USE OF RESPONSE SURFACE METHODOLOGY TO EVALUATE THE REDUCTION OF SODIUM AND ENERGY VALUE IN PREBIOTIC PETIT SUISSE CHEESE

Elizete N. Brach, Henry Charles Albert David N. T. M. Brandão, Cleonice M. Sarmento, Saraspthy Naidoo Terroso G. de Mendonça. Federal University of Technology – UTFPR Campus of Medianeira, Avenida Brasil, 4232, 85884-000 Medianeira, Paraná, Brazil

Soybean is one of the most produced and exported worldwide agricultural commodities. A relationship between soy consumption and human health has been investigated by the nutritional characteristics, whether the high protein content of adequate nutritional quality, meaningful content of minerals and fibers, or the reduced amount of saturated fat and no cholesterol. The objective of this study was to develop a petit suisse cheese-based soluble extract of soybean (HES) with the addition of strawberry pulp, inulin and whey protein concentrated (WPC), and evaluate the different formulations involving percentages of EHS cream and soy milk, through a complete factorial design with triplicate at the central point, using three levels and two factors. The results of physical and chemical analysis for protein, lipids, carbohydrates and energy value of the formulations of petit suisse cheese, were submitted to analysis and estimation of the effects, using the software STATISTICA 7.0. Increasing the percentage of soy milk in the samples, the energetic value of these decreases (p= 0.006090). At the point (0) at a concentration of 50/50 there is a reduction in the rate of carbohydrate and fat without affecting the product characteristics, making it well accepted. Increasing the percentage of soy milk the percentage of the sodium evaluated decreases (p=0, 04077). The reduction in the amount of sodium found in the samples with higher concentration of EHS, can contribute to prevent non communicable diseases as hypertension, since the large consumption today of the industrial products with a high sodium content is a current issue.