sweet Potato-Plum Bread Squares

Vegetable/Fruit-Grains/Breads

Grains/Breads

B-18

	<p>8. Cool. Cut each pan 5 x 10 (50 pieces per pan).</p> <p>9. For loaf pans: Lightly coat with pan release spray. Pour 5 lb 5 oz (1 qt 2 ½ cups) batter into each loaf pan (4" x 10" x 4"). For 50 servings, use 2 pans. For 100 servings, use 4 pans.</p> <p>Bake: Conventional oven: 350° F for 1 hour 20 minutes Convection oven: 300° F for 45 minutes</p> <p>Remove from pans. Cool completely. Cut each loaf into 25 slices, about ¾"-½" thick.</p>
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Comments:

†To plump raisins, cover the fruit with very hot tap water. Soak 2-5 minutes. DO NOT OVERSOAK. Drain well before using.

SERVING:	YIELD:	VOLUME:
1 piece provides ⅓ cup of vegetable and fruit and 1 ¼ serving of grains/breads.	<p>50 Servings: about 7 lb 6 oz 50 pieces</p> <p>100 Servings: about 14 lb 12 oz 100 pieces</p>	<p>50 Servings: about 3 quarts 1 cup (batter) 1 steamtable pan or 2 loaves</p> <p>100 Servings: about 1 gallon 2 ½ quarts (batter) 2 steamtable pans or 4 loaves</p>

Tested 2004

Special Tip:

50 servings: Use 2 ½ oz (¾ cup 2 Tbsp) dried whole eggs and ¾ cup 2 Tbsp water in place of eggs.

100 servings: Use 5 oz (1 ¾ cups) dried whole eggs and 1 ¾ cups water in place of eggs.

Sweet Potato-Plum Bread Squares

Vegetable/Fruit-Grains/Breads

Grains/Breads

B-18

Nutrients Per Serving

Calories	283	Saturated Fat	2.33 g	Iron	2.05 mg
Protein	4.14 g	Cholesterol	19 mg	Calcium	66 mg
Carbohydrate	46.49 g	Vitamin A	4586 IU	Sodium	391 mg
Total Fat	9.31 g	Vitamin C	1.8 mg	Dietary Fiber	1.6 g

White Bread

Grains/Breads

Grains/Breads

B-19

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
					For best results, have all ingredients and utensils at room temperature.
Active dry yeast (see Special Tip)		2 Tbsp 2 tsp	2 ½ oz	½ cup	1. Dissolve dry yeast in warm water. Let stand for 4-5 minutes.
Water, warm (110° F)		½ cup		1 cup	
Enriched all-purpose flour	2 lb 3 oz	2 qt	4 lb 6 oz	1 gal	2. Place flour, dry milk, sugar, and salt in mixer bowl. Blend with dough hook for approximately 2 minutes on low speed.
Instant nonfat dry milk		½ cup 2 Tbsp	3 oz	1 ¼ cups	
Sugar	2 ¼ oz	½ cup	4 ½ oz	¾ cup	
Salt		1 Tbsp		2 Tbsp	
Water (70-75° F)		2 cups		1 qt	3. Add water and mix for 1 minute on low speed.
					4. Add dissolved yeast and mix for 2 minutes on low speed.
Shortening	2 ¼ oz	½ cup	4 ½ oz	¾ cup	5. Add shortening and mix for 2 minutes on low speed.
					6. Knead dough on medium speed for 8 minutes, or until dough is smooth and elastic.
					7. Place dough in warm area (about 90° F) for 45-60 minutes.
					8. Divide dough into pieces, 1 lb 15 oz each. For 50 servings, divide into 2 pieces. For 100 servings, divide into 4 pieces. Shape each piece into a loaf and place in loaf pan (4 ½" x 16 ½" x 4") which has been lightly coated with pan release spray. For 50 servings, use 2 pans. For 100 servings, use 4 pans.
					9. Place pans in a warm area (about 90° F) until double in size, 45-55 minutes.
					10. Bake until lightly browned: Conventional oven: 400° F for 20-25 minutes Convection oven: 375° F for 18-22 minutes
					11. Cool. Cut each loaf into 25 slices, ¾" thick.
Margarine or butter, melted (optional)		1 Tbsp		2 Tbsp	12. Optional: Brush top of each loaf lightly with melted margarine or butter (approximately 1 ½ tsp per loaf) while warm.

White Bread

Grains/Breads

Grains/Breads

B-19

SERVING:	YIELD:	VOLUME:
1 piece provides 1 serving of grains/breads.	50 Servings: 3 lb 14 oz (dough) 50 pieces	50 Servings: 2 loaves
	100 Servings: 7 lb 12 oz (dough) 100 pieces	100 Servings: 4 loaves

Tested 2004

Special Tip:

To use high-activity (instant) yeast, follow directions below or manufacturer's instructions.

For 50 servings, omit step 1. In step 2, add 2 Tbsp high-activity (instant) yeast. In step 3, add 2 ½ cups water (110° F). Omit step 4. Continue with step 5. In step 6, knead for 10 minutes. Continue with steps 7-12.

For 100 servings, omit step 1. In step 2, add ¼ cup high-activity (instant) yeast. In step 3, add 1 qt 1 cup water (110° F). Omit step 4. Continue with step 5. In step 6, knead for 10 minutes. Continue with steps 7-12.

Variations:

A. Oat Bread

50 servings: Follow step 1. In step 2, use 1 lb 13 oz (1 qt 2 ½ cups) enriched all-purpose flour and 7 oz (2 ¾ cups) rolled oats. Continue with steps 3-12.

100 servings: Follow step 1. In step 2, use 3 lb 10 oz (3 qt 1 cup) enriched all-purpose flour and 14 oz (1 qt 1 ½ cups) rolled oats. Continue with steps 3-12.

B. Oat Bread With Honey

50 servings: Follow step 1. In step 2, use 1 lb 13 oz (1 qt 2 ½ cups) enriched all-purpose flour and 7 oz (2 ¾ cups) rolled oats. Omit sugar. In step 3, combine 3 ¾ oz (½ cup) honey with water. Continue with steps 4-12.

100 servings: Follow step 1. In step 2, use 3 lb 10 oz (3 qt 1 cup) enriched all-purpose flour and 14 oz (1 qt 1 ½ cups) rolled oats. Omit sugar. In step 3, combine 7 ½ oz (¾ cup) honey with water. Continue with steps 4-12.

C. Raisin Bread

50 servings: Follow step 1. In step 2, add 1 ½ tsp ground cinnamon. Continue with steps 3-5. In step 6, add 13 oz (2 cups) †plumped raisins during last 2 minutes of mixing. Continue with steps 7-12.

100 servings: Follow step 1. In step 2, add 1 Tbsp ground cinnamon. Continue with steps 3-5. In step 6, add 1 lb 10 oz (1 qt) †plumped raisins during last 2 minutes of mixing. Continue with steps 7-12.

†To plump raisins, cover the fruit with very hot tap water. Soak 2-5 minutes. DO NOT OVERSOAK. Drain well before using.

White Bread

D. Wheat Bread

50 servings: Follow step 1. In step 2, use 1 lb 10 oz (1 qt 1 ¾ cups) enriched all-purpose flour and 9 oz (2 ¼ cups) whole wheat flour. Continue with steps 3-12.

100 servings: Follow step 1. In step 2, use 3 lb 4 oz (2 qt 3 ½ cups) enriched all-purpose flour and 1 lb 2 oz (1 qt ¼ cups) whole wheat flour. Continue with steps 3-12.

E. Wheat Bread With Honey

50 servings: Follow step 1. In step 2, use 1 lb 10 oz (1 qt 1 ¾ cups) enriched all-purpose flour and 9 oz (2 ¼ cups) whole wheat flour. Omit sugar. In step 3, mix 3 ¾ oz (½ cup) honey with water. Continue with steps 4-12.

100 servings: Follow step 1. In step 2, use 3 lb 4 oz (2 qt 3 ½ cups) enriched all-purpose flour and 1 lb 2 oz (1 qt ¼ cup) whole wheat flour. Omit sugar. In step 3, mix 7 ½ oz (¾ cup) honey with water. Continue with steps 4-12.

Nutrients Per Serving

Calories	93	Saturated Fat	0.36 g	Iron	1.03 mg
Protein	2.59 g	Cholesterol	0 mg	Calcium	14 mg
Carbohydrate	17.11 g	Vitamin A	20 IU	Sodium	145 mg
Total Fat	1.51 g	Vitamin C	0.1 mg	Dietary Fiber	0.7 g

Oatmeal Muffin Squares

Grains/Breads

Grains/Breads

B-20

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Rolled oats	8 oz	3 cups	1 lb	1 qt 2 cups	1. Place oats in a stainless steel bowl and pour hot water over them. Let stand 20 minutes. Do not drain.
Water, hot		3 ½ cups		1 qt 3 cups	
Enriched all-purpose flour	1 lb 3 oz	1 qt ⅓ cup	2 lb 6 oz	2 qt ⅔ cup	2. Combine flour, baking soda, cinnamon, nutmeg, and salt in a bowl.
Baking soda		1 ¼ tsp		2 ½ tsp	
Ground cinnamon		1 ¼ tsp		2 ½ tsp	
Ground nutmeg		1 ¼ tsp		2 ½ tsp	
Salt		1 ¼ tsp		2 ½ tsp	
Margarine or butter	6 oz	¾ cup	12 oz	1 ½ cups	
Brown sugar, packed	1 lb 2 oz	2 ¼ cups	2 lb 4 oz	1 qt ½ cup	
Sugar	1 lb 2 oz	2 ¼ cups	2 lb 4 oz	1 qt ½ cup	
Vanilla		2 ½ tsp		1 Tbsp 2 tsp	
Frozen egg whites, thawed OR Fresh large egg whites	9 oz	1 cup 2 Tbsp OR 7 each	1 lb 2 oz	2 ¼ cups OR 14 each	3. In a separate mixing bowl, using a paddle attachment, beat the margarine or butter and sugars for 10 minutes. Scrape down the sides of the bowl. Add the vanilla, egg whites, yogurt, and applesauce. Beat for 3 minutes.
Lowfat plain yogurt	2 oz	¼ cup	4 oz	½ cup	
Canned applesauce	2 oz	¼ cup	4 oz	½ cup	
					4. Add the oat mixture and blend for 1 minute on low speed. Add the flour mixture and blend for 1 minute. Scrape down the sides of the bowl.
Rolled oats	3 oz	1 cup 2 Tbsp	6 oz	2 ¼ cups	5. For topping: Combine rolled oats, flour, brown sugar, and margarine or butter and mix until crumbs are size of small peas.
Enriched all-purpose flour	1 oz	¼ cup	2 oz	½ cup	
Brown sugar, packed	2 oz	¼ cup	4 oz	½ cup	
Margarine or butter	2 oz	¼ cup	4 oz	½ cup	

Oatmeal Muffin Squares

Grains/Breads

Grains/Breads

B-20

	6. Lightly coat each steamtable pan (12" x 20" x 2 1/2") with pan release spray. Pour 3 qt 1/2 cup (7 lb 7 oz) batter into each pan and spread evenly. Sprinkle 1 3/4 cups of topping over each pan. For 50 servings, use 1 pan. For 100 servings, use 2 pans.
	7. Bake until golden brown and muffin pulls away from sides of pan: Conventional oven: 325° F for 45 minutes Convection oven: 325° F for 35 minutes
	8. Cut each pan 5 x 10 (50 pieces per pan).

SERVING:	YIELD:	VOLUME:
1 piece provides 1 serving of grains/breads.	50 Servings: about 7 lb 1 oz 1 steamtable pan	50 Servings: about 3 quarts 1/2 cup (batter) 50 pieces
	100 Servings: about 14 lb 2 oz 2 steamtable pans	100 Servings: about 1 gallon 2 1/4 quarts (batter) 100 pieces

Edited 2004

Variation:

A. Peach Muffin Squares

In step 6, refrigerate batter (already in pans) for 1 hour prior to adding topping. Spread 3 lb 2 oz of canned, sliced peaches (drained) over each pan. (Fruit may be pureed.) Sprinkle 1 3/4 cups of topping over fruit. Bake as directed.

B. Blueberry Muffin Squares

In step 6, refrigerate batter (already in pans) for 1 hour prior to adding topping. Spread 3 lb 2 oz of frozen blueberries (thawed and drained) over each pan. (Fruit may be pureed.) Sprinkle 1 3/4 cups of topping over fruit. Bake as directed.

Oatmeal Muffin Squares

Grains/Breads

Grains/Breads

B-20

Nutrients Per Serving

Calories	185	Saturated Fat	0.86 g	Iron	1.08 mg
Protein	2.87 g	Cholesterol	0 mg	Calcium	20 mg
Carbohydrate	34.51 g	Vitamin A	163 IU	Sodium	146 mg
Total Fat	4.23 g	Vitamin C	0.1 mg	Dietary Fiber	1.0 g

Orange Rice Pilaf

Grains/Breads

Grains/Breads

B-21

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
*Fresh onions, chopped OR Dehydrated onions	8 oz OR 1 ½ oz	1 ¼ cups OR ¾ cup	1 lb OR 3 oz	2 ¾ cups OR 1 ½ cups	1. Place onions, water, orange juice, seasonings, and bay leaves in a stock pot. Boil for 5 minutes or until onions are tender. Remove bay leaves. 2. Weigh out 3 lb 6 oz of regular rice OR 3 lb 10 oz of parboiled rice into each steamtable pan (12" x 20" x 2 ½"). For 50 servings, use 1 pan. For 100 servings, use 2 pans. Pour 3 qt ½ cup liquid from step 1 into each pan. 3. Bake: Conventional oven: 350° F for 45 minutes Convection oven: 350° F for 30 minutes Steamer: 30 minutes 4. CCP: Hold for hot service at 135° F or higher. Portion with No. 8 scoop (½ cup).
Water		3 ½ cups		1 qt 3 cups	
Orange juice		2 qt 1 cup		1 gal 2 cups	
Salt		2 tsp		1 Tbsp 1 tsp	
Ground black or white pepper		1 tsp		2 tsp	
Dried bay leaves		4 each		8 each	
Enriched white rice, long grain, regular OR Enriched white rice, long grain, parboiled	3 lb 6 oz OR 3 lb 10 oz	2 qt OR 2 qt 1 ¼ cups	6 lb 12 oz OR 7 lb 4 oz	1 gal OR 1 gal 2 ½ cups	
Sliced almonds, toasted (optional, see Special Tip)	2 oz	½ cup	4 oz	1 cup	

Comments:

*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Mature onions	10 oz	1 lb 4 oz

SERVING:	YIELD:	VOLUME:
½ cup (No. 8 scoop) provides 1 serving of grains/breads.	50 Servings: about 9 lb 12 oz	50 Servings: about 1 gallon 2 ¼ quarts 1 steamtable pan

Orange Rice Pilaf

Grains/Breads

Grains/Breads

B-21

100 Servings: about 19 lb 8 oz

100 Servings: about 3 gallons 2 cups
2 steamtable pans

Tested 2004

Special Tip:

One-half cup (2 oz) of toasted almonds may be added to each pan of pilaf after cooking, for color and taste. To toast, spread almonds on a half-sheet pan (18" x 13" x 1"). Bake in a conventional oven at 350° F for 15 minutes, until lightly browned.

Nutrients Per Serving					
Calories	126	Saturated Fat	0.07 g	Iron	1.06 mg
Protein	2.52 g	Cholesterol	0 mg	Calcium	14 mg
Carbohydrate	27.85 g	Vitamin A	40 IU	Sodium	94 mg
Total Fat	0.27 g	Vitamin C	17.7 mg	Dietary Fiber	0.5 g

Brown Rice Pilaf

Grains/Breads

Grains/Breads

B-22

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Brown rice, long grain, regular	2 lb 14 oz	1 qt 3 ¼ cups	5 lb 12 oz	3 qt 2 ½ cups	1. Place 1 lb 7 oz of brown rice in each steamtable pan (12" x 20" x 2 ½"). For 50 servings use 2 pans. For 100 servings, use 4 pans.
Enriched white rice, long grain, regular OR Enriched white rice, long grain, parboiled	1 lb 11 oz OR 1 lb 13 oz	1 qt OR 1 qt ¾ cup	3 lb 6 oz OR 3 lb 10 oz	2 qt OR 2 qt 1 ½ cups	
Chicken stock, non-MSG		1 gal 1 ½ cups		2 gal 3 cups	2. Place 13 1/2 oz regular rice OR 14 1/2 oz of parboiled rice into each steamtable pan (12" x 20" x 2 ½").
Ground black or white pepper		½ tsp		1 tsp	
*Fresh onions, diced 1/4 " OR Dehydrated onions	4 oz OR 1 oz	¾ cup OR 2 Tbsp	8 oz OR 2 oz	1 ½ cups OR ¼ cup	3. Heat the chicken stock, pepper, and onions in a pot. Bring to a boil.
					4. Add 2 qt 1 cup of hot chicken stock mixture to each pan. Cover with foil or metal lid.
					5. Bake: Conventional oven: 350° F for 50 minutes Convection oven: 350° F for 40 minutes Steamer: 40 minutes CCP: Heat to 165° F or higher for at least 15 seconds.
					6. CCP: Hold for hot service at 135° F or higher. Portion with No. 8 scoop (½ cup).

Comments:

*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Mature onions	5 oz	10 oz

SERVING:

½ cup (No. 8 scoop) provides 1 serving of grains/breads.

YIELD:

50 Servings: about 12 lb 7 oz

VOLUME:

50 Servings: about 1 gallon 2 ¼ quarts
2 steamtable pans

Brown Rice Pilaf

Grains/Breads

Grains/Breads

B-22

100 Servings: about 24 lb 14 oz

100 Servings: about 3 gallons 2 cups
4 steamtable pans

Tested 2004

Nutrients Per Serving

Calories	146	Saturated Fat	0.21 g	Iron	0.83 mg
Protein	3.50 g	Cholesterol	0 mg	Calcium	16 mg
Carbohydrate	30.37 g	Vitamin A	0 IU	Sodium	55 mg
Total Fat	0.97 g	Vitamin C	0.3 mg	Dietary Fiber	1.6 g

Rice-Vegetable Casserole

Vegetable-Grains/Breads

Grains/Breads

B-23

Ingredients	50 Servings		100 Servings		Directions
	Weight	Measure	Weight	Measure	
Enriched white rice, long grain, regular OR Enriched white rice, long grain, parboiled	2 lb 8 oz OR 2 lb 11 oz	1 qt 2 cups OR 1 qt 2 ¾ cups	5 lb OR 5 lb 6 oz	3 qt OR 3 qt 1 ½ cups	1. Put 2 lb 8 oz regular rice or 2 lb 11 oz parboiled rice into steamtable pan (12" x 20" x 2 ½"). For 50 servings, use 1 pan. For 100 servings, use 2 pans. Cover with foil or a metal lid. Steam for 20 minutes. 2. Add 2 qt 1 cup chicken stock per pan. 3. In a sauce pan, sauté carrots and peas in oil over low heat, about 5 minutes. 4. Add ½ tsp pepper and 1 qt 3 cups (2 lb 8 oz) of cooked vegetables to each pan of hot rice. Stir to combine thoroughly. CCP: Heat to 165° F or higher for at least 15 seconds. 5. CCP: Hold for hot service at 135° F or higher. Portion with No. 6 scoop (¾ cup).
Chicken stock, non-MSG		2 qt 1 cup		1 gal 2 cups	
Vegetable oil		¼ cup		½ cup	
*Fresh carrots, diced	1 lb 4 oz	1 qt ¾ cup	2 lb 8 oz	2 qt 1 ½ cups	
Frozen peas	1 lb 4 oz	3 ¼ cups	2 lb 8 oz	1 qt 2 ½ cups	
Ground black or white pepper		½ tsp		1 tsp	

Comments:

*See Marketing Guide.

Marketing Guide for Selected Items

Food as Purchased for	50 Servings	100 Servings
Carrots	1 lb 9 oz	3 lb 2 oz

SERVING:	YIELD:	VOLUME:
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¾ cup (No. 6 scoop) provides ⅙ cup of vegetable and ¾ serving of grains/breads.

50 Servings: about 13 lb 14 oz

50 Servings: about 2 gallons 1 cup
1 steamtable pan

100 Servings: about 27 lb 12 oz

100 Servings: about 4 gallons 2 cups
2 steamtable pans

Tested 2004

Rice-Vegetable Casserole

Vegetable-Grains/Breads

Grains/Breads

B-23

Nutrients Per Serving

Calories	102	Saturated Fat	0.22 g	Iron	0.96 mg
Protein	2.44 g	Cholesterol	0 mg	Calcium	13 mg
Carbohydrate	19.63 g	Vitamin A	2608 IU	Sodium	40 mg
Total Fat	1.37 g	Vitamin C	1.4 mg	Dietary Fiber	1.2 g