

Current results 2024 (first half of the year)

AP19679638 «Scientific and practical basis for the use of collagen-containing concentrate in the production of specialized cottage cheese products for the nutrition of sportsmen»

Description section of the calendar plan	Implementation timeframe	Brief description of the work done/results obtained	Information on possible usage
No. 4 Study of the effect of BAAs from plant raw materials with expressed antioxidant properties on the state and metabolic processes in the organs of the immune system under in vivo conditions	January - June 2024	Preclinical studies of the effect of BAAs from plant raw materials with antioxidant properties on the organs of the immune system in vivo have been carried out. It was found that extracts from yarrow, sage, sea buckthorn and rosehip have pronounced antioxidant and immunostimulating properties. The extracts are recommended for use in the production of cottage cheese products for sports nutrition. According to the results of the research the test report (No. 1 dated 19.02.2024 and No. 2 dated 19.02.2024) was prepared.	The developed formulation of cottage cheese product with the addition of collagen-containing concentrate and BAA from vegetable raw materials can find wide application in the production of products for specialized sports nutrition. The introduction of collagen-containing concentrate and antioxidant plant additives improves not only the nutritional value but also the functional properties of the curd product, which makes it promising for sports and healthy nutrition.
No. 5 Research and development of formulation and technology of cottage cheese product for specialized sports nutrition	January - June 2024	On the basis of experimental data the formulation of cottage cheese product with the addition of collagen-containing concentrate and BAA from vegetable raw materials is developed. Research on the technology of cottage cheese product for sports nutrition is carried out. For publication in a peer-reviewed journal (CiteScore not less than 35 in Scopus) changes in the stability of the structure, effective viscosity, ultimate shear stress, moisture retention capacity and organoleptic parameters of the product during production are studied.	
No. 5.1 Study of the influence of the dose of collagen-containing concentrate and BAAs from vegetable raw mate-	January - June 2024	On the basis of the conducted research the optimal dose of collagen-containing concentrate, BAAs from vegetable raw materials was selected and the formulation of curd	

<p>rials on structural and mechanical characteristics, quality indicators of cottage cheese product</p>		<p>product was developed. Based on the results of the research 2 articles were published:</p> <p>1) Zharykbassova KS, Zharykbassov ES, Kakimova JH, Raimhanova GN, Baikadamova AM Collagen-containing concentrate in the production of dairy products for sports nutrition // Bulletin of Shakarim University. Series of technical sciences. – 2024. - № 1 (13). – https://doi.org/10.53360/2788-7995-2024-1(13)-15</p> <p>2) Jarykbasov ES, Kakimov AK, Jarykbasova KS, Kakimova JH, Raimhanova GN Study of the effect of doses of collagen-containing concentrate on the quality parameters of cottage cheese product // Bulletin of Shakarim University. Series of technical sciences. – 2024. - № 2 (14). - https://doi.org/10.53360/2788-7995-2024-2(14)-27</p>	
<p>№ 5.2 Development of technological modes of introduction of collagen-containing concentrate and BAAs from vegetable raw materials into cottage cheese product</p>	<p>January - June 2024</p>	<p>Studies of technological modes of introduction of collagen-containing concentrate and BAA from vegetable raw materials into cottage cheese product are carried out. For publication in a peer-reviewed journal (CiteScore not less than 35 in Scopus) changes in structure, viscosity, ultimate shear stress, moisture retention capacity and organoleptic properties of the product during production are researched</p>	