

SELECT LUBRICATING COMPONENTS IN CAPSULE FOR TREATMENT URINARY TRACT INFECTIONS

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Urinary tract infections are the second most frequently form of infectious diseases, second only to respiratory infections. A major problem is recurrent urinary tract infections in patients who have ever suffered from acute cystitis. This problem makes a pronounced impact on the quality of life of patients and results in significant medical costs. In the global standards of treatment of urological infections direction proposed introduction regimens herbal products that complement the basic therapy, enhancing the action of antibiotics, reducing the risk of relapse and can be used as a prophylactic measure without the threat of negative effects on the body. Abroad are popular drugs based on cranberry and hibiscus to reduce the frequency of lower urinary tract infection due to the large number of organic acids and proanthocyanidins that change urine pH and show antyadhezive effects.

The aim of this work was the development of technology and capsules based on medicinal plants for the treatment and prevention of inflammatory urological diseases and the optimal choice of lubricant to ensure the process of filling capsules.

Materials and methods. As an active drug components used flowers hibiscus , cranberry fruit, herb chamomile and equisetum. To provide the necessary technological parameters added to a mixture of lactose monohydrate and had a wet granulation using 20% aqueous polyvinylpyrrolidone. As used lubricant magnesium stearate and aerosil. We determined the turnover, bulk volume granules before and after shrinkage, moisture content in the compositions. The technological parameters were determined by methods SPU.

The obtained results. To improve the yield rate and fix problems when filling capsules from plant material of the capsule weight added several types of lubricants. When using magnesium stearate granules turnover increases, but when administered in capsule weight aerosil its fluidity demonstrates better performance. What does the presence of colloidal silica in mass to 1.0% of its turnover increases, while increasing concentrations slowly decrease. High porosity allows syloyidu absorb moisture, which is important when used in mass of a drying plant material.

Conclusions. The structure was introduced filler caps lactose monohydrate, polyvinylpyrrolidone binding component and lubricant aerosil (in the amount of 1%), which provides optimal technological parameters necessary for filling capsules.