

**Research Poster from the
Consumer and Market Demand Agricultural Policy Research Network
Enabling Research for a Competitive Agriculture**



ABSTRACT CMD-03

The Demand for Milk in Canada by Fat Content and Province

Jing Zhang¹ and Ellen Goddard²

¹University of Saskatchewan, Department of Bioresource Policy, Business and Economics, Canada

²University of Alberta, Department of Rural Economy, Canada

Since the 1980s, Canadians have shifted away from consumption of milk. The annual per capita consumption of milk has declined steadily from about 103 litres in 1980 to 81 litres in 2009. Oddly, the change in milk consumption cannot totally be explained by a desire to avoid fat since the per capita consumption of cream has increased from 5 litres per person (1988) to well over 8 litres per person (2009). However within the fluid milk category there have been major shifts with large decreases in whole milk consumption and a rapid increase in demand for reduced-fat milks, including 2% milk, 1% milk and skim milk. In 1960, about 93% of per capita milk consumption was whole milk. This percentage has decreased substantially since then: 40% in 1980, 17% in 2003 and 15% in 2009. The competition between different reduced-fat milk types is also increasing. Per capita consumption of 2% milk experienced an increase from the 1960s to late 1980s, from about 7 litres in the early 1960s to 63 litres in 1989, accounting for about 65% of milk consumption. Then, it decreased to about 41 litres in 2003, only about 50% of milk consumption, as a result of the increasing popularity of 1% milk and skim milk. It continues to represent about 50% of fluid milk consumption in 2009. Milk fat preference, however, varies across provinces in Canada. In 2009, only 23% of total milk consumption was 1% milk and skim milk in Quebec, while the same percentage was 43% in Alberta. The Canadian fluid milk market, is characterized by low levels of concentration in dairy production, with some level of self-sufficiency at the provincial level due to the established supply management system and in part to dispersed population, long distances between provinces and the high perishability of fluid milk. Taking into account the variation in milk fat preferences across provinces is important for a complete understanding of the structural changes in Canadian fluid milk consumption.

In this study a complete demand system for fluid milk in Canada using pooled provincial data that incorporates both the temporal and spatial structure of the Canadian milk market and explores substitution patterns between different fluid milk types across provinces is reported. Explanatory factors include the levels of price for each milk, as well as prices of other beverages and generic and brand level advertising for the individual milks. By analyzing the changes in milk demand across provinces over time, the demand for each type of milk in the near future can be more accurately projected.