

Determination and Comparison of Some Elements in Different Types of Orange Juices and Investigation of Health Effect

Authors : F. Demir, A. S. Kipcak, O. Dere Ozdemir, E. M. Derun, S. Piskin

Abstract : Fruit juices play important roles in human health as being a key part of nutrition. Juice and nectar are two categories of drinks with so many variations for consumers, regardless of age, lifestyle and taste preferences, which they can find their favorites. Juices contain 100% pulp when pulp content of 'nectar' changes between 25%-50%. In this study, potassium (K), magnesium (Mg), and phosphorus (P) contents in orange juice and nectar is determined for conscious consumption. For this purpose inductively coupled plasma optical emission spectrometry (ICP-OES) is used to find out potassium (K), magnesium (Mg), and phosphorus (P) contents in orange juices and nectar. Furthermore, the daily intake of elements from orange juice and nectar that affects human health is also investigated. From the results of experiments K, Mg and P contents are found in orange juice as 1351; 73,25; 89,27 ppm and in orange nectar as 986; 33,76; 51,30 respectively.

Keywords : element, health, ICP-OES, orange juice

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