Research Highlights 2015-2016

DFC Research Investment Impact

2015-2016 Total Research Value

$6.6 million

4 Main Partners

57 Research Projects

6 Research Programs

130 Students (PhD, MSc, undergrad)

160 Scientists

1 Communications and Knowledge Transfer Plan

10 Federal Research Centres

2 International Research Institutions

15 Canadian Universities

Dairy Research Cluster

Organic Science Cluster

ESAC

Dairy Research Consortium

DairyGen

Industrial Research Chairs (5)
Research investment benefits for the dairy sector, the Canadian economy and Canadians’ health:

- Canadian dairy genetics are among the best in the world! Since 1988, the total value of Canadian dairy genetic exports, including dairy cattle, embryos and semen rose from $68 million to $140 million in 2015.
- Breeding and genetic improvements have resulted in a 178% increase in milk production per cow from 1970 to 2015 (5,763 kg compared to 10,257 in 2015).
- The average Canadian dairy herd has experienced a faster rate of genetic gain in the past five years due to genomics, increasing genetic progress in Holsteins. Before genomics, the net benefit per cow per year was $84. With genomics (since 2009) that benefit is $171/cow/year (based on Pro$ research).
- National eradication programs for serious cattle diseases have been developed and several diseases, like brucellosis, have been eradicated from the dairy herd.
- Mastitis research and discoveries are leading to promising new strategies like controlling pathogens and developing a vaccine to manage mastitis infections.
- Research outcomes resulted in science-based standards for the Animal Care Assessment program of DFC’s proAction program.
- Canadian milk is among the highest quality milk in the world! Canada has lowered the somatic cell count standard to 400,000 cells per millilitre of milk since 2012.
- Milk products, regardless of their fat content, do not appear to increase cardiovascular risk. In fact, a growing body of evidence indicates that milk products are associated with a reduced risk of cardiovascular disease.
- Milk products are important for weight management. Evidence to date indicates that an adequate consumption of milk products may be a key factor in preventing obesity.
- Several studies, including meta-analyses, suggest that milk products are associated with a reduction in the risk of metabolic syndrome and type 2 diabetes, important global health and economic burdens.
- The socio-economic life cycle analysis of the Canadian dairy sector, based on UNEP/SETAC’s guidelines, was completed in 2012. A global dairy first!