Milk intake in pregnancy

The article about milk intake during pregnancy and decreased birth weight has several flaws. It may also serve to perpetuate typical physician perceptions that bovine milk is necessary for human health.

The study found that pregnant women who restricted milk intake had babies that weighed 120 g less on average than the babies of women who did not restrict milk intake. But the real concerns are whether the lower birth weight had any negative clinical impact (acute or chronic) and whether the babies were underweight. Could there even have been benefits associated with delivering slightly smaller babies?

Both groups of women in the study had good protein intakes. Caloric intakes were almost equivalent. Does the small (10 g) difference in daily protein intakes between the 2 groups account for the difference in birth weights? How does one separate out the effect of vitamin D and calcium? Should we be measuring serum vitamin D levels to help quantify the differences in intake?

Note that there was no randomization in the study. Perhaps the women who restricted their milk intake also had restricted diets more generally. If the milk restrictors tended to eat smaller servings of food, then the diet surveys would have overestimated their protein and caloric intakes. I also wonder if natural bovine hormones in milk, or if hormonally active pesticides that bioaccumulate in milk, can increase birth weight.

People from my ethno-religious background are virtually all lacto-vegetarians and some are becoming vegans. I’ve heard dozens of stories about physicians telling family members and friends (both lacto-vegetarians and vegans) that they were hurting their un-born babies, their children and themselves and that they must consume meat. Physicians should be able to take an adequate history to determine whether any diet, vegan or otherwise, provides the micro- and macronutrients needed in pregnancy. A basic knowledge of vegetarian and vegan foods that provide protein and other nutrients is also necessary. For instance, physicians should note that vitamin D is added to milk and that soy milk now contains equivalent amounts of protein, calcium and vitamin D.

Tushar Mehta
Substance Use Medical Service St. Joseph’s Health Centre Toronto, Ont.

REFERENCE
DOI:10.1503/cmaj.1060123

[The authors respond:]

We appreciate Tushar Mehta’s concerns. Our study was designed as a diet study and therefore we measured both supplement and food intakes of many nutrients, using the dietary reference intakes recently developed by Canadian and US experts. The media’s “milk slant” on the article drew in readers and listeners, but this was a study about a dietary requirement for vitamin D.

Initially we examined the quality of the diets of pregnant women who were in increasing numbers restricting their intake of fortified milk, which was one of the few good sources of vitamin D in the Canadian diet in 1998. With the growing recognition that vitamin D deficiency is widespread in North America and that a dietary source of this vitamin is required in the winter months, more foods are now fortified with vitamin D, including yogurt, rice and soy beverages, margarine, some infant formulas, meal replacements and ready-to-eat cereals. Use of vitamin supplements is still encouraged, but the pregnant women in our study who needed supplements the most were not consuming them.

Mehta wonders whether the 120-g difference in birth weight that we observed is clinically relevant. At the recent Milk, Hormones, and Human Health Conference sponsored by Harvard University (www.milksymposium.org), preliminary data were presented from the Danish Birth Cohort Study (with 101 042 recruits) showing a higher incidence of both small-for-gestational-age and large-for-gestational-age births with low and high milk intakes, respectively.

Milk is a complex biological fluid requiring further investigation, as more than 1 component could be responsible for its biological effects. In Canada, where pregnant women live at northern latitudes with limited sunlight exposure, vitamin D is one of these important nutrients. One of the consequences of inadequate vitamin D consumption during pregnancy now appears to be reduced bone mineralization in childhood. Our study’s conclusion that daily intake of vitamin D is required during pregnancy is an important public health message for Canadians.

Kristine G. Koski
Katherine Gray-Donald
School of Dietetics and Human Nutrition
McGill University
Ste. Anne de Bellevue, Que.
Cynthia A. Mannion
Faculty of Nursing
University of Calgary
Calgary, Alta.

REFERENCES
DOI:10.1503/cmaj.1070017

Time to reperfusion therapy

In their article on delays to reperfusion therapy in the province of Quebec, Thao Huynh and associates concluded that for most patients the time to primary percutaneous coronary intervention exceeded current recommendations. This conclusion might be