

Abstract

Osmotic dehydration was examined as a pretreatment before frying in order to produce a banana snack with a low fat content. A relationship between dehydration kinetics as well as frying kinetics and the type of solution used for osmotic dehydration before frying of banana snacks has been developed. The effect of osmotic dehydration on sensorial properties (flavor and texture) and microbiological quality (aerobic bacterial count and fungal and yeast counts) of the banana snack was also investigated. Sugar solutions at two concentrations (40 and 60 Brix) and 3 soaking times (2, 4, and 6 h) were used. The results showed that osmotic pretreatment had a significant effect on oil uptake in banana snacks, as well as on the sensory properties. The osmotic treatment also maintained the good microbiological status of the product.