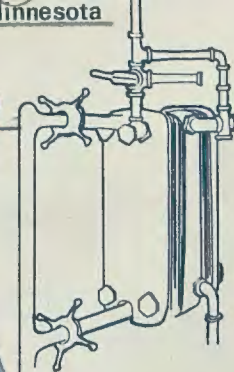
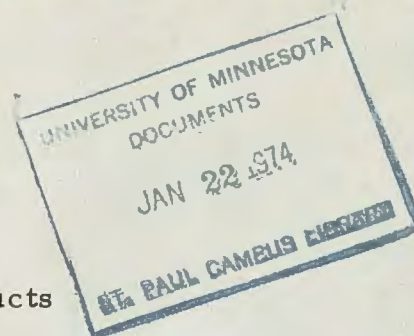


③ MINNESOTA DAIRY PRODUCTS PROCESSOR



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MILK AND CREAM STANDARDS FINALIZED

Milk and cream standards have now been finalized by the FDA and we'll try to hit some of the major provisions of the regulations in this issue of MDPP.

PRODUCTS INVOLVED

While the standards are referred to as milk and cream standards, other products are included. The total list consists of milk, lowfat milk, skim milk, half-and-half, light cream, light whipping cream, heavy cream, evaporated milk, concentrated milk, sweetened condensed milk, nonfat dry milk, and nonfat dry milk fortified with vitamins A and D.

PASTEURIZATION MANDATORY

Pasteurization is mandatory. However, the word "pasteurized" is optional in label declarations. The time-temperature relationships for pasteurization include the following (or their equivalent).

<u>Temperature</u>	<u>Time</u>
145° F*	30 seconds
161° F*	15 seconds
191° F	1 second
204° F	0.05 second
212° F	0.01 second

*If the product contains 10 percent fat (or more), or if it contains added sweeteners, the specified temperatures must be increased by 5° F.

"ULTRA-PASTEURIZED" DEFINED

"Ultra-pasteurized" is the name given to products which receive less than "sterilization" heat treatment, but which are nonetheless processed at time/temperature relationships allowing for extended storage under refrigeration. Cream treated by ultra-pasteurization can be held at least 6 weeks.

To be eligible to use the term "ultra-pasteurized" on a label, your dairy product must be processed at or above 280° F for at least 2 seconds, either before or after packaging. While the process itself is optional, any product processed in this manner must be labeled "Ultra-Pasteurized."

HOMOGENIZATION

Homogenization is an optional process. If used, the word "homogenized" is likewise optional in labeling.

PROTEIN FORTIFICATION OF LOWFAT OR SKIM MILK

Nonfat milk solids are often used to increase the solids of lowfat or skim milk products to about 10 percent MSNF levels. The term that will be used to describe such products in the future will be "protein fortified" or "fortified with protein," but only if the source of protein is milk-derived nonfat solids and the amount of solids is not less than 10 percent.

If lower levels of fortification are used (and they may be), the above descriptive term cannot be applied to the label. Further, the use of milk-derived nonfat solids cannot result in a decrease in either (1) the ratio of protein to total nonfat solids or (2) the protein efficiency ratio of all protein present. The final product, then, is identical to its lower-solids counterpart except in total solids content. The fact that additional solids have been added (although at levels resulting in less than 10 percent MSNF) can be conveyed to the consumer only through the statement of ingredients and nutritional labeling. Concentrated skim milk and nonfat dry milk may be declared as "nonfat milk solids." Nutritional labeling, which is mandatory for these two products, will show higher levels of protein than standard, unfortified products.

USE OF EMULSIFIERS AND STABILIZERS

Emulsifiers and/or stabilizers are permitted in lowfat and skim milk products only when milk derived solids are added. The amount cannot exceed 2 percent by weight of solids in such ingredients.

Emulsifiers and stabilizers are permitted in the four cream products.

FLAVORING INGREDIENTS

In the milk and cream products, characterizing flavoring ingredients (with or without coloring, nutritive sweetener, emulsifiers and stabilizers) are allowed to the extent that they consist of fruit and fruit juice, including concentrated fruit and fruit juice, or natural and artificial food flavorings.

FAT DECLARATION IN LOWFAT MILK

Milkfat in lowfat milk must be present at a level of $\frac{1}{2}$, 1, $1\frac{1}{2}$, or 2 percent, within good manufacturing practices. The phrase " percent milkfat" (using the appropriate fraction or multiple of $\frac{1}{2}$ percent) applied to the Principal Display Panel wherever the food name appears, is the manner in which fat content must be declared.

ADDITION OF VITAMINS A AND D

A chart follows which indicates the provisions for the addition of vitamins A and D. When they are added (or if they are added in the case of optional addition), they must be present in the following amounts:

- *Milk, lowfat milk, and skim milk--not less than 2,000 I.U. vitamin A and 400 I.U. vitamin D per quart of product.
- *Evaporated milk, concentrated milk (vitamin D only)--not less than 125 I.U. vitamin A and 25 I.U. vitamin D per fluid ounce of product.
- *Vitamin-fortified nonfat dry milk--not less than 2,000 I.U. vitamin A and 400 I.U. vitamin D/quart of reconstituted product, as reconstituted according to label directions.

	Fat %	MSNF Minimum	Total Solids	Moisture	Nutritional Labeling	Emulsifiers and Stabilizers	Flavorings	Sweeteners	Fat Declaration on PDP	Vitamin A	Vitamin D
Milk	3.25	8.25			Opt. (2)		Opt.		No	Opt.	Opt.
Lowfat Milk	0.5-2.0	8.25			Yes	Opt.	Opt.		Yes	Yes	Opt.
Skim Milk (Nonfat Milk)	0.5	8.25			Yes	Opt.	Opt.		No	Yes	Opt.
Half-and-Half	10.5-18.0				Opt.	Opt.	Opt.	Opt.	No		
Light Cream (Coffee Cream or Table Cream)	18-30				Opt.	Opt.	Opt.	Opt.	No		
Light Whipping Cream (Whipping Cream)	30-36				Opt.	Opt.	Opt.	Opt.	No		
Heavy Cream (Heavy Whipping Cream)	36				Opt.	Opt.	Opt.	Opt.	No		
Evaporated Milk	7.5		25.5		Yes	Opt.			No	Opt.	Yes
Concentrated Milk	7.5		25.5		Opt. (2)	Opt.			No		Opt.
Sweetened Condensed Milk	8.5		28.0					Yes	No		
Nonfat Dry Milk	1½ (1)			not over 5.0%					if over 1½%		
Vitamin-Fortified Nonfat Dry Milk	1½ (1)			not over 5.0%	Yes				if over 1½%	Yes	Yes

(1) If the product contains more than 1½% fat, the statement "_____ % milkfat" must accompany the food name on the Principal Display Panel. The percent fat must be stated to the nearest 0.1%.

(2) This is optional only if vitamins are not added and nutrition is not advertised. Otherwise it is mandatory.

OTHER ASPECTS OF THE STANDARDS

The table on page 3 indicates a variety of other factors related to the milk and cream standards. For products shipped in interstate commerce, the effective date for these regulations is December 31, 1974.

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