IMPROVEMENT OF THE TECHNOLOGY OF LOLLIE CARAMEL BASED ON ISOMALTITOL AND VEGETABLE ADDITIVE OF BARBERRY

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Sugar is the most common sweetener in the production of confectionery products. But, based on the data on the increase in the incidence of diabetes and the trend towards a healthy lifestyle, it is advisable to use sugars, but preference should be given to sweeteners with a low glycemic index. In recent years, there is a widespread use of sugar substitutes - polyols. Isomaltitol has a low calorie content (about 2 kcal/g), it is believed to act as a ballast substance, stimulates the functioning of the intestines and has prebiotic properties. Unlike sucrose and glucose, isomaltitol is extremely inert to chemical and enzymatic hydrolysis. In the presented work, the object of research was the technology of lollipop caramel based on isomaltitol - invert syrup with the addition of a food additive of plant origin - ordinary barberry powder. Thanks to its presence of natural dyes and a number of organic acids, the dietary additive based on dried and ground berries of common barberry allows to replace the artificial colorant and to reduce or completely abandon the use of citric acid. The presence biologically active substances in the composition of barberry berries makes its use in food technologies very relevant. The introduction of a barberry food additive to the caramel lollipop recipe will positively affect the nutrition composition of the product. The lollipop caramel made by us has a pleasant color, is not sticky, has the right shape, has a pleasant caramel smell and has a delicate, sour note of barberry on the taste.

Taking into account a significant amount of vitamin C in composition, the acidity index was determined. It can be concluded that with an increase in the amount of a food additive based on barberry in the composition of caramel, the acidity of lollipop increases. The value of acidity is within the normal range (according to DSTU 3893:2016). On the basis of theoretical generalizations, the need to use the sugar substitute isomaltitol, which has low hygroscopicity, in the production of lollipop caramel on invert syrup has been established and scientifically substantiated. The optimal ratio of isomalt: invert syrup = 80:20 was established, which provides the necessary organoleptic indicators of lollipop caramel and a 20% reduction in caloric content compared to the caloric content of ordinary caramel (on white crystalline sugar).