Background

Calcium supplementation is used for slowing the progression of osteoporosis but it may have adverse effects if accumulating in arteries and causing calcification.

Objectives

The aim was to examine calcium intake from food and supplements of older residents in assisted living and to assess whether the use of supplements is directed according to the needs of residents.

Methods

Cross-sectional study among residents in assisted living facilities (N = 350) in the metropolitan region of Helsinki, in Finland. Calcium intake was calculated from one-day food diaries and the use of calcium supplements retrieved from medical records.

Results

Mean age was 83 years; 82% were females. According to MNA, 21% suffered from malnutrition. The mean dietary calcium intake of females was 1113 mg; including food and supplements 1441 mg. The corresponding figures for males were 1224 mg and 1528 mg. Of all residents, 13% had a total daily calcium intake from food and supplements <800 mg, 29% 800-1200 mg, and 59% >1200 mg.

More than one-third (37%) used calcium supplements daily. Of those having calcium intake from food <800 mg, only 32% were administered calcium supplements. The respective proportions among groups in which calcium intake from food was 800-1200 mg, 1200–1500 mg, or >1500 mg were 37%, 43%, and 36% (Figure 1).

Conclusions

Calcium supplements were not administered adequately to those whom they were indicated. Dietary intake of calcium should be evaluated.