Title Determination of mineral nutrients in some leafty vegetables

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Abstract

Leafy green vegetables are variable in botanical origin and minerals content and other functional properties. Many fresh herbs are harvested as soft or semi-woody leafy stems (basil, tarragon and savory) and others are harvested as developing leaves (leek) or intact plants (parsley). They are a valuable source of minerals (iron, and calcium), vitamins (A, C, K, and Riboflavin) and cellulose. For example parsley is highest in calcium, iron and folate of all vegetable. Green leafy vegetables are generally low in calories. Their nutritional advantage is that they offer a high concentration of macro- and micronutrients for low contents of calories and fat. In this experiment six green leafy vegetables were selected as follows: Iranian leek (*Allium sp.*), parsley (*Petroselinum crispum*), Green Sweet basil (*Ocimum basilicum*), Violet Sweet Basil (*Ocimum basilicum*), Tarragon (*Artemi dracunulus*) and Savory (*Satureia hortensis*) that been used besides of three meals of Iranian. These leafy vegetables have been analyzed for the macronutrients (K, Ca, Mg and Na) and micronutrients (Fe, Cu, Zn, and Mn) contents. The results showed that the amount of macro- and micronutrients are noticeable especially Ca, Mg, Fe and Cu in most of selected herbs. The highest Fe was found in leek and savory and the tarragon was rich in Cu. Leek is rich also in potassium content and the amount of calcium and magnesium are nearly the same in all leafy vegetables, although Mg were higher in tarragon, leek and basil. These results provide important data on macro- and micronutrient of selected leafy vegetables, emphasizing that these herbs can be a good source of minerals in daily diet.