

## **THE PERSPECTIVES OF INULIN USE IN BUTTER INDUSTRY**

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Nowadays, inulin attracts the attention of the scientists from many countries, as a preparation of plant origin, which has the immune action and radioprotective activity.

The purpose of the work is to study the expediency and perspective to use inulin in the production of butter and its analogues.

We used the high-molecular inulin. The technology of its obtaining from the plant raw was worked out in USUFT. We processed a new kind of butter with inulin, and the technology of its production.

We carried out some experimental production of butter with inulin, and its medical and biological studies in the condition of the clinics. We studied inulin's influence on butter's consistency and rheological indices, the processes of butterfat oxidation, and the microbiological indices of its storage in the temperatures from +5°C to -18°C.

According to the data of clinical tests, butter with inulin is included into medical and preventive products. There was affirmed that inulin additions increase the content of firmly connected moisture in the product. This favors the product's plastification. We noticed that butter with inulin is characterized by the good heat resistance, plasticity, and spreadability. The organoleptic estimation for butter with inulin was higher than for the control sample (without additions).

There was exposed that inulin slows the processes of butter's milk fat oxidation during its storage. We also affirmed that inulin hampers the growth of different microorganisms during butter's storage.

Thus according to the investigation data we affirmed that inulin gives butter the preventive and medical properties, and also has a role of the structure's stabilizer and plastifier, antioxidant and conservant, and also improves the product's organoleptic estimation.

The obtained data permit to make a conclusion of the expediency and perspective of inulin's use in the industry of butter, its analogues, fat-containing paste-like products, and margarine.