Materials of Conferences

RESEARCH ZYMOHYDROLYSIS ALBUMENS OF MILK

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Proteinaceous hydrolyzates are the products of the proteolysis consisting of separate amino acids, their sodium salts and the polypeptide remains. Proteinaceous hydrolyzates actively use for production of specialized products of a baby and sports food. Proteinaceous hydrolyzates are a full-fledged product of a parenteral food at the various conditions, being accompanied proteinaceous insufficiency, reduce also intoxication phenomena. In the course of hydrolysis of proteins there is a rupture of peptide communications of a proteinaceous molecule to formation of Dee – and трипептидов, and also free amino acids that increases digestion of albumens in a live organism. In this regard use of proteinaceous hydrolyzates in production of food in a diet a food, in particular, children is used by proteinaceous hydrolyzates with lack of amino acids in the form of making components of medical foods which allow to optimize biological value and to provide additional functionality to an organism of children of early age [1].

For creation of proteinaceous hydrolyzates as the main component of products of a special purpose, for patients with a gistidinemiya, it is necessary to decide on a type of hydrolysis, the rational parameters of hydrolysis providing the maximum extraction of a histidine from proteinaceous molecules for the subsequent biotransformation of a histidine in connections, not having toxic effect on an organism of the patient [2].

Two ways of hydrolysis of proteinaceous molecules are known and are widely used: chemical (acid and alkaline) and fermentativny [3].

As a result of research of technological process of purposeful removal of a histidine from a polypeptide chain of a dairy proteinaceous concentrate by means of fermentativny hydrolysis by the enzimatichesky system, consisting from ekzo-and эндопептидаз, received: quality эндопептидазы used chymotrypsin (KF 3.4.21.1) which possesses wider substratny specificity unlike other enzymes and mainly splits peptide communications, and also hydrolyzes communications of a leucine, methionine, but it is especially important that this fermental preparation allows to destroy a histidine. Chymotrypsin is most active in the range up to 8,2 at a temperature of 50 ± 1 °C. In quality экзопептидаз used карбоксипептидазу And and аминопептидазы. Karboksipeptidaza A. The analvsis of results of research, showed that at a ratio «enzyme substratum» 1:40 at 6–8 hours of hydrolysis is formed about 2.0 mg/100 r a free histidine. and at the same duration of reaction, but at a ratio complex 1:20 enzyme-substratnogo the mass fraction of a histidine reaches more than 2,20 mg/100 Γ protein. At duration of hydrolysis of a mix of proteins of cow milk 24 hours are celebrated the greatest extent of extraction of a histidine from a polypeptide chain. So at a ratio «enzyme substratum» 1:40 this value reaches 2,69 mg/100 r protein that is 1,2 times higher, than at the same enzyme-substratnom a ratio, but duration at 8 ± 0.05 hours. At a ratio «enzyme substratum» 1:20 and duration of 24 ± 0.05 hour is observed the greatest extent of extraction of a histidine to 100%.

At enzyme-substratnom a ratio of 1:40 and 1:80 lasting hydrolysis up to 4 ± 0.02 and 8 ± 0.02 hours, low release practically all amino acids that is not rational use of the ratios given enzyme-substratnykh, in connection with increasing costs of use of these enzymes also is observed.

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ANALYSIS AND STABILITY ENSURING OF ELECTRONIC STRUCTURES TO THERMAL INFLUENCES (ASONIKA-T)

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Purpose and main features of the subsystem ASONIKA-T. Subsystem ASONIKA-T can operate in standalone mode or as part of ASONIKA in combination with other subsystems. Subsystem ASONIKA-T is designed to automate the modeling of thermal processes such as micro assemblies, radiators, heat-removing bases, hybrid-integrated modules, power cordwood structure, cabinets, racks, and atypical (arbitrary) structures electronics.