Abstract

Introduction. Cardiovascular disease is a public health problem globally; it represents the second cause of mortality in Colombia. These reasons highlight the importance of identifying risk markers since childhood, in order to diminish mortality rates. Objectives. To determine the lipid profile, homocysteine and C reactive protein plasma concentrations and identify relationship between these markers with age, sex and school type in schoolchildren aged 5 to 14. Materials and methods. A descriptive study was carried out in 600 schoolchildren, where we evaluated the lipid profile, and the plasmatic concentrations of homocysteine and C-reactive protein. Results. Higher average levels of total cholesterol, low density cholesterol and triglycerides were observed in girls (p<0.05) as compared to boys. The prevalences of high lipid were higher in girls than in boys: 7.9% vs. 3.0%; 11.6% vs. 4.7% and 6.9% vs. 5.7% for total cholesterol, low density cholesterol and triglycerides, respectively; children in private schools also had higher levels of lipid than those in public ones (p<0.05). The prevalence of homocysteine levels above 6.3 umol/L was higher (64.3%) in boys than in girls (56.1%). No statistically significant differences were observed when comparing the prevalence high levels of C-reactive protein according to sex, age and type of school. Conclusions. The prevalence of high lipid profile levels, in girls, suggests the possibility of adopting intervention measures since childhood. It is necessary to investigate, about the intervention of other factors in the homocysteine levels observed in boys and over the C protein reactive in order to see the real contribution to cardiovascular disease.

Keywords
Cardiovascular diseases/epidemiology, cholesterol, triglycerides, homocysteine, C-reactive protein, child.