Changes in socio-economic status and lipoproteins in Chilean adolescents: A 16-year longitudinal study

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Objective The present longitudinal study assessed whether changes in socio-economic status (SES) from infancy to adolescence were associated with plasma lipoprotein concentrations in adolescence, of which low HDL-cholesterol (HDL-C) and high LDL-cholesterol (LDL-C), TAG and total cholesterol (TC) concentrations are associated with higher cardiovascular risk.

Design SES, assessed using the modified Graffar Index, was calculated at 1, 5, 10 and 16 years. Principal components factor analysis with varimax rotation extracted two orthogonal SES factors, termed 'environmental capital' and 'social capital'. Generalized linear models were used to analyse associations between environmental and social capital at 1 and 16 years and outcomes (HDL-C, LDL-C, TAG, TC) at 16 years, as well as changes in environmental and social capital from 1-5, 5-10, 10-16 and 1-16 years, and outcomes at 16 years.

Setting Santiago, Chile.

Participants We evaluated 665 participants from the Santiago Lon