

SUMMARY

Vegetable products contribute to increasing the supply of valuable nutrients and minerals in the daily diet. Innovative technologies for the production of jam-like products with the addition of isomaltulose, which has a lower glycemic index (GI) compared to sugar, and fiber preparations increase the health-promoting properties of processed food and the sensory attractiveness of vegetables, which is important from a dietary point of view, in order to maintain health and proper body weight.

The main goal of my thesis was to develop a technology for the production of products from pumpkin (*Cucurbita maxima* Duch.), carrots (*Daucus carota* L.), cucumbers (*Cucumis sativus* L.), tomatoes (*Solanum lycopersicum*) and rhubarb (*Rheum* L). A healthier sugar substitute - isomaltulose and the addition of fiber: watermelon and cocoa, oat and cocoa, and buckwheat and cocoa were used to produce the above-mentioned products. The effect of the addition of fiber preparations on the quality of finished products was examined compared to the product without the additive. In addition, the effect of storage time (8 months) on the quality of vegetable products was determined.

The thesis conducted as part of this dissertation concerned: energy value, chemical composition, antioxidant properties, texture and color parameters, and organoleptic evaluation of finished products. The work was completed by isolating products that are characterized by a favorable chemical composition and high organoleptic values. All vegetable products that were the subject of the research demonstrated suitability for the production of jam-like products. Products made of pumpkin, carrot, cucumber, tomato, and rhubarb are characterized by low calorific value, high content of nutrients and minerals and high organoleptic values.

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