

THE USE OF NATURAL PRESERVATIVE IN PRODUCTION GUMMY CANDIES: VALUATION OF LOCAL WINE VINEGAR

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Today, manufacturers need to take care of getting into this niche and gaining the trust of customers, striving to make their product high-quality and natural. Healthy lifestyle has also extended to unexpected product categories like sugary drinks, chips and candy. At present, attention is paid to the development of food products, in which not only the components are obtained from natural sources, but also natural preservatives are used. This study evaluated the use of local raw materials: grape juice, wine vinegar and natural honey to replace artificial additives in the production of natural gummy candies. Summarizing the analysis of the organoleptic properties of jelly sweets with wine vinegar, we can conclude that the best results were obtained by samples with an amount of vinegar equal to 5 ml per 150 ml of juice, that is, 2.5% of the total mass of the candy. Calorie calculation showed that the calorie content of the developed gummy sweets is not high and varies from 94 to 124 kcal/100 g, which is on average 2 times less than other dietary gummy sweets without sugar and 3 times less than ordinary sweets with sugar content. The results of the study of vit. C showed that its amount in 100g of the product is on average 2.11 ± 0.45 mg (3% of the recommended daily dose), which is approximately half the amount of vit. C contained in 100g of grape juice. It can be concluded that the developed technology for the preparation of sweets retained the vitamin from the raw materials used as much as possible. The antioxidant activity of sweets varies from 44 to 52%. The indicator is quite high and is explained by the content of grape juice, at least 75% in the composition of the product, which is rich in antioxidant properties; also, natural honey and natural wine vinegar are present in sweets, which also contain antioxidant substances in their composition. The antioxidant and antimicrobial properties of the plant materials used play an important role in suppressing the development of various microorganisms. This allows you to stabilize the system and increase the shelf life of natural chewing sweets. According to the results it can be concluded that these chewing sweets have functional properties due to the presence of biologically active compounds and are competitive along with imported analogues.

Keywords: natural candies, vinegar, honey, grape, acid acetic.

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