High-Protein Roll - Control vs. Reduced Sodium

Enhance a nutrition label without sacrificing taste, using the naturally salty flavor of delactosed permeate. A high-protein roll made with delactosed permeate contains 76% less sodium than a similar roll made with salt — a reduction from 150mg sodium per serving to just 35mg.



INGREDIENTS

	Usage Levels (%)	Reduced Sodium
Bread Flour	36.25	31.27
Milk, 2%	14.55	_
Milk, nonfat	_	21.49
Cottage Cheese, 1% fat	14.07	11.24
Whole Wheat Flour	9.68	7.33
Milk Protein Isolate	_	6.06
Butter, unsalted	7.48	5.47
Honey	6.29	4.89
Eggs, whole	5.66	4.69
Rolled Oats	4.55	3.42
Whey Protein Concentrate	_	2.64
Delactosed Permeate	_	0.78
Baker's Yeast	0.89	0.73
Salt	0.58	_
Total	100.00	100.00

NUTRITIONAL CONTENT

Control

Nutrition Facts

Serving Size (50g) Servings Per Container

Amount Per Serving		
Calories 140	Calories	from Fat 35
		% Daily Value*
Total Fat 4g		6%
Saturated Fat	2g	10%
Trans Fat 0g		
Cholesterol 20m	ıg	7%
Sodium 150mg		6%
Total Carbohydi	ate 22g	7%
Dietary Fiber 1	g	4%
Sugars 3g		
Duntain Fa		

Protein 5g

Vitamin A 2%	•	Vitamin C 0%
Calcium 2%	•	Iron 6%
*Desert Deile Meles		

*Percent Daily Values are based on a 2,000 calori diet. Your daily values may be higher or lower depending on your calorie needs: Calories: 2,000 2,500

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydr	ate	300g	375g
Dietary Fiber		25g	30g
Calories per gra			
Fat 9 • (Carbohydrate	4 · Prot	ein 4

Reduced Sodium

Nutrition Facts

Serving Size (50g) Servings Per Containe

Amount Per Serving	3	
Calories 130	Calories	from Fat 30
		% Daily Value
Total Fat 3g		5%
Saturated Fat	t 1.5g	8%
Trans Fat 0g		
Cholesterol 20	mg	7%
Sodium 35mg		1%
Total Carbohyo	irate 19g	6%
Dietary Fiber	1g	4%
Sugars 3g		

Protein 8g

Vitamin A 2%	•	Vitamin C 6%
Coloium 40/		Iron CO/

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
0-1			

Calories per gram: Fat 9 • Carbohydrate 4 • Protein 4

PREPARATION

- 1. Scald milk (140°F), cool to 100°F.
- 2. Dry-blend bread flour, whole wheat flour, oats and yeast.
- 3. Melt butter.
- 4. Combine cottage cheese, egg, honey, salt, butter and milk; add to dry ingredients and mix at low speed with a dough hook for 12 minutes.
- 5. Oil surface and cover. Allow dough to rise until double in size.
- 6. Form 53g pieces into a roll. Cover and let rise 20 minutes
- 7. Bake at 400°F on parchment paper-covered baking sheets for 13 to 14 minutes.

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed at Dairy Products Technology Center, California Polytechnic State University. ©2014 U.S. Dairy Export Council.

