Abstract

Introduction: Obesity is a risk factor for other nontransmissible chronic diseases. It has been suggested calcium intake helps to control obesity, but there is no consensus about this. Objective: Analyze the studies published on this topic in order to highlight issues to be further explored in future studies. Methods: A literature review was conducted using the PUBMED, Science Direct, Scielo, Scopus, Medline and CAPES electronic scientific basis. Studies, which evaluated the effect of calcium ingestion in energy metabolism, body weight, and body composition, published from 2000 through 2011, were analyzed. Results and discussion: The results of most of the interventional studies selected suggest that calcium ingestion may favor the reduction of the anthropometric measures and improve body composition. The discrepancy in the results of the observational studies is probably due to methodological differences. It seems that the benefits are only detected when a low calcium habitual ingestion (700 mg/day or lower) is increased to about 1,200-1,300 mg/day. Conclusion: When assessing the effect of calcium derived from supplements, the investigators should test higher bioavailability compounds. If the calcium source is the dairy product, it is necessary that to consider and isolate the impact of other nutrients present in these foods. Longer term studies should be conducted to assess the effect of calcium on energy metabolism.

Keywords
Calcium, Energy metabolism, Body weightm Body composition.