

Mineral balance during nutritional recuperation of infants with protein deficiency

Balance de minerales durante la recuperación nutricional en lactantes con desnutrición energético-proteica.

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Mineral requirements of normal infants change according to growth velocity. They are directly associated to needs for obtaining an adequate composition of new tissue, assure an optimal bone mineralization and for maintaining normal plasma mineral levels. Nutritional rehabilitation of malnourished infants determines increased mineral requirements, which may be not satisfied with usual infant formulas. We studied mineral retention (Ca, P, Mg, Zn and Cu) during nutritional recovery of 9 malnourished male infants (age: 2-7 mo; weight/age < 70%), fed two formulas, both with 85 Kcal/dL (356 KJoule/dL): the first based on whole cow's milk (LP) and the second on a modified cow's milk containing mineral recommendations for normal infants (LPM); balances were compared to normal for age and for length. Infants received each formula for 6 days, with the last 3 days on a metabolic balance Ca, Mg, and P showed high intakes and very low urinary excretions, calcium retention (68.5 +/- 22.7 and 61.4 +/-