

Getting kids to consume more dairy

Experts say three crucial characteristics may enhance dairy and calcium intake in preschool children

By Karli Longthorne

Dairy products rich in calcium such as milk, yogurt and cheese play an important role in optimizing children’s health and nutrition—maintaining bone health by providing micro-nutrients such as calcium and vitamin D, and reducing long-term health risks. Yet 37 per cent of Canadian children ages four to nine don’t consume enough dairy.

University of Guelph Masters student Mackenzie Harris and professors Andrea Buchholz, Department of Family Relations and Applied Nutrition, and Genevieve Newton, Human Health and Nutritional Sciences and colleagues are working to address this gap in children’s nutrition. Identifying a target audience, determining the intervention setting and implementing one or more behaviour change strategies are three crucial characteristics that may enhance dairy and calcium intake in preschool children.

Interventions—a type of strategy designed to impact individual’s health choices—that aim to instill healthy lifestyle habits such as dairy consumption are best when initiated during preschool age (five years or younger).

“We hope our findings will inform the development of future dairy and calcium intervention studies and public health education efforts,” says Buchholz.

Interventions that spark environmental restructuring—that is, creating an environment conducive to consumption—may lead kids to more dairy and calcium. So may teaching prompts, cues and apps.

Steps to increasing dairy consumption by children



1 Identify target audience

2 Determine setting of intervention



3 Select and implement behaviour change strategy

They can be used as triggers to remind individuals to consume milk at a specific time of day, such as at meal time.

Finally, interventions that target preschool children as well as their parents are more effective than those that target other stakeholders, such as childcare services.

“These results suggest that future studies should modify interventions to implement these characteristics to increase dairy and/or calcium intake in preschoolers,” says Newton.

The researchers found that most existing interventions were

ineffective in encouraging dairy and calcium consumption for several reasons. This could be because the target message—increasing dairy or calcium intake—wasn’t focused enough, the type of behaviour technique used was inappropriate or there was too much variability (such as target audience and dietary messaging) among the interventions.

“This tells us that there is still a great need for future studies to modify their interventions to exclusively target dairy and/or calcium intakes and reduce variability in interventions,” says Buchholz.

Further information on the study can be accessed at doi.org/10.3390/nu11040714

For more information, contact Andrea Buchholz at abuchhol@uoguelph.ca

Published by Dairy at Guelph
University of Guelph
ON N1G 2W1
dairyatguelph.ca

Written and produced by
Students Promoting Awareness
of Research Knowledge (SPARK)
uoguelph.ca/research/spark

DAIRY 
at GUELPH
CANADA'S DAIRY UNIVERSITY