CBC news

Calcium supplement use may raise heart attack risk

CBC News Posted: May 23, 2012 6:38 PM ET Last Updated: May 23, 2012 11:01 PM ET

Taking calcium supplements doesn't seem as benign as thought, say doctors who've found the pills may increase the risk of heart attack.

The findings of a study published in Thursday's online issue of the journal Heart were based on data from almost 24,000 women in Germany aged 35 to 64 who were tracked for an average of 11 years as part of a European cancer and nutrition project.

For decades, doctors routinely prescribed calcium supplements to prevent and treat osteoporosis, particularly for postmenopausal women.

The risk of having a heart attack almost doubled among calcium supplement users compared with non-users, after taking into account other factors that were likely to influence the results.

Overall, the risk was small and 354 heart attacks occurred.

"This study suggests that increasing calcium intake from diet might not confer significant cardiovascular benefits, while calcium supplements, which might raise [heart attack] risk, should be taken with caution," Professor Sabine Rohrmann of the division of cancer epidemiology and prevention at the University of Zurich and co-authors concluded.

The latest findings add momentum to the pendulum starting to swing away from taking supplements and towards dietary calcium.

"The conclusion we came to was that calcium supplements were probably not a good idea because the cardiovascular problems they cause were greater than the benefits that arose in terms of fracture prevention," said Professor Ian Reid of Auckland University in New Zealand, who wrote a journal editorial accompanying the study.

Calcium supplements have been widely embraced by doctors and the public on the grounds that they were natural and were therefore considered a safe way to prevent fractures.

"It is now becoming clear that taking this micronutrient in one or two daily boluses is not natural, in that it does not reproduce the same metabolic effects as calcium in food," Reid concluded.

The effect may result from unnatural spikes in calcium in the blood stream after taking supplements, said Dr. Aliya Khan, director of the calcium disorder clinic at McMaster University in Hamilton, Ont.

"Dietary calcium is more slowly absorbed whereas these concentrated calcium supplements may potentially contribute to calcification in the blood vessels," Khan said in an interview from a conference in Winnipeg.

Osteoporosis Canada's most recent guidelines recommends getting about 1,200 milligrams every day of calcium, preferably from diet, Khan said. One glass of milk has about 300 milligrams of calcium.

Ried said calcium should be seen as an important part of a balanced diet and not a "low-cost panacea" to postmenopausal bone loss.