INVESTIGATION OF KINETICS OF DRYING OF QUINCE FRUITS IN NATURAL CONVECTION

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The main aim of this graduation thesis is to investigate kinetics in process of drying quince fruit in natural Convection. Methods of drying with natural convection, kinetics of drying and types of dryiers were presented. The research material of quince fruit is characterized. To estimate the influence of drying temperature and size of the fruit with different fragmentation: quarters, eighths, longitudinal slices and transverse slices on this process. To fulfit this laboratory reaserch on samples of quince fruit was conducted. The course of changes in the water content during the process of drying was determined at five different temperatures of the drying agent: 40, 50, 60, 70, 80 ° C.

Quince is a fruit with a high water content, it contains 85-86%. Before starting the drying process, the fruit samples, depending on the size, contain various initial water contents.

Drying of quince fruit is the shortest at 80 ° C for any type of fragmentation. The larger the sample, the drying process is slower.

Key words: quince, convention, kinetics of drying, drying fruit.