CHANGES IN THE QUALITY PARAMETERS OF SHORTBREAD BISCUITS WITH GRAPE POWDER DURING THE STORAGE

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The technology of shortbread biscuits with the addition of fine-dispersed powders made of grape seeds and grape skins in the amount of 15.0% by weight of wheat flour was developed. Cookies are characterized by a pleasant taste and aroma, crumbly structure, increased food and biological value.

We have studied the changes in parameters of the quality of the developed products during the storage. Samples of the biscuits were stored packed in cellophane bags at 18 ± 3 °C for 60 days. Every 5 days we determined organoleptic, physical and chemical indicators of quality as well as studied the processes of accumulation of free fatty acids and peroxide compounds in the samples. It was determined that after 45 days visible foreign taste and odor appeared in the control sample without additives, indicating the start of fat oxidation. A sample with the addition of grape seed powder acquired such taste after 60 days, and the organoleptic characteristics of cookies with the addition of the powder from the grape skins have not changed throughout the storage period. In addition, cookies with the powder stay crisp for a longer period and slowly lose moisture.

Adding grape powder into biscuits inhibits the accumulation of products of primary oxidation of fats, as evidenced by the lower values of acid and peroxide numbers of fat throughout the shelf life as compared to the control. This is due to a high content of substances with antioxidant activity in powders. Their addition can extend the shelf life of shortbread biscuits.

Keywords: grape, powders, shortbread biscuits, storage.