

# Breakfast Bites

Start the morning right with portable, protein-packed breakfast bites. On-the-go consumers will appreciate its convenience. Consumers looking for satiety with a higher protein diet will appreciate that it has 70% more protein than similar cheesy on-the-go products in the market.\* Sodium-conscious consumers will be delighted that a serving has 40% less sodium than similar cheesy on-the-go products.\*



## MARKET INSIGHTS

- Breakfast is known as the most important meal of the day — 58% of surveyed adults believe breakfast is more important than lunch or dinner.
- Yet 30% of surveyed adults eat breakfast less than four times a week — leaving untapped potential for convenient breakfast foods.
- Nutrition studies show that higher protein diets can increase satiety, or a feeling of fullness.
- Protein content is often low in breakfast meals, and consuming protein at breakfast can help balance protein intake throughout the day.
- Some consumers are trying to reduce the amount of sodium in their diet.

## INGREDIENTS

	Usage Levels (%)
<b>Dough Formula, 84g</b>	<b>(62.64)</b>
Bread flour	19.60
Water	14.03
Whole wheat flour	4.60
<b>Milk Protein Concentrate 80</b>	<b>3.80</b>
Whole wheat flour	3.39
<b>Unsalted butter</b>	<b>3.07</b>
Clover honey	2.94
Egg substitute (Original Egg Beaters®, ConAgra Foods)	2.51
<b>Nonfat dry milk powder</b>	<b>2.51</b>
Soluble fiber (5g) (ADM/Matsutani, Fibersol® -2)	2.14
Rolled oats	1.94
<b>Whey permeate</b>	<b>1.66</b>
<b>Whey Protein Concentrate 80</b>	<b>0.45</b>
Yeast, dry active	0.02
<b>Filling Formula, 50.1g</b>	<b>(37.36)</b>
IQF frozen scrambled eggs (Michael's Foods)	17.44
<b>Medium Cheddar cheese, shredded</b>	<b>17.44</b>
Diced yellow onion	0.95
Diced green bell peppers	0.76
<b>Romano cheese, shredded</b>	<b>0.71</b>

## BENEFITS OF USING U.S. DAIRY

### Milk Protein Concentrate

- Adds dairy protein and calcium
- Helps build body and texture of the bread

### Nonfat Dry Milk

- Helps build body and texture of the bread
- Contributes to browning of the crust

### Whey Permeate

- Enhances flavors and salt perception, allowing for a reduction in added salt
- Improves surface browning while providing a clean dairy flavor

### Whey Protein Concentrate

- Boosts protein content and is easily digested and absorbed by the body
- Contains all of the essential amino acids required for good health

### Cheese/butter

- Distinct and exciting taste
- Cheese flavor and functionality can be tailored to specific applications

## NUTRITIONAL CONTENT

### U.S. Label

## Nutrition Facts

Serving Size (127g)	
Amount Per Serving	
Calories 340	Calories from Fat 130
% Daily Value*	
<b>Total Fat 15g</b>	<b>23%</b>
Saturated Fat 8g	<b>40%</b>
Trans Fat 0g	
<b>Cholesterol 135mg</b>	<b>45%</b>
<b>Sodium 270mg</b>	<b>11%</b>
<b>Total Carbohydrate 36g</b>	<b>12%</b>
Dietary Fiber 5g	<b>20%</b>
Soluble Fiber 3g	
Sugars 8g	
<b>Protein 21g</b>	<b>42%</b>
Vitamin A 10%	• Vitamin C 2%
Calcium 25%	• Iron 10%
Thiamin 20%	• Riboflavin 25%
Phosphorus 25%	
*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
Protein	50g    65g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

\*Contains 40% less sodium and 70% more protein than similar cheesy on-the-go products in the market. Protein has been increased from 12 g per serving in similar on-the-go products to 21 g per serving in this product. Sodium has been reduced from 480 mg per serving in similar on-the-go products to 270 mg per serving in this product. See nutrition information for total fat, saturated fat and cholesterol content.

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## PREPARATION

### Filling

1. **Blend IQF frozen scrambled eggs, diced yellow onion and green bell pepper, Cheddar and Romano cheeses, and black pepper uniformly.**
2. **Weigh 18 grams of filling per piece.**

### Dough

1. **Blend the MPC 80, nonfat dry milk powder, whey permeate, WPC 80 and water together. Allow to hydrate for 30 minutes.**
2. **Dry blend bread flour, whole wheat flour, oats, Fibersol-2 and yeast.**
3. **Melt butter.**
4. **Heat the hydrated dairy ingredients to 110°F.**

5. **Combine egg substitute, honey and melted butter. Add to dry ingredients and mix at low speed with a dough hook for 12 minutes.**
6. **Allow dough to proof so it doubles in size (about 1 hour at 106°F).**
7. **Form 30 gram balls of dough.**

### Assembly

1. **Roll out 30 grams of dough to about ¼" thickness.**
2. **Place approximately 18 grams of filling on the dough layer.**
3. **Completely enclose filling to keep cheese in the dough during baking.**
4. **Bake at 400°F on parchment-covered baking sheets for approximately 12 minutes. Adjust time as necessary based on product size.**

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](http://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. [@ThinkUSAdairy](https://twitter.com/ThinkUSAdairy)

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 Wisconsin Center for Dairy Research, University of Wisconsin-Madison. ©2014 U.S. Dairy Export Council.