THE EFFECT OF MILK PRODUCTS AND NOVEL MILK PRODUCTS ON SATIETY, FOOD INTAKE, AND METABOLIC CONTROL (GLYCEMIA) IN EARLY AND LATE ADULTHOOD

OBJECTIVE:
The primary objective of this project was to provide evidence that could help support claims that dairy products play an important role in controlling appetite (satiety), food intake and post-meal blood glucose levels (postprandial glycemia) in adults.

KEY OUTCOMES:
A total of 11 randomized, controlled trials involving both young (aged 20-30 years) and older (aged 60-70 years) adults were carried out:

• Dairy consumed with breakfasts of cereal (young adults) or toast and jam (older adults) markedly reduced post-meal glycemia associated with glycemia-inducing carbohydrates.

• The form of dairy (solid, semi-solid or liquid) is a consideration for managing satiety, glycemia and food intake with cheese being the preferred snack or pre-meal appetizer.

• Even a single serving of dairy consumed as a snack, immediately before a meal or with a meal may be effective for reducing appetite and post-meal glycemia.

• Both the total amount of protein, and the casein:whey ratio, in a serving of milk is an important consideration for the design of novel milks aimed at controlling blood glucose levels and satisfying appetite.

• A breakfast meal formulated with a dairy yogurt vs. a plant-based yogurt eaten with granola cereal, resulted in reduced post-meal glycemia, without an increase in subsequent energy intake, and can be recommended as a functional breakfast for improved blood glucose control.

BENEFITS TO THE DAIRY INDUSTRY
Provides strong evidence for supporting the beneficial impact of dairy products (including milk, yogurt and cheese) in controlling appetite (satiety), food intake and post-meal blood glucose levels.

SCIENTIFIC PUBLICATIONS
The effect of dairy products consumed with high glycemic carbohydrate on subjective appetite, food intake, and postprandial glycemia in older adults.
ncbi.nlm.nih.gov/pubmed/28759735

The effect of dairy and nondairy beverages consumed with high glycemic cereal on subjective appetite, food intake, and postprandial glycemia in young adults.
ncbi.nlm.nih.gov/pubmed/28759734

Effect of milk protein intake and casein-to-whey ratio in breakfast meals on postprandial glucose, satiety ratings, and subsequent meal intake.
ncbi.nlm.nih.gov/pubmed/30139624