

Title Shelf life extension of almond paste pastries
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Abstract

Almond paste products have a brief shelf life due to both lipid oxidation and hardening. Since oxidation and hardening are respectively induced by headspace oxygen and moisture migration, the use of polymeric films having high barrier properties to low molecular weight compounds in combination with a low oxygen concentration in the package headspace is expected to extend almond paste shelf life. During this research, two flexible films, having a nylon or an ethylene–vinyl alcohol copolymer layer as a barrier to low molecular weight compounds, were tested. Products were packed alternatively under nitrogen or in presence of oxygen scavengers. A part of them was kept as controls and packed under air. Samples were stored at 37 °C and regularly analysed. Results showed that the loss of moisture, and the consequent hardening of samples, is the main phenomenon affecting quality and shelf life of almond paste.