

**Title** Combined effects of chemical dip and/or carrageenan coating and/or controlled atmosphere on quality of fresh-cut banana

**Author** S.L.S. Bico, M.F.J. Raposo, R.M.S.C. Morais and A.M.M.B. Morais

**Citation** Food Control, Volume 20, Issue 5, May 2009, Pages 508-514

**Keywords** Fresh-cut banana; Ascorbic acid; Calcium chloride; Cysteine; Carrageenan; Controlled atmosphere

#### **Abstract**

The combined effect of chemical dip and/or edible coating and/or controlled atmosphere (CA) on quality of fresh-cut banana was investigated. Banana slices were subject to a 3-min dip into a solution containing 1% (w/v) calcium chloride, 0.75% (w/v) ascorbic acid and 0.75% (w/v) cysteine and/or combined with a carrageenan coating and/or combined with controlled atmosphere (3% O<sub>2</sub> + 10% CO<sub>2</sub>). Physico-chemical and microbiological qualities were evaluated during 5 days of storage at 5 °C. Dip combined with CA treatment prevented product weight loss and increase of polyphenol oxidase activity during the 5 days of storage. Colour, firmness, pH, titratable acidity and total soluble solids values and total phenolic content presented the smallest changes. Microbial analysis showed that minimally processed bananas were within the acceptable limits during 5 days of storage at 5 °C.