



## Calcium supplements may raise risk of heart attack

By Tan Ee Lyn HONG KONG | Thu Jul 29, 2010 7:20pm EDT

(Reuters) - Calcium supplements, which many people consume hoping to ward off osteoporosis, may increase the risk of heart attack by as much as 30 percent, researchers reported Friday.

These tiny tablets which carry concentrated doses of calcium were also associated with higher incidences of stroke and death, but they were not statistically significant.

The researchers advised people consuming calcium supplements to seek advice from their doctors, take more calcium-rich foods and try other interventions like exercise, not smoking and keeping a healthy weight to prevent osteoporosis.

"People regard calcium supplements as natural but they are really not natural at all," Ian Reid, professor of medicine at the University of Auckland in New Zealand, said in a telephone interview.

Reid and colleagues in Britain and the United States conducted a meta-analysis encompassing 11 studies that tracked nearly 12,000 elderly people over four years.

Half of them were given calcium supplements and the other half placebo or dummy pills with no therapeutic content. The results were published in the British Medical Journal.

"What we found was a 30 percent increase in heart attacks in the people who were randomized to take calcium," Reid said.

"If you have 1,000 people taking calcium for five years, we will expect to find 14 more heart attacks, 10 more strokes and 13 more deaths in the people given calcium than they would have had if they hadn't been treated with calcium," Reid said.

"That is 37 more adverse events and we expect 26 fractures being prevented. So calcium is associated with more bad things happening than with bad things prevented."

While experts are not certain about the biological mechanism by which calcium supplements may damage the body, studies in the past have linked high levels of blood calcium to more heart attacks and damage to blood vessels, Reid said. "When you take calcium supplements, your blood calcium level goes up over the following four to six hours and goes up to the top end of the normal range," he said.

"That doesn't happen when you have calcium to eat in your diet because the calcium from food is very slowly absorbed and so the blood calcium level hardly changes at all."

Higher blood calcium may lead to the formation of plaques in blood vessels, which can lead to heart attack, stroke and other cardiovascular diseases, Reid explained.

"People have always focused on fat levels in the blood as driving that process (plaque formation) but there is increasing evidence now that calcium levels in the blood might drive that as well," he added. (Editing by Sugita Katyal)