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The Experts' Forum

This month's feature article:
Wow Now Slim Cow by Helen Bishop MacDonald



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One of the biggest problems in the area of nutrition is the way in which misinformation or misconceptions get a toe-hold in the public's collective mind. A minor example of this would be the nonsense about brown eggs being more nutritious than white. It's minor in that it doesn't do great harm to the people believing it other than to cost them a few pennies more at the grocery store. Another myth with the potential for more serious harm, albeit to a smaller number of people, is the one that says we need eight glasses of water every day. We need the equivalent of two litres of fluid, which we can get if we never touch a glass of water, from everyday foods that contain fluid. Where the risk for harm comes in is when people take this notion to extreme and can actually die from over-consumption of the stuff.

The myth that concerns me most, however, because it affects a far greater number of people, is the myth that milk and milk products are fattening. Not only is this a big fat myth, the very opposite is true.

Recently a randomized controlled study by Dr. Michael Zemel and his group of researchers confirmed what earlier studies had shown, and that was that milk and milk products in the diet greatly enhanced weight and fat loss in people on a diet moderately reduced in calories. Another researcher, Robert Heaney, has shown that those whose calcium intake (primarily from dairy) is greater than 1200 mg. per day are five times less likely to have a body mass index over 26, compared to those taking in less than 500 mg. of calcium. A body mass index between 20 and 25 indicates a healthy weight. Put in more practical terms, that means that folks who average three or more servings of milk and milk products per day while following a balanced diet are much less likely to be fat than their counterparts who avoid milk!

Other researchers have looked at children and adolescents and found pretty much the same thing: kids who drink milk and eat cheese and yogurt have a greatly reduced risk of becoming obese.

This almost sounds blasphemous, doesn't it? The notion that kids eating cheese will be slimmer seems to run contrary to everything we think we know. But the evidence is very powerful. A recent Canadian study looked at the eating habits of obese and non-obese children and found that cheese intake was negatively correlated with percent body fat while sugar-sweetened drinks were positively correlated. The sweetened drink finding wasn't a surprise to the researchers, but the cheese part sure was!

Another study of children carried out in Tennessee found that the more calcium that was in a child's diet, the less body fat she or he had. Similarly in work done with pre-schoolers in Boston, more milk, less fat.

What all this means, of course, is an increased interest in having calcium and dairy products play a more important role in weight loss or maintenance. Some, unfortunately, have interpreted the science as meaning that calcium alone is responsible for this happy phenomenon. Not true, not by a long shot. What has become more evident is that it is calcium in combination with as-yet unidentified milk ingredients that does the trick. When researchers tried to duplicate the weight-loss success using calcium supplements, the results were not comparable. Simply adding calcium to a product will not help the dieter achieve the same level of success as seen when milk and milk products are the source of the calcium. Some studies have used soy beverage fortified with calcium and weight

loss was only similar to that of people on the usual calorie-restricted diet plans.

Speculation about what other components of milk besides calcium might be responsible for the fat loss has focused on conjugated linoleic acid (CLA) and protein. Certainly there is an impressive amount of evidence that CLA has an impact on body composition (more muscle mass, less fat), and there is renewed interest on the role of protein-rich diets in enhancing weight loss. As it happens, milk and milk products are the only foods that are naturally rich in all three: calcium, CLA and protein.

The bottom line, the take-to-the-bank message is that Canadians will benefit greatly from an increased consumption of milk, cheese, and yogurt and from products made from these ingredients. It's no mere coincidence that the average weight of the population has gone up as dairy product intake has gone down.

Given the range of chronic illnesses that have been linked to low calcium/milk consumption plus the evidence of milk as a fat fighter, one of the best bits of dietary advice we can give Canadians is that they follow Health Canada's Food Guide recommendation of 2-4 servings of milk and milk products every day.

In summary, researchers have concluded that the myths concerning dairy products leading to weight gain are simply not true. These studies have, in fact, revealed that consumption of dairy ingredients can lead to better health and diet management.

What does this mean to you as a further processor? As consumers become more aware of the good science associated with dairy products, they will be more likely to increase their consumption, be it in the form of cheese and milk or further processed goods such as prepared foods rich in milk ingredients such as cream or butter and meal replacement/diet type beverages enriched with skim milk powder and milk proteins.

If you are currently using dairy in your finished products, these studies reveal the substantial health and wellness benefits to be gained from their continued use.

The good science emerging on dairy products and ingredients should lead to new opportunities for growth in the food processing and further processing sectors. Companies looking for new ways to market and promote the value of their finished products can point to the dairy ingredients on their ingredients list for added appeal to the consumer.

Helen Bishop MacDonald

Helen Bishop MacDonald is a highly accomplished dietitian and author, with a Masters degree in nutrition from Michigan State University. She has an extremely colourful and diverse career history including: nutritionist for the Calgary Flames, the '88 Olympics, nutrition columnist for Canadian Living Magazine, lecturer at Mount St. Vincent University and Dalhousie University, Assistant Professor at Université de Moncton, independent nutrition consultant and nutrition researcher.

She is the author of "Eating for the Health of It" and co-author of "The Total Fibre Book" (with Marg Fraser) as well as "Eat Well, Live Well, Canadian Dietetic Association's Guide to Healthy Eating" (with Marg Howard). Her work as a researcher resulted in the publishing of six research papers on topics including obesity and weight loss, the role of xylitol in the prevention of dental caries, meat and its place in the diet and choice vegetables for beta carotene, vitamin C and fibre.

In 1987, she was presented the General Foods Award for Excellence in Nutrition Communications. She is a charter fellow of the Canadian Dietetic Association. She is currently Director of Nutrition at the Dairy Farmers of Canada.