

# Dairy Ingredients Composition Chart

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AMERICAN  
Dairy Products  
INSTITUTE™

# Dried Dairy Ingredient Composition Summary<sup>1</sup>

	WHEY PROTEINS									MILK PROTEINS						
	Dry Acid Whey	Dry Sweet Whey	RM Whey	WPC34	WPC80	WPI	WPPC	mWPC34	mWPC80	WMP	NFDM	SMP	DBM	MPC70	MPC80	MPI
<b>PROTEIN</b>			17.0 max	33.5 min	79.5 min	89.5 min	50.0 min	33.5 min	79.5 min	34.0 min		34.0 min	30.0 min	69.5 min	79.5 min	89.5 min
<b>FAT</b>	1.5 max	1.5 max	4.0 max	5.0 max	10.0 max	1.5 max	12.0 min	2.0 max	2.0 max	26.0 - 42.0	1.25 max	1.50 max	4.5 min	2.50 max	2.50 max	2.50 max
<b>MOISTURE</b>	5.0 max	5.0 max	5.0 max	6.0 max	6.0 max	6.0 max	6 max	6.0 max	6.0 max	4.5 max	4.0 max	5.0 max	4.0 max	6.0 max	6.0 max	6.0 max
<b>LACTOSE</b>			82.0 max	48.0 - 55.0 <sup>2</sup>	4.0 - 10.0 <sup>2</sup>	0.5 - 1.0 <sup>2</sup>		55.0 max	13.0 max					20.0 max	9.0 max	5.0 max
<b>MINERALS</b>			7.0 max	6.5 - 8.0 <sup>2</sup>	3.0 - 5.0 <sup>2</sup>	2.0 - 3.0 <sup>2</sup>	8 max	7.5 max	5.0 max					10.0 max	6.0 max	6.0 max

	CASEINS						CARBOHYDRATES		
	Micellar Casein Concentrate 70	Micellar Casein Concentrate 80	Micellar Casein Isolate	Acid Casein	Rennet Casein	Caseinates	Milk Permeate	Whey Permeate	Lactose
<b>PROTEIN</b>	69.5 min	79.5 min	89.5 min	90.0 min	84.0 min	90.0 min	2 min	7 max	0.30 max
<b>FAT</b>	2.50 max	3.00 max	3.00 max	2.0 max	2.0 max	2.0 max	1.5 max	1.5 max	
<b>MOISTURE</b>	6.0 max	6.0 max	7.0 max	12.0 max	12.0 max	6.0 max	5.0 max	5.0 max	6.0 max
<b>LACTOSE</b>	16.0 max	10.0 max	1.0 max	1.0 max	1.0 max	1.0 max	76 min	76 min	99.0 min
<b>MINERALS</b>	8.0 max	8.0 max	8.0 max	2.5 max	7.5 max		14 max	14 max	0.30 max

## Legend

DBM.....Dry Buttermilk  
MPC70 .....Milk Protein Concentrate 70%  
MPC80 .....Milk Protein Concentrate 80%  
MPI.....Milk Protein Isolate  
mWPC34.....Milk Whey Protein Concentrate 34%  
mWPC80.....Milk Whey Protein Concentrate 80%  
NFDM.....Nonfat Dry Milk  
RM Whey .....Reduced Minerals Whey  
SMP .....Skim Milk Powder

WMP .....Whole Milk Powder  
WPC34 .....Whey Protein Concentrate 34%  
WPC80 .....Whey Protein Concentrate 80%  
WPI .....Whey Protein Isolate  
WPPC.....Whey Protein Phospholipid Concentrate (Also MFGM)  
The following carbohydrates are also identified as shown below (Dairy Permeate and Dairy Products Solids are acceptable for both Milk and Whey Permeate):  
Lactose.....Milk Sugar, Edible Lactose, Food Grade Lactose  
Milk Permeate.....Dairy Permeate, Dairy Products Solids  
Whey Permeate .....Dairy Permeate, Dairy Products Solids, Deproteinized Whey, Dried Whey Product, Dried Whey Solubles

(1) Units for any given parameter may vary from ingredient to ingredient, e.g., some are dry basis while others are as-is. Please consult the ADPI Ingredient Standard for full details on any ingredient in question.

(2) Typical values are shown here, where the ADPI Ingredient Standards do not set strict limits for minimum or maximum content. Actual product composition may vary.