



AMERICAN  
Dairy Products  
INSTITUTE™

MILK PROTEIN

# MPC 80

## Milk Protein Concentrate 80%

### Product Definition

Milk Protein Concentrate 80% (MPC 80) is obtained by concentrating bovine skim milk through filtration processes so that the finished dry product contains at least 80% protein by weight. MPC 80 may be produced by filtration, dialysis, or any other safe and suitable processes by which all or part of the lactose and minerals may be removed. The product cannot be manufactured by combining separately produced ingredients, i.e. casein (or caseinates) and whey proteins.

MPC 80 is produced by filtration methods (ultrafiltration and diafiltration) which capture essentially all the casein and whey proteins contained in the raw material stream, resulting in products with a casein-to-whey protein ratio equivalent to that of the original milk, generally a value of 80:20.

MPC 80 complies with all provisions of the U.S. Federal Food, Drug, and Cosmetic Act.

### Composition

PARAMETER	UNITS OF MEASURE	MPC 80
	Limits (protein limits are minima; all other limits are maxima)	
PROTEIN <sup>1</sup> , AS-IS BASIS	%	79.5
LACTOSE	%	9.0
FAT	%	2.50
TOTAL MOISTURE	%	6.0
ASH	%	8.0

### Product Labeling

Recommended identifications: Milk Protein Concentrate

### Protein Quality

Protein Digestibility Corrected Amino Acid Score (PDCAAS)..... **1.00**

Digestible Indispensable Amino Acid Score (DIAAS): ..... **1.18**

### Nutrition Facts

servings per container  
**Serving size** (100g)

**Amount per serving**  
**Calories** **360**

% Daily Value\*

**Total Fat** 1g 1%

Saturated Fat 0g 0%

Trans Fat 0g

**Cholesterol** 60mg 20%

**Sodium** 110mg 5%

**Total Carbohydrate** 7g 3%

Dietary Fiber 0g 0%

Total Sugars 7g

Includes 0g Added Sugars 0%

**Protein** 81g **161%**

Vitamin D 0mcg 0%

Calcium 1900mg 150%

Iron 0mg 0%

Potassium 380mg 8%

Phosphorus 1200mg 100%

Magnesium 100mg 25%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Functionality and Applications



### HIGH PERFORMANCE:

Emulsification  
Water Binding  
Heat Stability



### MEDIUM PERFORMANCE:

Hydration Rate  
Viscosity

MPC 80 provides functionality to many applications at levels of 1 to 4% usage. Functional uses include water binding and heat stability for soups, sauces, and ready to eat pudding and desserts, gel formation for yogurt and process cheese, and others.

MPC 80 is a high-quality protein for protein enhancement of low-acid beverages that are ready-to-drink and/or ready to mix, nutrition bars, frozen desserts, yogurt, and more.

## Product Examples

(launched in the last 2 years)

*Credit: Innova Market Insights*



**Oats Overnight:** Overnight oat mixes offer a convenient breakfast option that helps start your day with high quality protein. Milk protein concentrate and whey protein concentrate contribute 20 grams of protein per serving in this breakfast mix.



**Abbott Similac Go And Grow 360:** This toddler drink mix uses milk protein concentrate to provide high quality dairy protein with lower lactose levels than other milk powders. This drink mix provides 15% of the daily value for protein to support toddler growth and development.



**Enlightened Greek Frozen Yogurt:** This frozen Greek yogurt provides high quality protein from Greek yogurt and milk protein concentrate. This indulgent frozen dessert has 8 grams of protein per serving which qualifies it as a good source of protein.



**Premier Protein Good Night Shake:** Milk protein concentrate provides a high quality protein source with the heat stability needed for a low acid, aseptic beverage. The 10 grams of protein per serving supports muscle maintenance and provides a good source of tryptophan for better sleep.



**Abbott Similac Prenatal And Postnatal Nutrition Shake:** Protein intake is important for pre- and postnatal care for women. Milk protein concentrate provides high quality protein and heat stability to this low acid, aseptic drink for moms.