



ODESSA NATIONAL ACADEMY OF FOOD TECHNOLOGIES

THE DEVELOPMENT FUNCTIONAL CANNED FOOD INGREDIENT TECHNOLOGY FROM THE APPLE POMACE

Liganenko M.G., Bezusov A.T.

Purpose and scope

The work is devoted to the scientific substantiation and development of functional canned ingredients from apple excrement by the method of enzymatic biocatalysis, in order to fully utilize the physiologically functional ingredients contained in the raw material: pectin oligosaccharide syrup (liquid phase) as a source of prebiotics and dietary food fibers (solid phase).

Main characteristics and the development essence

A new kind of product has been developed that has no analogue in the Ukrainian market; For the first time, for the production of pectin oligosaccharides, the process of enzymatic biocatalysis of apple excrement has been used; a new resource-saving technology for the processing of apple puddings on pectin oligosaccharides and dietary food fibers was proposed; It has been determined that pectin oligosaccharides have a positive effect on the growth and development of *Bifidobacterium bifidum* biomass, as is already known prebiotics of lactulose and lactose.

Comparison with the world's analogues, the main development advantages

A new type of product has been developed that has no analogue in the Ukrainian market

The intellectual property protection status

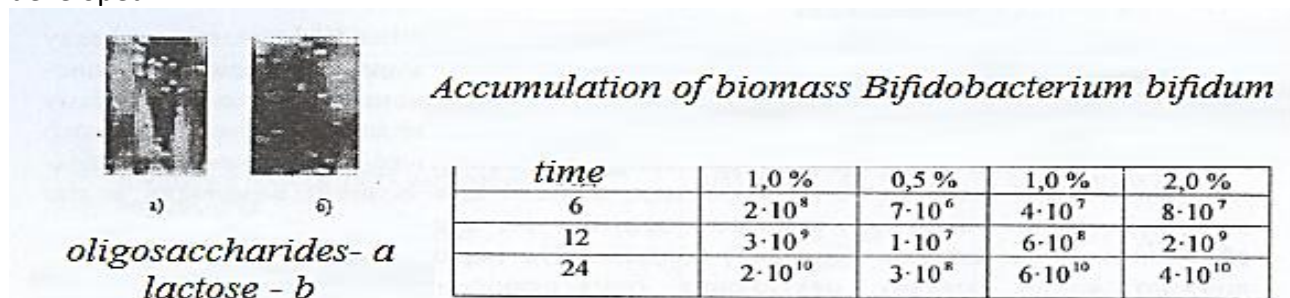
The patent of Ukraine for the utility model has been obtained.

Demand in the market

The development of modern food preservation technologies is based on the maximum use of enormous amounts of organic waste, which play an important role in the economy and the state of the environment. The valuable waste generated in the food industry during the processing of fruit raw materials include apple cuts. Such waste is multi-tonnage in Ukraine and so far is not widely used. Therefore, technologies of recycling of secondary raw materials for the development of new types of canned food products with a double benefit are a rational solution to the issue of waste utilization of the canning industry.

The readiness for development status

Technological schemes of production of functional canned ingredients from apple pomace have been developed. A draft of the normative documentation for "Peptic Oligosaccharides Syrup" and "Dietary Food Fibers", which can be implemented in the agro-industrial complex of Ukraine, was developed.



DEPARTMENT OF THE NORMATIVELY-
TECHNICAL PROVIDING AND METROLOGY

65035, Ukraine, Odessa, Kanatnaya str., 112
e-mail nauka@onaft.edu.ua (for Danylova Olena)
<http://www.onaft.edu.ua>
tel./ fax: +38 (048) 724-28-75, +38(048)712-41-30