MILK FERMENTED EFFECT ON SERUM HEMOGLOBIN OF INDIVIDUALS WITH METABOLIC SYNDROME


*Lactobacillus plantarum* is not considered as probiotic micro-organism by brazilian legislation, and it is not commonly found in fermented dairy products. However, in Europe and in the United States, that claim is established and many studies confirm the benefits promoted by strains of this specie. Currently, interest has been focused on the impact of lactic acid bacteria on human metabolism and over clinical parameters related to metabolic syndrome. Hemoglobin is a combination of four globin associated with a heme group responsible for transport of oxygen throughout body. The objective of this study was to evaluate the effect of ingesting *L. plantarum*-Lp 115 on hemoglobin serum levels of individuals with metabolic syndrome, during a supplementation with fermented milk in 06 weeks period. The fermented milk was prepared with *L. plantarum*-Lp 115 inoculum (10% w/v) reconstituted skim milk powder (10% w/v), refined sugar (8% w/v), sterilized (121°C/15 minutes), incubated at 37°C for 40 hours. The experiment was conducted with 37 subjects divided into groups of supplementation and placebo. Blood samples were collected before and after fermented beverage intervention period, to evaluate the hematologic parameter. The results were analyzed by Chi-square and Wilcoxon (p<0.05) tests. It was observed that 8x10^10 CFU/mL dosage, administered to the supplementation group, induced a significant increase, 4.08% (p=0.041), on hemoglobin levels after the intervention. Therefore, it was concluded that, the ingestion of *L. plantarum* Lp-115 had a beneficial effect on the volunteers health, due to the increase in hemoglobin concentration at the end of the study.