Effect of Osmotic Dehydration as Pretreatment in The Preparation of Applet Jelly

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The osmotic dehydration process consists in to remove water of food by effect of the osmotic pressure, which occurs by immersing the product in hypertonic solution of one or more solutes, during a time and temperature specific. In this process there is solid gain and decreased water activity which increases the shelf life of food. The jellies are from whole fruits obtained by concentration with sugar. The aim of this study was to develop and evaluate the characteristics of jelly elaborated by osmotic pretreatment of apples *Malus domestica Borkh* of Gala variety. The analysis for the determination of pH and soluble solids followed the methodology of the IAL (2005). For osmotic dehydration apples were cut into cubes, and these were immersed in sucrose solution: distilled water in 50:50 preheated to 30 ° C, then osmotic pretreatment was performed in a thermostated bath at 30 °C for one hour. For the jelly preparation (with and without osmotic pretreatment) used in proportion of 50:50 (pulp : sucrose) concentrated at 67°Brix followed by aseptic shutdown. The average pH was 3.27 and 3.17 respectively, according to the recommends literatures that, for extra apple jelly with and without osmotic pretreatment. The time to reach the concentration of 67 ° Brix of apple jelly was approximately 45 minutes, however, jelly pretreated with osmotically dehydrating with sucrose solution (50% p/p) expected concentration reached in a shorter time, approximately in 15 minutes. Thus, it was found that the jelly obtained after osmotic pretreatment reached in a shorter time than the desired concentration according with legislation to the which enables the manufacture of jellies, minimizing factors such as preparation time and thereby enabling the production.

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