



DAIRY PRODUCTS, INC.



Nutrose Benefits: Milk permeate increases moisture retention, improves browning and results in a total recipe cost reduction because less of the more expensive macro ingredients are needed.

Suggested Labeling: Milk Permeate Powder, Dairy Solids, Nonfat Milk Solids, De-Proteinized Skim Milk Powder

Allergens: Contains milk

Nutrition Facts

Serving Size (50g)	
Servings Per Container	
Amount Per Serving	
Calories 130	Calories from Fat 15
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 0g	1%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 200mg	8%
Total Carbohydrate 24g	8%
Dietary Fiber 1g	4%
Sugars 2g	
Protein 4g	
Vitamin A 0%	• Vitamin C 0%
Calcium 2%	• Iron 8%
*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
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Breadstick with Milk Permeate

Grassland Dairy Products, Inc.'s Nutrose is manufactured from the production of milk protein concentrates (MPC). Milk permeate powder is the carbohydrate portion of milk obtained by fractionating and concentrating the lactose, vitamins and minerals which are removed during the MPC production process. Grassland's Nutrose undergoes a crystallization process to create an exceptional dairy ingredient powder composed of at least 80% lactose. Nutrose is sourced from milk and therefore only has properties found in milk. This product does not undergo the cheese-making process unlike whey permeate, which is exposed to heat and additional ingredients.

Application for Nutrose in Breadstick

Ingredient	Control	25% Reduced Sodium
Sugar, granulated	1.29%	1.03%
Salt, table	1.30%	0.92%
Dough Conditioner	0.65%	0.64%
Baker's Yeast, dry active	1.20%	1.18%
Vegetable Oil, pure	2.55%	2.52%
Water, distilled	33.94%	33.44%
Flour, white bread, enriched	59.06%	56.60%
Milk Permeate		3.67%

*Items in Reduced Sodium column show overall reduction in other ingredients.

Cost per 50g Breadstick Serving Analysis

Breadstick control: \$0.0430 per pound
 Breadstick reduced sodium: \$0.0426 per pound

Savings of \$0.0004 per serving!

*Cost analysis is based on grocery store ingredient prices in Madison, Wisconsin area and milk permeate market based on June 1, 2015. Prices are subject to change.

Grassland Dairy Products, Inc.
 N8790 Fairground Avenue, Greenwood, WI 54437
 (800) 428-8837
 www.grassland.com
 ingredientsales@grassland.com

