

# Effects of New Technologies Introduction on Canadian DHI

R. Cantin  
CanWest DHI  
Guelph, Ontario, Canada

## Abstract

In Canada, one of the key aspects of DHI service delivery is the routine collection of milk samples from individual cows. The interest for those samples initially focused on fat and protein determination, but the list of possible analysis to be performed has grown significantly over the years. The evolution of analytical technology, including the introduction of milk based ELISA and PCR test kits are making this possible. From a farmer customer point of view, some of the key benefits of the new milk based analysis include convenience and cost effectiveness. For DHI, the opportunity to provide value added testing services from milk samples that are already available, is very efficient and can enhance the overall business. Furthermore, some of the new milk based analysis provides the opportunity for large scale data collection that can be used for genetic improvement. Some of the first value added analyses were somatic cell counts (SCC) and milk urea nitrogen (MUN). Over the last decade, new technologies have made disease testing such as Mastitis bacteria, Paratuberculosis (johne's disease), Enzootic Bovine Leukosis and Bovine Viral Diarrhea (BVD) a possibility. More recently, Pregnancy diagnosis through milk testing was introduced. And finally, the monitoring of Ketosis through the analysis of beta-hydroxybutyrate (BHB) has now become routine. New milk based analytical technologies are proving to be very beneficial for both dairy farmers and DHI organizations.

## Key words:

Milk samples, technology, convenience, value added