

# Dairy

## FOODS

### Ingredient Technology

#### Chilling Out with Protein

According to The Food Channel's recently released Top 10 snack trends, consumers are eating more substantial snacks packed with protein as meal replacements, and eating them more often. However, the high-protein snack category needs some livening up – products that go beyond bars and beverages. Frozen novelty manufacturers are primed for the challenge, as dairy proteins contribute to a desirable texture in frozen desserts and at the same time provide the creamy, rich flavor consumers appreciate.

The Wisconsin Center for Dairy Research, University of Wisconsin-Madison, through funding by the U.S. Manufacturing & Ingredients Marketing program at the U.S. Dairy Export Council, Arlington, Va., developed a formula for a chocolate-flavored frozen protein dairy snack. (See table.) A serving contains 120 calories and 3 grams fat, while functioning as an excellent source of protein (12 grams) and calcium (265 milligrams).

The product contains three dairy ingredients: whole milk, milk protein

Ingredient	Usage Level (%)
Whole milk	62.0
Milk protein concentrate 70	14.6
Crystalline fructose	10.0
Cocoa powder	5.0
Erythritol powder	4.0
Whey protein isolate	3.7
Vanilla extract 2X	0.7

concentrate (MPC) and whey protein isolate (WPI). The whole milk contributes rich dairy flavor and provides structure and texture stability. The MPC adds dairy protein and calcium, while also contributing to a desirable texture. The WPI provides the boost of easily digested and readily absorbed proteins that enable the “excellent source” claim. The final product is a cool and creamy high-quality protein snack.

For more information, visit [www.innovatewithdairy.com](http://www.innovatewithdairy.com). ■

