

A multifactorial approach of nutritional, intellectual, brain development, cardiovascular risk, socio-economic, demographic and educational variables affecting the scholastic achievement in Chilean students: An eight- year follow-up study

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The aim of this study was to quantitate the relative impact of nutritional, intellectual, brain development, cardiovascular risk, socio-economic, demographic and educational variables on the results of the 2009 Quality Education Measurement System (SIMCE) tests of language and mathematics for scholastic achievement (SA) applying a multifactorial approach, in school-age children of the 2010 5 th elementary school grade (5ESG) and of the 1 st grade of high school (1HSG). The purposes were: i) to test the hypothesis that intellectual ability, the level of SA of the educational establishments in the 2009 SIMCE tests, sex, parental schooling levels, and head circumference-for-age Z-score are the most relevant parameters associated with