USE OF CASSAVA STARCH AS AN ENHANCER OF TERDERNESS, FLAVOR AND YIELD IN BEEF MEAT HAMBURGER


Hamburger meat is a restructured meat product highly appreciated in Brazil and worldwide. In its commercial formulation, Textured Soy Protein (TSP) is commonly used in order to substitute some percentage of the meat as well as enhance water retention. However, TSP changes its sensory characteristics. The objective of this work was to evaluate the use of cassava starch as extender in beef meat hamburger. For this, 3 formulations were prepared: Formulation 1 – F1 (4% TSP), Formulation 2 – F2 (2% cassava starch) and Formulation 3 – F3 (only meat). The hamburger was evaluated by 44 untrained judges using the Global Acceptance tests (Hedonic Scale - 9 points) and ordination tests, with tenderness used as sensory attribute. To check the effect of formulation on the parameters studied, ANOVA and Tukey test (p<0.05) were performed. The hamburger yield was also evaluated. F2 showed 7% more yield (p<0.05) than the other formulation (F1 = 60.96% and F3 = 61.29% of yield). The ordination tests showed that the product with cassava starch was the tenderest. The hedonic scale test showed that the product prepared with cassava starch had better acceptation, followed by the preparation containing only meat. Therefore, the application of cassava starch improves the product tenderness, increases its yield, as well as enrich its flavor.