THE USE OF THREE-COMPONENT FRUIT AND BERRY SEMI-FINISHED PRODUCTS IN THE TECHNOLOGY OF MARMALADE PRODUCTS

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Today there is an increasing of demand among the population for healthy food products made of natural ingredients. Among of all confectionery products, marmalade-pastila products have the greatest potential for enrichment due to the two advantages: absence of fat in the recipe and presence of fruit and fruit and berry raw materials. However, the modern technologies of production of marshmallow or marshmallow-and-marmalade goods, as a rule, are conducted on obsolete equipment with addition of synthetic dyes and flavors, as well as the use of low-quality raw materials, which results to a negative impact on the nutritional value of the product and therefore on the human body, as a whole. In this regard, it is relevant to improve existing technologies, particularly jelly-pastilles, by adding of compositions of blended fruit and berry semi-finished products to their prescriptions.

The use of low temperature during the concentration of three-component fruit and berry semi-finished products (50...60 °C) ensures maximum preservation of biologically active substances.

During the experimental studies it is determined the change of structural and mechanical properties in blended compositions and marmalade with their addition. Marmalade products with the addition of blended compositions of fruit and berry semi-finished products are characterized by a pleasant color, taste and aroma inherent in the fruit and berry raw materials, the correct clear form, opaque fracture.

The results of studies allowed to determine that the maximum strength of marmalade assured by adding a composition with a content of 65% apples, 25% strawberries and 10% hawthorn. The entering of natural compositions does not require the additional use of synthetic dyes, essences and gelling agents.

Keywords: fruit semi-finished product, blending, marmalade, structural and mechanical properties.