



Human Nutrition and Health

Nutritional synergy between dairy products and other food nutrients

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Principal Investigator:

Dr. Michel Britten
Agriculture and Agri-Food
Canada, Saint-Hyacinthe

Collaborators:

H. Giroux (AAFC Saint-Hyacinthe), S. Lamothe (AAFC Saint-Hyacinthe), N. Rémillard (AAFC Saint-Hyacinthe), H. Sabik (AAFC Saint-Hyacinthe)

The research team will study the interaction between dairy foods and the nutrients from other foods during digestion and investigate its nutritional and physiological consequences. Dairy foods are recognized for their nutritional quality, but they could also be recognized for enhancing the stability and bioactivity of nutrients from foods they are consumed with. The focus of the activity is on the interactions between milk components and foods containing nutrients sensitive to oxidation. The work should provide:

- A clear understanding of the influence of milk components on the Gastro intestinal (GI) oxidation status;
- Knowledge of the protection effect of milk components against the oxidative degradation of model foods containing Polyunsaturated fatty acids (PUFA) or sensitive vitamins (vitamins C and E);
- Knowledge of the physiological consequences of adding dairy foods to a diet rich in PUFA or sensitive vitamins using an animal model.

This activity could have social and economic impacts for Canada and the dairy industry. Health issues are major concerns for Canadians and a better understanding of the interactions between nutrients should help to make better food choices. Wise combinations of foods during a meal may result in synergistic interactions during digestion leading to positive health effects. The demonstration that milk could improve the availability of nutrients in mixed meals would reinforce the position of dairy foods in a healthy diet and increase the global demand for dairy products.