

Production Losses from Johne's Disease

Source: Steve Mason, Research Associate

Much of the dairy industry's concern about Johne's Disease (JD) has focused on the possible role of its causative organism (*Mycobacterium avium* subspecies paratuberculosis or MAP) in Crohn's Disease in humans. While there is no question that the industry would suffer significant losses if the public perceived a link between the two diseases, the more immediate concern should be the negative effect of JD on production and cow longevity. However, due to the chronic, subtle nature of MAP infection, production effects are usually not obvious. As a result, producers are often not motivated to implement strategies to control JD.

To encourage producer participation in JD control programs, researchers at the University of Minnesota and Purdue University undertook a study to evaluate production losses due to MAP infection. Two Minnesota dairies were enrolled in the study and fecal samples were collected from 1,048 cows during the close-up period. Fecal samples were cultured to determine MAP infection status and cows were classified as either fecal culture positive or negative

Production data by lactation for positive and negative groups and differences between them are shown in the table below. Overall, positive cows produced 1,355 kg per lactation less than negative cows. Using an average Canadian milk price of \$75/hectolitre, a loss of 1,355 kg reflects lost income of \$987 per lactation. Milk yield losses were greatest for first lactation cows, declining with cows in further lactations. Income over feed costs was US\$366 higher for negative cows compared with all positive cows. Positive cows that survived their current lactation produced US\$276 less in milk income than negative cows.

Fecal-culture-positive cows were three-times more likely to be culled than negative cows, although the difference in average days open between the two groups was not statistically significant. Incidence rates of other postpartum disorders were not different between positive and negative groups.

Source: E.A. Raizman et al., J Dairy Sci 92:4929(Oct 2009)



2010 Dairy Conference and AGM date and location

Mark Your Calendars!

The 2010 Alberta Milk Dairy Conference and Annual General Meeting will take place November 16 - 19 at the Sheraton Cavalier Hotel in Calgary.

Watch for your registration package in September.

	MAP Fecal Culture		Difference
	Negative	Positive	
	Milk Yield, kg/lactation		
Lactation 1	9,786	7,973	1,803
Lactation 2	11,543	10,350	1,193
Lactations 3+	11,644	10,539	1,105
All Lactations	10,985	9,630	1,355

