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Influence of *S. cerevisiae* yeast as a part of the recipe component of flour confectionery on the quality of deep-fat frying

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Abstract

Products prepared in the deep-fat frying way are fried in a significant amount of fat therefore fat plays an important role in the technology of their production. Besides, fat is not only a heat-transmitting substance, but it is also one of the main product's components defining its properties and nutrition value. In order to investigate the influence of *S. cerevisiae* yeast, being a part of flour confectionery products' recipe, on the quality of the deep frying, there was carried out a process of continuous frying of semi-finished products in it. A set of the received results testifies that in the conditions of a four-hour deep frying deep fat undergoes changes in its quality indicators, the severity of which depends on the composition of experimental semi-finished flour confectionery samples. On the basis of the lipid oxidation degree indexes research (peroxide value, the amount of peroxide, presence of diene conjugates and ketodienes) it was found out that the use of *S. cerevisiae* yeast in the flour confectionery allowed to extend the term of deep fat using compared to the deep fat, in which were prepared experimental semi-finished flour confectionery samples, according to a traditional recipe without yeast, i.e. organic acids secreted by yeast during the fermentation of the dough act as a synergist of antioxidants and thus contribute to slow the process of deep fat peroxidation while using, thus reducing the rate of oxidative destruction processes in deep fat.

Keywords

Deep fat, Dieneconjugates, Ketodiens, Peroxide value, *S. cerevisiae* yeast