

## Caramel Crème Crisp Bar, Milk Chocolate Coating

### Whey protein for women's nutrition

Throughout their lives, women face changing nutritional needs depending on life stages and life styles. Elements of particular importance for adult women include folate, iron, calcium and protein balanced with a lower calorie intake. This concept for a satisfying snack bar is tuned to those needs, delivering as much calcium as a glass of milk and 15 grams of high-quality protein.

This concept uses **Hilmar™ 8200** Whey Protein Concentrate and **Hilmar™ 8370** Whey Protein Hydrolysate. Whey crisps made with Hilmar whey protein are also used. These crisps, available in protein levels from 50% - 70%, are a novel way to boost protein content and offer an alternative to traditional crisps and granola. In addition, whey protein and whey crisps can complement lesser quality proteins, such as plant proteins, to provide optimum nutrition and foster satiety. In fact, whey protein appears to increase the feeling of satiety more than other proteins such as casein\*. Hilmar whey proteins are complete proteins providing the essential amino acids in an optimum blend for human consumption. Whey proteins have a PER of 3.2 and "perfect" PDCAAS of 1.00 and have a low glycemic load at 2 per 100 grams for concentrates and <1 for whey protein isolates.

**Hilmar™ 8200** is an 80% WPC designed to improve texture in nutrition and food bars by controlling moisture, maintaining volume, and emulsifying fat. **Hilmar™ 8200** also reduces dough stickiness, enhancing the processing and/or handling characteristics of bar formulations. **Hilmar™ 8370** is a WPH containing pre-digested proteins, short peptides, and amino acids. Providing critical functionality in bar applications, **Hilmar™ 8370** has the ability to modify the texture of nutrition bars, making them softer and more pliable. It can be used alone or as a partial replacement for casein, caseinates, hydrolyzed gelatin, and soy protein isolate.

High cost estimate for the ingredients only is \$0.30 per 45 g serving (as of October 2017).

\* Hall WL, Millward DI, Long SI and Morgan LM. "Casein and whey exert different effects on plasma amino acid profiles, gastrointestinal hormone secretion and appetite." Brit J Nutri 89, 239-248, 2003.

**INGREDIENTS:** Brown Rice Syrup, Whey Crisp (whey protein isolate, whey protein concentrate, tapioca starch, calcium carbonate, soy lecithin), Chocolate Coating (Sugar, Vegetable Oil (Palm Kernel Oil and Hydrogenated Palm Kernel Oil), Cocoa Powder, Nonfat Dry Milk Solids, Whole Milk Solids, Whey Powder, Soy Lecithin (an emulsifier), Salt, and Artificial Flavor), Oats, Soy Nuggets (isolated soy protein, tapioca starch, salt), Glycerin, Hilmar™ 8370 Whey Protein Hydrolysate, Hilmar™ 8200 Whey Protein Concentrate, Soluble Corn Fiber, Natural and Artificial Flavor, Sweeteners (oligofructose, fructose, vegetable protein isolate, natural flavors), Vitamin Mineral Blend (blend (Calcium Carbonate, Magnesium Oxide, Ascorbic Acid, d,1-alpha Tocopheryl Acetate, Zinc Gluconate, Niacinamide, Vitamin A Palmitate, Maltodextrin, Ferric Orthophosphate, Biotin, d-Calcium Pantothenate, Phytonadione, Copper Gluconate, Potassium Iodide, Pyridoxine Hydrochloride, Chromium Chloride, Manganese Sulfate, Thiamin Mononitrate, Riboflavin, Sodium Molybdate, Sodium Selenite, Folic Acid, Cyanocobalamin )

## Nutrition Facts

Serving Size (45g)  
 Servings Per Container  
**Calories 180**  
 Calories from Fat 30

Amount / Serving	% Daily Value*	Amount / Serving	% Daily Value*
<b>Total Fat 3g</b>	<b>5%</b>	<b>Total Carbohydrate 25g</b>	<b>8%</b>
Saturated Fat 2g	10%	Dietary Fiber 2g	8%
Trans Fat 0g		Sugars 9g	
<b>Cholesterol 20mg</b>	<b>7%</b>	<b>Protein 14g</b>	
<b>Sodium 105mg</b>	<b>4%</b>		
Vitamin A 20% • Vitamin C 20%		Calcium 15% • Iron 10%	
Vitamin D 0% • Vitamin E 20%		Vitamin K 20% • Thiamin 15%	
Riboflavin 15% • Niacin 10%		Vitamin B6 0% • Folate 10%	
Vitamin B12 15% • Pantothenic Acid		Phosphorus 4% • Iodine 6%	
Magnesium 10% • Zinc 8%		Selenium 6%	

\*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

The nutritional data presented herein is obtained from calculated values based on individual components.