



Osteoporosis Canada

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## Calcium Intake Statement

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Prepared and reviewed by members of the Scientific Advisory Council of Osteoporosis Canada

Calcium is essential for the achievement and maintenance of normal bone health. Recent research, however, has raised concerns regarding the daily use of 1000 mg or higher of elemental calcium particularly in elderly individuals (>70 years of age) in the presence of impaired renal function.

Research from New Zealand evaluated the results of 11 randomized controlled trials of calcium supplementation involving more than 12,000 patients. Ian Reid and his colleagues found an increase in the risk of heart attacks by 31% in the groups receiving calcium in comparison to placebo with 143 women experiencing a heart attack in the calcium groups and 111 women experiencing a heart attack in the placebo groups.

The reason for this increased risk of heart attacks is not yet clear and may be due to calcification of the coronary arteries following rises in blood calcium after the intake of calcium supplements. Such findings have not been seen with intake of calcium from dietary sources.

Is it time to stop calcium supplementation? No, but high doses (i.e., 1000 mg) of calcium supplements should not be used by post-menopausal women who do not need extra calcium or just a more modest amount. It's important to assess total intake from diet and supplements. In terms of dietary intake, each of the following provides about 300 mg calcium: 1 cup milk, fortified soy beverage, or fortified orange juice; 175 ml yogurt; 50 g hard cheese. In addition, other foods in the diet generally provide about 300 - 400 mg in total. If total intake is equal to 1200 mg (i.e., the Adequate Intake (AI) of 1200 mg recommended by the Institute of Medicine and Health Canada), further supplementation should not be recommended.

In response to a recent Womens' Health Initiative study, the SAC has added the following statement to the Information for Patients position statement:

**A recent analysis from the Women's Health Initiative study which studied approximately 35,000 women over 7 years suggests there may be an increased risk of heart attacks in those women taking calcium supplements in comparison to those not on calcium supplements. Women should discuss the need for calcium supplements with their physician. Osteoporosis Canada advises women to take 1200 mg of elemental calcium**

**daily. Achieving this from dietary sources is preferred. Osteoporosis Canada has printed patient information listing which foods are rich in calcium. For those not able to meet their calcium requirements from diet alone then low dose supplements may be used with either calcium carbonate or calcium citrate.**