PREPARATION AND EVALUATION OF TECHNOLOGICAL CHARACTERISTICS OF MASS FOOD ENRICHED WITH WHEY PROTEIN CONCENTRATE

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The trend of the current consumer is to use foods that are easy to prepare and that besides having nutritional quality provide health benefits. In this work, the aim was to incorporate whey protein concentrate (WPC), as additional raw material in pasta, as well as assess their technological properties of the mass. The optimization of formulation was carried out using 0, 5, 10, 15 and 20% addition of WPC. Dry materials were added to trough, mixed and then water was added. The mass was homogenized for 15 minutes, drawing of spaghetti extruded at N°8 and dried in temperature of 27°C and relative moisture of 57% for 48 hours. Immediately after drying, samples were analyzed. The data were subjected to variance and regression analysis (p <0.05). Pasta had cooking time increased while added WPC. The obtained data for weight increase after cooking and solid loss in the cooking water did not fit to used mathematical model and obtained this following results: 140% (0%), 173% (5%), 148% (10 %), 161% (15%), 169% (20%) and 0.62 g (0%), 0.65 (5%), 0.67 (10%) 0.63 g (15%) and 0.73 (20%) respectively. The color parameter L showed a linear decreased, b* a linear increase and for a* the results showed an increase in 20%. The moisture content decreased from 10% addition. The WPC addition didn’t improving the product technological properties, only increased to approximately 3.5g, 6.9g, 10.4g and 13.8g, respectively, protein content in the formulations tested.

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