

عنوان مقاله:

A comparative study for quality of local and imported commercially available bottled water brands

محل انتشار:

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خلاصه مقاله:

In this study the quality of Omani and United Arab Emirates bottled water brands which are sold in Oman were assessed by comparing the chemical composition indicated on manufacturer's label with local and international bottled water standards. Results indicated that all the bottled water brands are complying with local and international standards. According to piper diagram, the most dominant water type among Omani brands is mixed Ca^{2+} - Mg^{2+} -Cl- and among United Arab Emirate brands is calcium chloride. Hierarchical cluster analysis divided Omani and United Arab Emirate brands in to four groups based on similarity in chemical composition. Some of the Omani and United Arab Emirate brands have same chemical composition, but marketed under different names. Calcium concentration in Omani and United Arab Emirate brands is low compared to imported mineral water brands, and their contribution towards recommended dietary allowances of calcium for adults is only 3%. Both Omani and United Arab Emirate brands used in this study are meeting United States Food and Drug Administration's very low sodium category requirements and are suitable for individuals on severely restricted sodium diet.

کلمات کلیدی:

Bottled water, Hierarchical cluster analysis (HCA), Oman, Piper diagram, Recommended Dietary Allowances, United Arab Emirate (UAE)

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