



## EFFECT OF PACKAGING MATERIALS AND STORAGE TIME OF CONCENTRATE ORANGE JUICE ON CHEMICAL PROPERTIES AND ANTIOXIDANT ACTIVITY

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**ABSTRACT**

A study was conducted to determine the effects of packaging materials, and storage time on physicochemical and antioxidant properties of commercial concentrate orange juice largely consumed in Algeria (Ramy). The juice was packaged in different packaging materials (glass, cardboard and plastic bottles) and stored for three months at room temperature. Total soluble solids, pH, titratable acidity, vitamin C, and antioxidant activity (DPPH method) were evaluated in freshly juice, and after 1,2, and 3 months of storage. The results showed that total soluble solids, pH, vitamin C and antioxidant activity decreased with storage time under different storage time, irrespective of packaging materials. On the contrary, the acidity increased during storage. The juice in glass bottles did not show significant changes until the end of storage. It was concluded that glass bottles packing proved to be most suitable for orange juice storage, which maintained the better quality and antioxidant properties loss than rest of the packing materials.

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