

Effect of bovine-hemoglobin-fortified cookies on iron status of schoolchildren: A nationwide program in Chile

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The Chilean School Lunch program, which serves one million children nationwide, was supplied with three 10-g cookies fortified with 6% bovine hemoglobin concentrate, designed to provide 1 mg bioavailable iron per day. A survey of 1000 children was performed after 3 y. Significant differences in hemoglobin concentrations were found in the children from the fortified vs the nonfortified province ($P < 0.01$). Low serum ferritin values were also significantly more prevalent in the nonfortified group. The effect was evident despite the very low prevalence of anemia in both the fortified and the unfortified school groups. Heme-iron-fortified cookies are a feasible and effective way to improve the iron status of school-age children. In regions of high prevalence of iron-deficiency anemia, the effect of a heme-fortified cookie program should be even more important.