Evaluation of total phenol, total flavonoid and ascorbic acid in Iranian commercial orange juice

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This study was designed to measure and compare the total phenols, flavonoids and vitamin C contents in four orange juice brands which are commercially available in Iran. Total phenols, flavonoids and ascorbic acid content of 100 samples from four different commercial brands were evaluated by spectrometric method. The results showed the significant difference between the four brands’ total phenols, flavonoids and vitamin C level (P<0.05). The total phenolic content in the samples was ranged between 28.39 to 114.20 mg gallic acid equivalent per liter/L (mg GAE/L). The range of total flavonoids were measured between 12.53 to 32.62 mg quercetin equivalent per liter (mg QE/L) and the ascorbic acid concentration in commercial orange juices was determined between 29.95 to 93.08 mg/L. The obtained results showed the level of determined parameter in commercial orange juice was significantly less than fresh orange juice and it seems that an international standard is required to avoid cheating in this industry.

Biography

Mannan Hajimahmoodi received Pharmacy Doctorate and PhD of Food Science and Nutrition from Tehran University of Medical Sciences (TUMS). She is Vice Chancellor of Food and Drug university of Medical Science, since 2013. Now she is the Professor of Drug and Food Control Department, Faculty of Pharmacy, TUMS. She has published many papers and managed more than 20 projects about food and nutrition. She is skillful in analytical instruments such as HPLC, GC/ FID, IR, UV, and highly interested in analytical methods about food safety and quality

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