

## Dietary Calcium Intake in Sample of Moroccan schoolchildren and adolescents

**Background:** The adequate development of children and adolescents is conditioned by an adequate calcium intake which plays an essential role in maintaining bone health. Indeed, inadequate calcium intake presents a several health problem that may cause many disorders especially in adulthood. As other countries, the calcium status must be studied to meet the objectives set by the Minister of Health in the fight against micronutrient deficiencies. Thus, our aim's study consists in the estimation of calcium intake in a sample of children and adolescent aged from 6 to 18 years.

**Methods:** This is a descriptive cross-sectional study including 131 children and adolescents. . For each participating children and adolescent, anthropometric measurements were taken and calcium intake was assessed based on 24 h dietary recall. Children's nutritional habits was also evaluated, by a food frequency questionnaire, to assess the consumption of calcium-rich food.

**Results:** The total mean of calcium intake was  $522.0 \pm 297.0$ mg/day with 85.5% of subjects highlighted an inadequate calcium intake. No significant difference between boys and girls. According to age groups, calcium intake was significantly different with high consumption in subjects aged from 14 to 18 years ( $776.86 \pm 290.07$ mg/day) showing insufficient calcium intake of the studied population. Analysis of daily food intake and food frequency showed that bread, vegetables, and fruits are the most consumed food and the main source of daily calcium intake, while consumption of dairy products, presented the best source of calcium, is limited (14% of total calcium intake).

**Conclusion:** Findings from this study showed that a large proportion of Moroccan children and adolescents have inadequate calcium intake. Hence, the urgent need to put in place strategies and action plans in order to improve the calcium status and to reduce different inadequate calcium disorders that threaten the Moroccan population health, both in childhood and adulthood.

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