Fermentative hydrolyzate from sub-standard eggs as basis of nutrient mediums for biotechnology

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To grow up bacterial cultures for biotechnology, it is necessary to select for them suitable nutrient mediums. The purpose of researches was definition of use's possibility of a fermentative hydrolyzate from sub-standard eggs as nutritious broth for cultivation of various groups of microorganisms. The experimental liquid environment prepared on the basis of a fermentative hydrolyzate of sub-standard eggs (FHSSE) with the content of amines nitrogen (% Nam) from 480 to 570 mg %. For check of ability to support growth of microorganisms the received nutrient mediums on the basis of an egg's hydrolyzate and beef-extract broth (control) inoculated with cultures: Bacillus subtilis ATCC 6633, Escherichia coli and Lactobacillus acidophilus. By us it is established that nutrient mediums on the basis of FHSSE provide growth of Bacillus subtilis ATCC 6633, Lactobacillus acidophilus, Escherichia coli, the number of cages of the microorganisms doesn't fall below value of colonies forming units-106. Thus, the received results of researches showed that nutrient mediums on the basis of various options of a fermentative hydrolyzate can serve for accumulation, allocations and subcultivation of various groups of microorganisms and sub-standard eggs can serve as a full substitute of meat raw materials or fish products in production of nutritious bases.

Biography
Masimzhan Velyamov defended the doctoral dissertation in 2006 in the National center of biotechnology in the Republic of Kazakhstan. He is the head of the laboratory “The biotechnology, quality and food safety”, in Kazakh scientific research institute of the processing and food industry. Has more than 170 scientific works. His areas of scientific interests are biotechnology, microbiology, food safety and processing of foodstuff.

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