Table 3

The state of gluconeogenesis in the liver of intact rats
(mg glucose / 1g tissue / hour, n = 15)

Group options	Control	An experience	Change in %	P
No substrate	0,566±0,060	0,488±0,490	-11	P›0,1
Alanin	0,622±0,041	0,507±0,022	-18	P›0,05
Pyruvate	0, 623±0,092	0,563±0,057	-9	P›0,5
Succinate	0,634±0,050	0,603±0,044	-5	P›0,5
Ketoglutarate	0,630±0,021	0,612±0,046	-3	P›0,5

The increase in newly formed glucose, regardless of the nature of the substrate, with the exception of alanine, did not exceed the basal level. In diabetes, due to a lack of insulin, which controls the synthesis of these enzymes, their activity is sharply reduced. Under conditions of alloxan diabetes, the collection led to a decrease in blood sugar levels by more than two times, which was accompanied by inhibition of the activity of tissue phospharylases and significant stimulation of hexokinase in the liver and muscles. Under conditions of alloxan diabetes, the collection inhibits gluconeogenesis in the liver, which is especially pronounced in relation to alanine.

Conclusions. The results of the study and their analysis allow us to consider the local herbal collection, which has hypoglycemic properties, as absolutely non-toxic when used orally.

TOPICALITY OF EXTEMPORAL SYRUP DEVELOPMENT FOR TREATMENT OF UPPER RESPIRATORY TRACT DISEASES

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Introduction. Respiratory tract infections are the leading cause of morbidity and mortality worldwide. In this regard, the Twenty-ninth World Health Assembly decided that WHO, in the implementation of its program of work, should expand its activities to include the fight against these diseases. Unfortunately, in view of the availability of data on the incidence of respiratory infections for only a few countries, it is impossible to provide a comprehensive picture of the incidence of respiratory diseases on a global scale. Death data are available for 88 Member States: 9 in Africa, 29 in the Americas, 14 in Asia, 28 in Europe and 8 in Oceania.

The total population of these countries is about 1200 million people - just over a quarter of the world's population. Given the large population, the aggregate data obtained is telling, although a true assessment of the global situation is difficult, as acute respiratory infections can pose an even more serious public health problem in countries for which information is not available. Aggregated data show that the total number of deaths due to acute respiratory diseases, registered in the above-mentioned 88 countries during 3 years, amounted to 666 726 people per year.

If we roughly assume that mortality, that mortality in countries that do not provide statistics to WHO, is similar to the figures given, it can be calculated that about 2.2 million people die from acute respiratory diseases in the world every year. Thus, these data indicate that acute respiratory diseases are the cause of 61% of deaths due to respiratory diseases. When all causes of death are taken

into account, acute respiratory diseases account for 6% of the total number of deaths registered in the world.

Analysis of the group of children (including children aged 0-14 years) shows that mortality from acute respiratory diseases is 20% of total mortality (fluctuations in the range of 9-27%). However, the highest mortality rate in this group of diseases is observed among infants under 1 year of age. In the age group from 55 to 75 years and older, the proportion of deaths from acute respiratory diseases does not exceed 13%.

Purpose of the research. Substantiate the relevance of expanding the range of extemporal drugs for the treatment of respiratory diseases.

Materials and methods. Informational, based on research of scientific literature and materials of Internet resources.

Obtained results. An important stage in the creation of a drug is the choice of a dosage form. The development of a dosage form envisages, in addition to addressing issues of stability, bioavailability, the creation of comfortable conditions for admission, incl. acceptable organoleptic characteristics. The appearance of the dosage form, its organoleptic characteristics have a certain psychological effect, contributing to an increase in the effectiveness of drug therapy, especially for children and geriatric patients. In some cases, the smell and taste of the drug are so unpleasant that they cause intolerance to patients, and even interfere with their intake. Therefore, in the manufacture of such such drugs, they resort to the help of flavors, which provide convenience and comfort of treatment.

The literature describes methods of correcting and recommendations for the use of certain auxiliary substances to correct the taste of bitter, salty, sour and sugary sweet medicinal substances in various dosage forms. Medicinal syrups differ from flavoring syrups or syrups used as binding excipients in the production of other dosage forms - tablets, pills, the presence of medicinal and a complex of excipients used as flavoring agents.

Syrups are especially widely used in pediatrics to correct the taste of a medicinal substance. In addition, the oral route of administration is the most comfortable in pediatrics, as the simplest and most natural. The advantage of syrups is also high bioavailability in comparison with solid dosage forms, due to the fact that the drug is in a dissolved state. When choosing auxiliary substances for syrups, there is also the task of minimizing the disadvantages inherent in them as a dosage form – instability during storage and use after opening the package. When developing syrups, like other dosage forms for oral use, it is necessary to take into account an integrated approach to the selection of excipients, in particular flavors: they must provide the main function (acceptable organoleptic characteristics), increase bioavailability and be harmless.

The main research in the field of syrups is aimed at optimizing the existing formulations and expanding the range of syrups at the expense of medicinal substances. The development stages provide for the justification of the dosage, the composition of the excipients, especially the flavoring agents for substances with a bitter taste. Also, when developing the composition and technology of syrups, much attention is paid to the selection of the optimal ratios of co-solvents, stabilizers, preservatives.

Conclusions. Research on respiratory diseases by general practitioners in the UK suggests that these diseases account for about a quarter of all consultations and half of all patients. That is why the expansion of the pharmaceutical market with drugs for the treatment of respiratory diseases will always be relevant. Syrups are a promising dosage form for synthetic drugs, in particular, for the treatment of respiratory diseases. This dosage form will be preferable for use in pediatric patients, allowing not only to improve the taste of the respective drugs, but also to create more comfortable conditions for their intake.