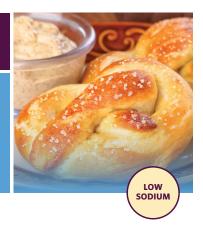
Savory, Soft Protein Pretzel

Better snacking delivered. This delicious snack provides a good source of protein for an authentic Made with whey protein concentrate 80, milk permeate and unsalted butter, this dairy-based snacking item to satisfy a salty craving while helping to keep sodium in check.



MARKET INSIGHTS

- Nearly two-thirds (64%) of U.S. consumers buy grocery products that are explicitly marketed or labeled as targeting specific health concerns.
- About half of all U.S. shoppers who have purchased targeted foods and beverages are willing to pay more for "better-for-you" grocery
- Sodium-reduction initiatives are global, with at least 32 countries having salt-/sodium-reduction initiatives according to a June 2011 review in the Journal of Hypertension (19 in Europe, 6 in the Americas and 7 in the Western Pacific Region).

BENEFITS OF USING U.S. DAIRY

Whey Protien Concentrate 80

- · Provides textural characteristics and prevents moisture loss
- Contains branched-chain amino acids to support nutrition
- Boosts protein content in food and is easily digested and absorbed by the bodv

Milk Permeate

- Provides salty characteristics, so that added salt may be reduced
- Simply labeled as dairy product solids
- Contains minerals such as calcium, phosphorus, magnesium, sodium and potassium
- · Improves surface browning
- Economical ingredient option

Butter

· Delivers a delicious, natural flavor

INGREDIENTS

	Control (%)	Reduced Sodium (%)
Bread flour	54.80	55.68
Water	28.0	29.0
Whey protein concentrate 80	9.00	9.10
Granulated sugar	4.00	3.64
Milk permeate (dairy product solids)	-	0.18
Salt	1.80	-
Butter, unsalted	1.10	1.10
Instant yeast	0.75	0.75
Sea salt topping	0.55	0.55
Total	100.00	100.00

INGREDIENTS: Enriched wheat flour (wheat flour, malted barley flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), water, whey protein concentrate, sugar, dairy product solids, unsalted butter, yeast, salt.

Contains: milk

NUTRITIONAL CONTENT

Control

Nutrition Facts

Serving Size 2 pretzels (55g)

Amount Per Serving	3
Calories 150	Calories from Fat 10
	% Daily Value*
Total Fat 1.5g	2%
Saturated Fat	t 0.5g 3%
Trans Fat 0g	
Cholesterol 15	mg 5 %
Sodium 560mg	23%
Total Carbohyo	Irate 26g 9%
Dietary Fiber	1g 4 %
Sugars 3g	
Protein 8g	16%
Vitamin A 0%	 Vitamin C 0%
Calcium 2%	• Iron 15%

*Percent Daily V diet. Your daily v depending on yo	alues may be	e higher or	
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300ma	300ma

2.400ma

Reduced Sodium

Nutrition Facts

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Amount Per Serving	3	
Calories 150	Calories	from Fat 10
		% Daily Value
Total Fat 1.5g		2%
Saturated Fat	t 0.5g	3%
Trans Fat 0g		
Cholesterol 15	mg	5%
Sodium 150mg	1	6%
Total Carbohyo	Irate 26g	9%
Dietary Fiber	1g	4%
Sugars 2g		
Protein 9g		18%

Calcium 2%	•	Iron 15%
*Percent Daily Value diet. Your daily value		pased on a 2,000 calor
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Vitamin C 0%

2,500 Total Fat 2,400n 375g 30g 65g Total Carbohydrate

Vitamin A 0%

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

^{*}Contains 73% less sodium than a similar pretzel formulation. Sodium has been reduced from 560mg per serving to 150mg per serving.



Savory, Soft Protein Pretzel

PREPARATION

- 1. Preheat convection oven to 300°F (149°C).
- 2. Prepare a 3% lye solution in water.
- 3. Blend dry ingredients.
- 4. Add warm (100°F/ 38°C) water and melted butter. Mix until dough forms.
- 5. Knead dough for 10 minutes until smooth.
- 6. Allow dough to rise 1 hour in a warm place, until it has doubled in size.
- 7. Punch down dough and then form desired pretzel shapes.

- 8. Allow formed shapes to rise another 30 minutes in a warm place.
- Dip into a boiling 3% lye solution for 10 seconds; drain off excess.
- 10. Sprinkle with sea salt.
- 11. Bake for 10 minutes until golden brown.
- 12. Optional Cool and freeze.
- 13. Optional Reheat in toaster oven for 5 minutes at 425°F (218°C).

Rely on the dynamic lineup of U.S. dairy to meet consumer demands in global product development. The U.S. Dairy Export Council® (USDEC) offers resources on **ThinkUSAdairy.org** including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product.

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

