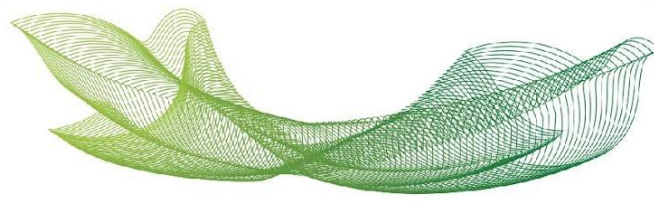




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Título	Associations of plasma lipids, lipoproteins, and cardiovascular outcomes with climatic variations in a large Brazilian population of Campinas, São Paulo state: an eight-year study
Autores	COROZOLLA, W.; ZAGO, V. H. S.; MARSON, F. A. L.; AVILA, A. M. H.; COSTA, P. D. P.; TEIXEIRA, L. S.; DALPINO, F.; FARIA, E. C.
Autor (es) USF	MARSON, F. A. L.
Autores Internacionais	Não
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Resumo	<p>In this eight-year retrospective study, we evaluated the associations between climatic variations and the biological rhythms in plasma lipids and lipoproteins in a large population of Campinas, São Paulo state, Brazil, as well as temporal changes of outcomes of cardiovascular hospitalizations. Climatic variables were obtained at the Center for Meteorological and Climatic Research Applied to Agriculture (University of Campinas - Unicamp, Brazil). The plasma lipid databases surveyed were from 27,543 individuals who had their lipid profiles assessed at the state university referral hospital in Campinas (Unicamp). The frequency of hospitalizations was obtained from the Brazilian Public Health database (DATASUS). Temporal statistical analyses were performed using the methods Cosinor or Friedman (ARIMA) and the temporal series were compared by cross-correlation functions. In normolipidemic cases (n=11,892), significantly different rhythmicity was observed in low-density lipoprotein (LDL)- and high-density lipoprotein (HDL)-cholesterol (C) both higher in winter and lower in summer. Dyslipidemia (n=15,651) increased the number and amplitude of lipid rhythms: LDL-C and HDL-C were higher in winter and lower in summer, and the opposite occurred with triglycerides. The number of hospitalizations showed maximum and minimum frequencies in winter and in summer, respectively. A coincident rhythmicity was observed of lower temperature and humidity rates with higher plasma LDL-C, and their temporal series were inversely cross-correlated. This study shows for the first time that variations of temperature, humidity, and daylight length were strongly associated with LDL-C and HDL-C seasonality, but moderately to lowly</p>



	associated with rhythmicity of atherosclerotic outcomes. It also indicates unfavorable cardiovascular-related changes during wintertime.
Fomento	Não