



Is Animal Health Important to You?

An emerging trend within the dairy industry is the growing importance of animal health and reproduction. For more than two years now, bull proofs for Daughter Fertility have been available to help meet the needs of producers and industry organizations in terms of genetic improvement for reproduction. Until recently, however, little attention has been given to genetic selection for improving animal health and reducing the incidence of disease in dairy cattle. How important is animal health to you and how will it affect the profitability of your herd in the future?

Consumer Trends and Expectations

There is no doubt that consumers in Canada and around the world are becoming more aware of what they buy and eat, including dairy products. There is a growing expectation that our food must not only be healthy in terms of nutritive value but also in terms of how it has been produced. Specific to milk and its associated dairy products, it is no longer sufficient to say that the product is good for your health but now there is an increasing need to show that the cow producing the milk was healthy herself and was fed and raised in a good environment. As a dairy industry we need to be aware of this expectation and prepare for it to ensure that dairy products remain a food staple within Canadian homes.

Impact on Profit

Producers are keenly aware of the negative impact that disease can have on the profitability of their herd. In addition to the increased cost associated with veterinary and treatment expenses, disease also affects profits by lowering the resulting revenue achieved from each cow. Disease incidence often has a negative impact on the production of milk and its components as well as on the cow's own reproductive performance. Milk from treated cows cannot be sold and often must be discarded, therefore yielding a loss in potential revenue for the herd. Frequently sick animals are normally culled, which yields higher replacement rates that are costly and reduce the efficiency of the herd. Over and above all of these direct effects of disease incidence to increase expenses and reduce revenue, and therefore net profit, there are also indirect factors such as the extra labour associated with having sick animals in the herd.

Industry Action

During the past few years, Canadian Dairy Network (CDN) has coordinated an industry-wide initiative that will move Canada into the forefront in terms of recording animal health information from dairy herds across the country. Throughout 2006, the Canadian DHI partners have been developing the National Dairy Cattle Health and Disease Data Management System that will be launched later in 2007. The main objective of this initiative is the creation of a national dairy cattle health and disease database for the

purposes of herd management and genetic evaluation. While the software being developed will allow for the recording of an exhaustive list of calf, heifer and cow diseases associated with dairy production, the initial concentration will be the recording of eight specific diseases that are known to affect herd profitability. Table 1 provides a list of these primary diseases as well as the lactation incidence rate and heritability of each, as reported in the cited research publications. Given the frequency of these diseases, their impact on herd profitability and the level of genetic variation that exists as reflected by the estimates of heritability, it is important to record the occurrence of these diseases to assist in herd management and to contribute to national genetic evaluation systems.

Table 1: Primary Diseases for Recording in Canadian Dairy Herds		
	Lactation Incidence ¹	Heritability ²
Milk Fever	6.5%	---
Retained Placenta	8.6%	---
Metritis	10.1%	6%
Ketosis	4.8%	6%
Left Displaced Abomasum	1.7%	14%
Cystic Ovarian Disease	8.0%	4%
Lameness	7.0%	4%
Clinical Mastitis	14.2%	9%

1 – Dr. David Kelton et al., Journal of Dairy Science, 1998
 2 – Dr. Nate Zwald et al., Journal of Dairy Science, 2004

The federal government, specifically Agriculture and Agri-Food Canada, has acknowledged the value of this important industry initiative and has provided \$600,000 in funding through the “Sustaining the Genetic Quality of Ruminants (SGQR) Program” to Holstein Canada, which is passed on to CDN and Canadian DHI for the coordination and development of this project, respectively. Other important partners include the AI organizations, researchers and various veterinarian groups, especially those involved with the veterinary database established in Québec known as the “Dossier Santé / Animal Health Record”.

Producer Action

Is animal health important to you? Does it affect the profitability of your dairy herd? If so, then you will see the value that recording the incidence of the eight primary diseases will have for your herd management and eventually for sire selection and genetic improvement. Once the new data collection software system is launched in the upcoming months by the milk recording agencies across Canada, interested producers will be encouraged to provide accurate and complete information associated with all occurrences of these eight diseases within your herd. Think about being one of these herds with the ultimate goal of providing safe and healthy dairy products from healthy dairy cows to the Canadian consumer.

Summary

The health of livestock that produce consumable products is of growing interest to the Canadian consumer and society in general. To meet the current and future expectations of consumers in terms of providing healthy dairy products, the industry is developing a national health and disease data collection and management system to be launched in 2007. Producers keenly interested in providing incidence information related to eight primary dairy cattle diseases (i.e.: milk fever, retained placenta, metritis, ketosis, left displaced abomasum, cystic ovarian disease, lameness and clinical mastitis) will be rewarded with reports to assist them, in association with their veterinarian, manage an effective herd health program.

Author: Brian Van Doormaal, CDN
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