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Título	Lipase C, Hepatic Type −250A/G (rs2070895) Variant Enhances Carotid Atherosclerosis in Normolipidemic and Asymptomatic Individuals from Brazil
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Resumo	The common genetic variant in the promoter region of the hepatic lipase gene [*LIPC* −250G/A(rs2070895)] has an ambiguous association with cardiovascular disease. In this context, our study was performed to identify the relationships between the rs2070895 with carotid atherosclerosis, plasma lipids, and parameters of reverse cholesterol transport. A total of 285 normolipidemic and asymptomatic participants from an initial sample of 598,288 individuals (inclusion criteria: LDL-C≤130 mg/dL and triglycerides ≤150 mg/dL; age: 20–75 years, both genders; confirmation of clinical, anthropometric and laboratory data; attended all visits; DNA was achieved to perform genetic analysis) were enrolled and the rs2070895 variant was genotyped by TaqMan® OpenArray® Plataform. Carotid intima-media thickness and the screening of atherosclerotic plaques were determined by B-mode ultrasonography. The rs2070895 genotype frequencies were 0.44, 0.41, and 0.15 (GG, GA, and AA, respectively). Logistic regression analysis showed that the risk of having plaques was increased in participants carrying the AA or AG genotypes (OR = 3.90; 95% CI = 1.54–10.33), despite an increase in high-density lipoprotein cholesterol levels, HDL diameter and apolipoprotein A-I, as compared to the GG genotype. Hepatic lipase and endogenous lecithin cholesterol acyl transferase activities were reduced (38% and 19%, respectively) and lipoprotein lipase was increased by 30% (AA vs GG). Our results provide evidence that the AA or AG genotypes of the rs2070895 were associated with carotid atherosclerosis in apparently healthy participants, probably as a consequence of reduced reverse cholesterol transport and accumulation of HDL subfraction 2 rich in triglycerides and depleted in cholesteryl esters that could become dysfunctional.
Fomento	