

Formulating Alternatives

Replacement of Liquid Dairy Ingredient with Dry Powders and Water

Liquid (100 kg)		Dry	Rounded numbers (approx.)	
			kg Dry	kg Water
Skim milk	→	Skim milk powder	10	90
Whole (Homo) milk	→	Whole milk powder	13	87
1% Milk	→	Skim Milk Powder DairyLo	10 1	89
2% Milk	→	Whole Milk Powder Skim Milk Powder	8 4	88
18% M.F. Table Cream	→	Dariplus 122 Cream Powder	25	75
Sour Cream	→	Dariplus 422 Sour Cream Powder *	25	75
Cream Cheese	→	Dariplus 325 Cream Cheese Powder *	45	55
Yogourt	→	Dariplus 350B Yogourt Powder *	15	85

* may require added stabilizers

EXAMPLE

Liquid Dairy Replacement for Alfredo Sauce

Scenario #1: Standard Formula

	Volume/Wt	Fat	MSNF	Total Solids
Homo Milk	157	5.2	14.1	19.3
Whipping Cream	67	23.5	3.7	27.1
Total Dairy Ingredients	224	28.6	17.8	46.4

Total Alfredo Sauce Batch	260
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Scenario #2: Replacement Formula

	Volume/Wt	Fat	MSNF	Total Solids
Dariplus 122	40	28.6	11.0	39.6
Protelac 190	7	0.1	6.7	6.8
Water	177	--		
Total Dairy Ingredients	224	28.7	17.7	46.4

Notes:

1. The Homo and Whipping Cream should be replaced by:

40 kg Dariplus 122
 7 kg Protelac 190
 177 kg Warm Water

2. It is very important the Powders be hydrated in warm water (50-55C) or (120-125F) for at least 20 minutes to minimize powdery notes in flavour.