

USING OF EXCIPIENTS FOR DEVELOPMENT OF THE DRUG IN FORM OF PERORAL SUSPENSION

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Introduction. Today many peroral drugs are available in the form of suspensions, because it has a number of advantages over other dosage forms, namely: better bioavailability compared to powders and tablets, prolongation of the therapeutic effect in contrast to solutions, ease of administration, the possibility of taste and smell correction. An important role in suspension preparations is played by auxiliary substances that are not pharmacologically active and are used for the manufacture of dosage forms in order to stabilize them or provide certain technological and organoleptic properties. They should be non-toxic, pharmacologically inert, non-alcoholic, economically accessible and should not interact with active substances and primary packaging materials.

Aim. The study is to characterize the main groups of auxiliary substances used in oral suspension dosage forms.

Materials and methods. To analyze the data of scientific literature on the use of excipients in suspension drugs and give their brief description with examples.

Results. Major groups of auxiliary substances, which are inserted into the peroral suspensions are: stabilizers-thickeners, antimicrobial preservatives, antioxidants, corrigents of taste and smell. Stabilizers-thickeners are used to increase the aggregate and sedimentation stability of suspensions. For this purpose, use natural and synthetic substances: alginates, agar, pectin, gums, gelatin, starch, cellulose derivatives, aerosil, etc. To prevent microbial contamination of the suspension drug in its composition is administered antimicrobial preservatives: chlorohexidine diglyconate, methyl parahydroxybenzoate, propyl parahydroxybenzoate, ethanol 96 %, citric acid monohydrate, etc. In order to ensure the chemical stability of drugs in the form of a suspension and to prevent oxidation to their composition, antioxidants are introduced, which are divided into direct (bottled hydroxytoluene), reducing (ascorbic acid) and chelating (disodium edetate). Corrigents of taste and smell are used to provide acceptable organoleptic properties. This group of substances include: sorbitol, sodium cyclamate, sodium saccharin, aspartame, maltol, etc.

Conclusions. Thus, when creating peroral suspension, the rational choice of excipients remains an important issue. The purpose of our further work is to substantiate the composition of excipients in the new antacid drug, which is being developed.

UTILIZATION OF SNOW FROM SIDEWALKS AND THE ROADWAY

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Introduction. Snow removal from sidewalks and roadways is now an urgent problem. In order to melt the snow faster, sprinkle it with salt, sand, or some other means. At the same time, sand (and partially coarse salt crystals) increase the adhesion of the wheels of vehicles to the road, thus preventing slipping and slipping of vehicles into ice. Salt itself lowers the freezing point of water and removes water from the carriageway at low temperatures.

The purpose of research. Snow, which is removed in settlements, as a rule, is taken to the fields. This contributes to the accumulation of moisture and should affect soil fertility. However, the snow that is taken from city roads and sidewalks contains a sand-salt mixture. These substances can contribute to salinization of fields, which will reduce the increase in crop yields. On the other hand, leaving this snow