AMINO ACID PROFILE IN SYMBIOTIC FERMENTED PRODUCED WITH HUMAN MILK PRESENTING HIGH DORNIC ACIDITY


Human milk is the ideal source of energy, nutrition and protection for newborns. Because of its sufficient content and balance of amino acids it provides the daily demands of infants. Many are the reasons that lead the maternal food to lack and Human Milk Banks are responsible for supplying this need. There, Dornic titration is among the routine tests used for milk quality control because it is considered an effective method for indirect evaluation of bacterial contamination. However, the high acidity may also be related to the physiology of lactation, changes in milk composition caused by pasteurization, freezing and thawing and the increase of free fatty acids. Therefore, a large amount of samples are being improperly discarded. In order to reuse the rejected milk samples, a symbiotic fermented milk was developed using a mixed culture with the strains Lactobacillus acidophilus 1865 (PharmaNostra) and Bifidobacterium Bifidum 7593 (Embrafarma). Based on an experimental planning followed by organoleptic analysis, two formulations of greater acceptance were selected to have their amino acid fractions analyzed: one using milk and soy extract and another based only on milk. Results showed that on both formulations most amino acids were present in higher concentrations than normally described for human milk, suggesting that they were likely a metabolic consequence of the strains used for fermentation. The total concentration was lower in drink soy-based. Considering the quantity of essential amino acids observed, the results suggest that both formulations may contribute largely with daily intake by groups of different ages.