

Bone mineralization and calcium intake in Chilean school children

Mineralización ósea e ingesta de calcio en escolares chilenos.

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Bone mineralization was evaluated in 36 school age children with calcium intake below 50% of Recommended Dietary Allowances (RDA), and compared with 28 school age children with calcium intake higher than 100% of the RDA. The total group was aged between 86 and 178 months. The calcium intake was evaluated by 24 hours recordatory survey. Height for age and weight for height were evaluated according to WHO tables. Puberal development was evaluated according to Tanner stages. Bone mineral density (BMD) and total bone mass (TBM) of whole body, spine and femoral neck were measured with Norland 2600 densitometer. School age children with intakes below 50% of RDA had lower height for age adequation (97.7 +/- 4.0%), whole body TBM adequation (98.9 +/- 17.9%) and BMD adequation (97.8 +/- 7.9%) than those ingesting more than 100% of the RDA (115.9 +/- 17.4%), (109.7 +/- 18.0%) and (104.7 +/- 11.1%) respectively. In spine, however, there was a clear tendency to be lower, there were no significant