

The invention relates to using methods for determining physicochemical properties of sorbents for determining the effectiveness of the sorbents for mycotoxins under conditions approximated to the digestive tract conditions. The invention provides for carrying out liquid chromatography of mycotoxins in a thin layer of a sorbent under study, chromatogram development, measuring indices of chromatographic mobility of mycotoxins and calculating the factor of capacity of the sorbent, distribution coefficient and concentration of mycotoxins in a liquid phase after achieving the state of sorption balance. It does not require using methods of qualitative determination of the compounds under study. To simulate the conditions, in which the absorption in the digestive tract takes place, buffer solutions with a certain level of acidity (from 2.0 to 9.0) are used as the liquid phase, and the chromatographic process is carried out at a temperature 35-42 °C.