INFLUENCE OF WATER STEVIA EXTRACT ON THE KINETIC OF AGAR SWELLING

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The prospects of using water extraction of stevia in the process of manufacturing pastille products as a dissolving polymer – agar, namely its influence on the kinetics of agar swelling, are considered in the article. The possibilities of introducing it into the recipe will allow reduce sugar mass content and receive pastille products with its reduced amount. At the same time organoleptic, physical-chemical and rheological parameters of the products will not be spoiled.

The investigations were carried out by means of the method of comparing masses before and after swelling and dispersed composition of agar. The starting point for the formation of pastille products’ quality is agar swelling, which is the first stage of polymers dissolving. The solubility of agar molecules in the dissolvent depends on the level of its swelling that increases general concentration and stipulates formation of harder gels.

Based on the obtained results the authors made a conclusion that water extraction from stevia positively influenced the swelling process and time for the achievement of its required level reduced.

Keywords: stevia, extract, agar, polymer, calves-foot, swelling.