## Abstract

## Lipidogram related to the physical condition of residents of the Community of Puruzinho, Amazonas

Iranira Geminiano de Melo<sup>D</sup><sup>1\*</sup>, Maria Enísia Soares de Souza<sup>D</sup><sup>1</sup>, Célio José Borges

<sup>1</sup> Federal Institute of Education, Science and Technology of Rondônia (IFRO), Health, Society and Technology Study Group, GESSTEC, Porto Velho, Brazil.

<sup>2</sup> Federal University of Rondônia (UNIR), Health, Society and Technology Study Group, GESSTEC, Porto Velho, Brazil.

\*E-mail: iranira.melo@ifro.edu.br

Conflict of interest: nothing to declare. Funding: nothing to declare.

The evaluation of the physical condition allows a previous knowledge of the physical condition of the person or group researched, as well as the elaboration of training with the precautions appropriate to the objective of the activity, which provides greater security in the quantification of the exercise. Good physical condition is associated with health, while an insufficient physical condition may indicate impairment of the person's health. The objective of the present research is to analyse the values of cholesterol, LDL, HDL, and triglycerides in relation to the physical condition levels of the residents of the Puruzinho community in the state of Amazonas. This is a descriptive cross-sectional research, and the study universe consists of 164 people distributed in 20 families. The sample consisted of 40 people aged between 13 and 73 years ( $36.25\pm14.31$ ), 18 women ( $35.05\pm12.89$ ), and 22 men ( $35.94\pm16.13$ ). The research data collection instrument consisted of a questionnaire with closed questions developed through personal interviews. Thus, the responses of each individual were analysed, translated into scores and, subsequently, the physical classification, following the following criteria: (1 to 5 points – "Insufficient physical condition"), (6 to 7 points – "Normal physical condition") and (8

to 10 points – "Good physical condition"). Refrigerated Serum was analysed using the Automated Enzymatic Method (BS-200) to determine the lipid profile. From the questionnaire, it was verified that 50% of the interviewees present a "Good physical condition", 27.5% of respondents have a "Normal physical condition", and only 22.5% have "Insufficient physical condition". The results show the following means and standard deviations for each analysed lipid item: Cholesterol 199.25 $\pm$ 44.00, LDL 126.26 $\pm$ 39.13, HDL 48.87 $\pm$ 10.77 and Triglycerides 120.17 $\pm$ 41.14. Of the nine people with insufficient physical condition, one has high blood glucose and borderline cholesterol, two have borderline cholesterol, one has high cholesterol, and four have desirable cholesterol. Of the 11 people with normal physical condition, two have high cholesterol, four have borderline cholesterol, and five have desirable cholesterol. It is necessary to implement a structure for bodily practices in the community, which currently boils down to a field of land for soccer practice. The age group includes adolescents, adults and the elderly. This was a limitation of the research; the sample did not consider this item for the analysis.

Keywords: Amazon Community, Health, Physical condition.

## Acknowledgements

To the Rondônia Foundation for the Support of the Development of Scientific and Technological Actions and Research of the State of Rondônia (FAPERO) and to CNPq for the financial support.