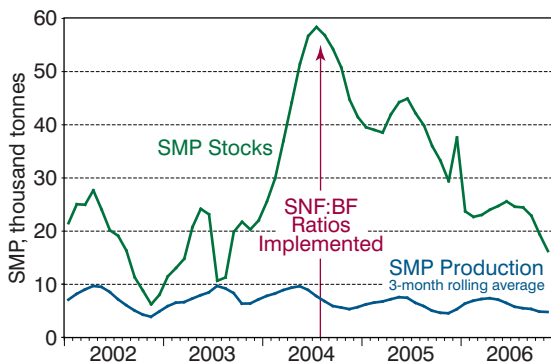


What You Should Know About Skim Milk Powder

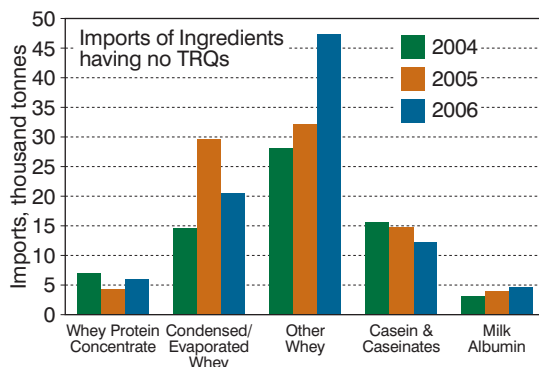
On December 20, 2002, a ruling by the World Trade Organization's Appellate Body reduced Canada's ability to dispose of its skim milk powder (SMP) 'structural' surplus on the world market. As shown in the graph below, by the end of the 2003-04 dairy year, our SMP stocks had risen to more than 58,000 tonnes, forcing the industry to seek alternative markets for SMP and reduce its production of solids non-fat (SNF).

At its July 28-29, 2004 meeting, the Canadian Milk Supply Management Committee (CMSMC) adopted a motion requiring that all provinces commit to reducing the national SNF to butterfat (BF) ratio (SNF:BF) down to 2.30 from its 2003-04 level of 2.346. Assuming that BF production under national Market Share Quota (MSQ) would not change, this would reduce SNF production by some 12,500 tonnes. All provinces except BC agreed to implement policies to achieve these reductions by July 31, 2006; BC was allowed an additional year due to its higher initial SNF:BF. The national ratio for the 2005-06 dairy year was 2.315.



Milk protein imports displace SNF

The reduction in SNF production on-farm is reflected in the slight decrease in SMP production illustrated in the graph above. However, other factors have come into play which have reduced the domestic utilization of SNF. In particular, processors are now using increasing quantities of modified milk ingredients (see article on next page) in the



manufacture of cheese, yogurt and other dairy products, displacing protein in the form of SNF. Most of these alternative ingredients are imported, many entering Canada tariff-free, making them less expensive. But cost is only one factor when processors consider using these ingredients. They confer unique functional properties to some manufactured dairy products and their minimal lactose content can also be an advantage. Improved processing technologies have also allowed processors to use domestic whey proteins more efficiently.

The CDC buys excess SMP

The Canadian Dairy Commission (CDC) Surplus Removal Program (SRP) is designed to remove surplus production from the domestic market. Structural surplus of SNF is purchased from processors year-round at prices that vary, depending

SMP, SNF and SNF:BF

Skim milk powder (also called non-fat dry milk) refers to the product which is created when the water is removed from pasteurized non-fat milk, usually by spray drying. SMP contains lactose, proteins and minerals (solids non-fat) in the same relative proportions as the fresh milk from which it was made.

Solids non-fat refers to the protein plus lactose and other solids (LOS) contained in milk as it is shipped from the farm.

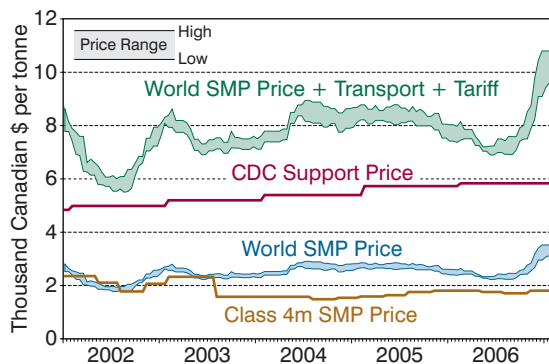
SNF:BF is the ratio of solids non-fat to butterfat tests in raw milk.

on the final market of the product. Last dairy year (2005-06), about one third of the structural surplus was exported, another third was sold under class 4a1 and the remaining third was sold as SMP to animal feed manufacturers under class 4m.

The net cost of the SRP is borne by producers through reduced returns from industrial milk sales. To reduce this burden, a decision by the CMSMC has placed a cap of 52,700 tonnes of SMP equivalent on surplus removal for the 2006-07 dairy year. It is anticipated that this will encourage processors to utilize more domestic SNF in their formulations.

SMP prices

The graph on the right illustrates SMP prices in Canadian dollars. Before the WTO Appellate Body 2002 decision, surplus SMP purchased by the CDC was exported at the world price. As a result of that ruling, most of the excess SMP must now be disposed of domestically, as noted above. SMP for animal feed is sold under class 4m at prices that have been consistently lower than the world price.



Canada's current tariff rate quota (TRQ) for SMP is zero; the over-quota tariff is 201.5%. As a result, the cost of importing SMP for domestic use is prohibitively high, as shown in the graph above. This is also the case for whole milk powder, milk protein concentrate and whey powder. However, tariff-free imports of these products are permitted under the Import for Re-export Program (IREP).

sources: Statistics Canada, Canadian Dairy Commission, Agriculture & Agri-Food Canada

Milk Ingredients and Modified Milk Ingredients

In recent years, an increasing number of dairy product labels indicate the inclusion of 'modified milk ingredients'. What are these ingredients? For the purposes of ingredient labelling on packaged food products, Canada's Food and Drugs Act and Regulations (FDA&R) define the terms 'milk ingredients' and 'modified milk ingredients' as follows:

Milk ingredients are milk fat and solids non-fat and their components whose chemical state has not been altered from that found in milk, including whole milk, partially skim milk, skim milk, evaporated or condensed whole milk, evaporated or condensed partially skim milk, evaporated or condensed skim milk, dried whole milk, dried partially skim milk, dried skim milk, cream, butter, butter-oil and anhydrous butter-oil.

Modified milk ingredients include calcium reduced skim milk, whey cream, whey butter and cultured milk products. Other components of milk like whey, milk and whey protein

concentrates and isolates, casein, caseinates and milk albumin that have had their chemical state altered from that found in milk also belong in this category.

For labelling efficiency, when both types of ingredients are present, they may be collectively referred to as modified milk ingredients.

source: Dairy Processors Association of Canada

