

Smile... and say more cheese, milk and yogurt

These dairy products help kids lower their bad cholesterol

By Karli Longthorne

Understanding the role of cheese, milk and yogurt consumption in preschool children's health — specifically, their cardiometabolic health, which is an individual's cardiovascular system health status and metabolism — is an understudied but important area of preventative health research.

An ongoing study, led by University of Guelph master's student Justin Sheremeta along with Prof. Genevieve Newton, Department of Human Health and Nutritional Sciences, Prof. Andrea Buchholz, Department of Family Relations and Applied Nutrition, and a team of researchers, have preliminary findings that suggest children with higher cheese consumption had lower levels of LDL cholesterol (a low-density lipoprotein that can increase the risk of heart disease and stroke) and total cholesterol.

"The lower LDL cholesterol was the most interesting finding so far, as compared to other dairy products, cheese is the most concentrated in saturated fat," says Sheremeta.

Sheremeta says the lower LDL cholesterol associated with cheese consumption in preschoolers — especially during a time in which children experience rapid growth — may be because the fat in cheese is being redirected towards growth rather than stimulating cholesterol synthesis.

Other preliminary findings were that as consumption of low-fat milk increased, so did HDL cholesterol (high-density lipoprotein that helps remove other forms of cholesterol



in the blood).

Moreover, higher yogurt consumption was associated with higher levels of HbA1c, a biomarker indicative of long-term blood glucose levels, and lower LDL cholesterol (low-density lipoprotein that collects in blood vessel walls, also known as "bad" cholesterol).

"These preliminary findings tell us that dairy intake can be associated with both cardiometabolic protective and undesirable outcomes in preschool children," says Sheremeta. "They also speak to the importance on focusing less on individual nutrients and more

on the effects of a whole food."

Dairy products contain nutrients such as protein, calcium, potassium, magnesium, vitamin D, and vitamin K that could have positive cardiometabolic effects, both independently and synergistically. As well, dairy products contain certain fatty acids that may be cardioprotective.

"More research is needed to further investigate these preliminary findings," says Sheremeta.

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