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Health Options
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Debunking calcium myths

Today more than ever before, people are self-publishing "health and nutrition" books, magazines, and especially newsletters as a way to promote their personal beliefs. The information is presented in a condensed form to fit into our busy lifestyles.

What appears to be the solution is keeping up with the latest information has a dark side.

It is increasingly difficult to separate fact from fiction. The amount of scientific data doubles at least every 10 years. Even professionals have difficulty keeping up with new information, but it is even more difficult to evaluate the accuracy of the condensed information.

And to make matters worse, the more often misinformation is repeated, the more likely people will believe it is true.

Last week, Judy Gorman in her "Healthy Stuff" column repeated some of the mushrooming misquoted and misinformation about calcium and milk.

After talking with Gorman, we all felt it important to set the record straight immediately.

Relative to the amount of calcium in milk, the protein content has only a minor effect on calcium loss. Consuming 1 cup of milk provides about 300 milligrams of calcium and about 100 milligrams of calcium will get absorbed into the body.

The protein content of the milk could be expected to cause the excretion of 8 milligrams of calcium in the urine – at the very most! Thus over 90 percent of the absorbed calcium would theoretically be retained. We get much more calcium from drinking milk than we lose.

So how do you know that these facts are true?

We talked with Dr. Nancy Johnson, former chairwoman of the University of Hawaii at Manoa Department of Food Science and Human Nutrition. Her research included one of the first human studies that showed the effect of dietary protein on calcium loss (Journal of Nutrition, 1970).

In our conversation, she stressed that the amount of protein in milk is minor compared to the amount of calcium, and that the protein effect on the calcium loss is only a concern when total dietary protein intake exceeds about twice the Recommended Dietary Allowance (RDA) – which would be about 90 grams.

Foods are complex chemical structures. In order to really understand the role foods play in our health, it is essential to evaluate the whole food as it fits into the complete diet, not just single nutrients. Some of the other points to consider regarding this issue include:

Oxalates found in many leafy green vegetables like spinach inhibit calcium absorption.

Dietary fiber, sodium or phosphorus are all important to overall health but in excess can adversely affect calcium balance.

Vitamin D, vitamin K and boron appear to be beneficial to the skeleton.

Caffeine can increase calcium loss, but research has indicated that a couple of cups of coffee a day is not a problem.

It is possible to choose a healthy diet without dairy products. However, this must be done carefully to provide adequate calcium for long-term bone health.

The problem of osteoporosis is increasing as our population ages. And because osteoporosis is such a painful condition, we should make sure that our choice to consume dairy products is based on facts and not on faulty evaluation.

Nutrition is a complex science that requires a significant amount of training in biochemistry, physiology and food composition.

In a future article we will address meeting calcium needs without milk.

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