USE OF ACID WHEY FOR THE DEVELOPMENT OF NON-FERMENTED LACTIC BEVERAGE

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The whey is the main byproduct of the dairy industry. Due to its high Biochemical Oxygen Demand (BOD), it is often seen as a problem, because if discarded improperly it may cause damages to the environment. For this reason, an alternative is its use in the development of new products. The whey can be classified as acid whey and sweet whey, depending on the technology for obtainment. The acid whey is obtained by acid coagulation of milk, and sweet whey is the one obtained by enzymatic coagulation. Due to lower consumer acceptability, the acid whey has fewer technological applications when compared to sweet whey. The aim of this study is to develop a non-fermented lactic beverage with acid whey, as an alternative to the use of this byproduct. Two formulations were elaborated: one with 100% acid whey and another with 60% sweet whey and 40% acid whey. Physico-chemical analysis of acidity, pH and protein content and also sensory analysis to verify the acceptance of beverages were carried out. The lactic beverages presented pH values between 4.5 and 4.7, acidity from 39.5 to 44.5 °D, and protein content from 1.3 to 1.6%. The results were satisfactory, and beverages attended the current legislation concerning the characteristics analyzed. Both formulations were well accepted by the judges (above 70%). Thus, it can be used up to 100% of acid whey in the elaboration of non-fermented lactic beverage. Financial support: Fundação Araucária.