



# High Protein Recovery Beverages

## Recovery Beverages Formulation:

Ingredients:	Chocolate	Cookies & Cream	Strawberry	Low Cal Chocolate	Low Cal Cookies & Cream	Low Cal Strawberry
1% Fat Milk	87.9990	88.2430	88.2833	0.0000	0.0000	0.0000
Skim Milk	0.0000	0.0000	0.0000	93.6370	93.9310	94.0613
Fructose	3.8028	3.8028	3.8028	0.0000	0.0000	0.0000
Sucrose	2.0352	2.0352	2.0352	0.0000	0.0000	0.0000
Cocoa, Gerkins Russett Plus	0.7000	0.0000	0.0000	0.6500	0.0000	0.0000
Cocoa, Blommers Jet Black	0.0000	0.4560	0.0000	0.0000	0.4560	0.0000
Whey Protein Concentrate	5.0000	5.0000	5.0000	5.0000	5.0000	5.0000
Firmenich 599191 TP0551 – N&A Chocolate	0.3000	0.0000	0.0000	0.3000	0.0000	0.0000
Virginia Dare #250K – Cookies and Cream	0.0000	0.2000	0.0000	0.0000	0.2000	0.0000
Virginia Dare 138 WC K – Strawberry Fresh	0.0000	0.0000	0.2048	0.0000	0.0000	0.2048
Virginia Dare 28178 K – Strawberry	0.0000	0.0000	0.1800	0.0000	0.0000	0.1800
Carageenan, Kelco Genulacta LF-180	0.0100	0.0100	0.0000	0.1000	0.1000	0.0000
Carageenan, FMC Viscarin SA 359	0.0530	0.0530	0.0530	0.0530	0.0530	0.0530
Joha KM2	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
FD&C Red #3 Powder – 0.5% Solution	0.0000	0.0000	0.2095	0.0000	0.0000	0.0000
FD&C Yellow #5 Powder – 1% Solution	0.0000	0.0000	0.0314	0.0000	0.0000	0.0000
Sucralose – 25% Solution	0.0000	0.0000	0.0000	0.0480	0.0480	0.0480
Acesulfame K	0.0000	0.0000	0.0000	0.0120	0.0120	0.0120
Total	100.00	100.00	100.00	100.00	100.00	100.00

### **Procedure:**

1. Ingredients were pre-weighed. All dry ingredients were dry blended together except for protein.
2. Protein and milk were mixed for 30 minutes at ambient conditions.
3. Additional ingredients were added and mixed for an additional 5 minutes.
4. Processing – Mixture heated to 200°F, thermally processed at 285°F for 3 seconds, homogenized (2000/500 psi), bottled in clean fill hood, and refrigerated.

Developed at the Dairy Product Technology Center, Cal Poly State University, San Luis Obispo, CA.

Note: These formulas serve as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs.

**Nutrition Information:**

Full Calorie:

<b>Nutrition Facts</b>	
Serving Size (365g)	
Servings Per Container	
<b>Amount Per Serving</b>	
<b>Calories</b> 300	Calories from Fat 45
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% Daily Value*	
<b>Total Fat</b> 5g	<b>8%</b>
Saturated Fat 3g	<b>15%</b>
Trans Fat 0g	
<b>Cholesterol</b> 40mg	<b>13%</b>
<b>Sodium</b> 280mg	<b>12%</b>
<b>Total Carbohydrate</b> 39g	<b>13%</b>
Dietary Fiber 1g	<b>4%</b>
Sugars 37g	
<b>Protein</b> 26g	
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Vitamin A 15%	• Vitamin C 4%
Calcium 50%	• Iron 2%
*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	

Reduced Calorie:

<b>Nutrition Facts</b>	
Serving Size (365g)	
Servings Per Container	
<b>Amount Per Serving</b>	
<b>Calories</b> 200	Calories from Fat 20
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% Daily Value*	
<b>Total Fat</b> 2g	<b>3%</b>
Saturated Fat 1.5g	<b>8%</b>
Trans Fat 0g	
<b>Cholesterol</b> 25mg	<b>8%</b>
<b>Sodium</b> 260mg	<b>11%</b>
<b>Total Carbohydrate</b> 19g	<b>6%</b>
Dietary Fiber 1g	<b>4%</b>
Sugars 18g	
<b>Protein</b> 27g	
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Vitamin A 15%	• Vitamin C 0%
Calcium 60%	• Iron 4%
*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	