

Title Effects of dipping treatments on quality of fresh cut artichoke
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Abstract

This paper describes the effects of anti-browning dips on sensory characteristics and microbial load of fresh cut artichoke hearts.

The hearts of a globe and white artichoke (cultivar 'Madrigal') were obtained by cutting the stem, the head top and by removing the external bracts. They were immediately dipped for 90 s in two different water solutions: citric or lactic acid 1%. The dipping in tap water was used as control. After the treatment the artichoke hearts were washed, drained, packed in PE bags and stored at 4°C for 12 days; for each treatment 12 bags (three replicates for four storage periods) containing 6 artichokes hearts were prepared. Qualitative traits, microbiological counts and sensory characteristics were evaluated during cold storage. Dipping treatment in lactic acid inhibited the enzymatic browning and the increase in the microbial population, allowing to obtain high quality fresh cut artichokes. Whereas dipping in citric acid solution, slightly delayed browning, but it did not result in substantial improvement of color evolution on cut surfaces compared to water dip control. As conclusions, lactic acid dipping maintained the sensorial attributes and controlled total aerobic bacterial population of fresh cut artichoke hearts. In this way it is possible to obtain a new healthy ready to eat (or to cook) product increasing the artichoke consumption.