Grading, %	
particles of less than 0.4 mm	100,0
particles of size 0, 2 - 0.25 mm	4,0
particles less than 0.2 mm	96,0

From the results of the determination of the pharmaco-technological properties of the magnesium lactate dihydrate substance, it follows that the substance possesses optimal properties of density and flowability, which can allow obtaining a good process when mixed with other active substances with unsatisfactory characteristics when preparing a combined preparation in the form of capsules, taking into account also its quantity in the capsule (more than 70%).

Very important in the preparation of capsule mass is the correct calculation of the technical mass of the active substances, taking into account the content of the basic substance, which can vary depending on the "quantity" and "water loss in drying" measured in the raw material.

When calculating the amount of magnesium lactate dihydrate, it should be borne in mind that in its certificate of quality, the indicator "loss in mass during drying" includes crystallization and adsorbed water. Therefore, it is necessary to carry out the correct calculation when loading magnesium lactate dihydrate.

We used the magnesium lactate dihydrate substance as a "loss in mass when dried" ratio of 15.11%.

Conclusions. Thus, the physico - chemical and pharmacological - technological properties of the active ingredient - magnesium lactate dihydrate for further studies on the preparation of capsule mass and the selection of auxiliary substances were studied.

INFLUENCE OF THE BEE PRODUCTS ON COMMERCIAL AND CLINICAL STRAINS OF PROBIOTIC CULTURES

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Introduction. Due to the intensive development of pharmacy and pharmacology, an enormous amount of drugs and forms have been created to treat ever-increasing numbers of people. But more often, the synthetic medicines do not take into account the impact on other functional systems. They affect one side of the disease, thus, they are harmful to human health.

Although, natural biological active substances do not have an immediate effect on certain aspects of the pathological process, nonetheless, they treat the causes of the disease but not their symptomatology. Bee products can be classified as a group of natural biologically active substances. Honey, wax, propolis, floral dust and royal jelly are biologically active substances that act as biogenic stimulants and they have very valuable therapeutic properties. They are completely safe for the organism, because they have no side effects and contribute to the removal of poisons and salts of heavy metals. Also they have radioprotective effect. Bee venom has no less therapeutic properties, although its use is not recommended for patients with allergic reactions. The compositions of honey with other bee products give the greatest effect.

Last years, there has been appeared a sufficiently large number of probiotic drugs. But the main difficulty of the critical analysis of the literature is the large variety of microorganisms: *Bacillus subtilis, Bacillus licheniformis, Bacillus cereus, Lactobacillus acidophilus, Lactobacillus delbrueckii subsp. bulgaricus, Lactobacillus plantarum, Lactobacillus fermentum, Lactobacillus salivarius, Lactobacillus casei, Lactobacillus rhamnosus, Lactobacillus reuteri, Bifidobacterium bifidum, Bifidobacterium longum, Bifidobacterium adolescentis, Escherichia coli, Enterococcus faecium, Streptococcus alivarius subsp. thermophilus, Saccharomyces boulardii and others*. Probiotic drugs, supplements, natural foods that contain complex vitamins, minerals and have biologically active substances are becoming more popular.

Aim. The aim of the research was study of the influence of bee products on commercial and clinical strains of probiotic cultures. It will allow us to make a conclusion about the possibility of using them for stimulation their own microflora and constructing effective drugs for the prevention and treatment of dysbiotic conditions.

Materials and methods. The dietary supplement "Lactiale", the leaven "Yogurt", the preparation "Bifidumbacterin", clinical isolates (as representatives of human normoflora), and natural bee products, namely, natural floral honey, propolis, flower pollen and royal jelly have been used as researched objects. Traditional microbiological, physico-chemical, organoleptic and statistical methods jelly have been used in researches.

Results and discussion. The results of research have been shown that, in general, bee products have a positive effect on the cultures of selected probiotic product groups – the representatives of dietary supplements “Lactiale”, domestic probiotics “Bifidumbacterin”, leaven product "Yogurt" and on clinical isolates, which have provided as representatives of human microflora.

Conclusions. During the study of the influence of bee products on microorganisms, which form the basis of certain groups of probiotic products, and on the clinical isolates of representatives of normoflora, it can be argued that in general, the biggest positive effect of bee products was observed on the complex additive "Lactiale" and leaven "Yogurt", the main components of which are lactic acid bacteria. The smallest positive effect was observed on the monoprobiotic "Bifidumbacterin", which is based on bifidobacteria. The highest positive effect among bee products was observed for royal jelly. Somewhat smaller but also large effect was for honey and beeswax. The obtained results allow recommending the use of bee products as effective stimulators of growth of own microflora in traditional medicine and as a combination with lactic acid bacteria in the creation of complex dosage forms of probiotics.

MICROBIAL PURITY OF A COMBINED MEDICINAL FORM ON THE BASIS OF DERIVATIVE CAMPHORIC ACID

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Introduction. Starting with the development of a new pharmaceutical product on the whole path from production to consumer, it is necessary to evaluate derivation chance of low a quality product and make a risk management system to achieve it’s quality. A special place in testing pharmaceuticals take microbiological methods, where microbiological purity is not the least one, which is based on determination of the consistency and microorganisms quantity, as well as matching the standards that provide microbial contamination .The level of microbial contamination depends on many factors: nature of raw materials, water content, the type of packaging or violation of sanitary standards for the manufacture of medicines. While creating new medicines it is nesessary to consider and follow certain requirements which are specified in SPhU 2nd edition.

Aim. Determination of the method and criteria for assessing the microbiological purity of a new non-sterile oral compound based on derivative camphoric acid.

Materials and methods. Objects of research – a derivative of camphoric acid, microbiological purity, recommended by the State Pharmacopoeia of Ukraine the test culture of microorganisms. To solve assigned tasks there were used microbiological methods of research.

Results and discussion. The Development problem, the substantiation and establishment of a sufficient level of microorganism content in new medicines is closely linked to the choice of the method for their detection, and identification, which provides the effectiveness of the analysis.

The new combined oral form based on derivative camphoric acid belongs to solid unsterile medicinal products, containing the main active ingredient, which does not exhibit antimicrobial action.

For non-sterile medicinal products, quantitative determination of mesophilic bacteria and fungi capable of growing under aerobic conditions is carried out. During the study, it is mandatory to check the growth properties of nutrient media. The preparation of an experimental test sample depends on the physico-chemical characteristics of the medical substance. For a derivative of camphoric acid, it is rational to use the pharmacopoeial method of preparation of the sample with water-insoluble medicinal products, which do not contain fats. Detection of microorganisms in the presence of a combined oral form based on