

## The Evaluation of Dandelion (*Taraxacum officinale*) Properties as a Valuable Food Ingredient

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### Abstract

The qualities of dandelion (*Taraxacum officinale*), a plant of the spontaneous flora of Romania and the possibility of using it in food were highlighted. Currently used only for consumption as medicinal tea with beneficial effects on the body, dandelion has a chemical composition that allows its use in dairy products, pastries, desserts, etc. In this study were determined the content of mineral elements of plant using ICP-MS spectrometer, antioxidant activity was determined by the DPPH method, the vitamin C was determined by HPLC and the carotene and chlorophyll was determined by spectrophotometric measurements. All parts of the plant, roots, leaves, stems, flowers in fresh state were analyzed. The results demonstrate that the plant can be used throughout the year, so the production does not become a seasonal one because all its component parts have special qualities in terms of chemical composition, both fresh and frozen.

**Keywords:** antioxidants, carotenes, chlorophyll, minerals

### 1. Introduction

Fruits and vegetables have an important role in human nutrition because they contain constituents that have health benefits and anti-disease factors, such as antioxidants and polyphenols. These components are known to scavenge harmful free radicals that are capable of attacking the healthy cells of the body, causing them to lose their structure and function. Cell damage caused by free radicals appears to be a major contributor to aging and to degenerative diseases of aging such as cancer, cardiovascular disease, cataracts, immune system decline, and brain dysfunction (OZGUR & al. [1]; PERCIVAL [2]). Antioxidants have also been used in food industry to prevent deterioration, nutritional losses and off-flavoring in various foods, especially those containing polyunsaturated fatty acids. Recently, interest has increased considerably in finding naturally occurring antioxidants for use in foods because of their potential in health promotion and disease prevention, and their high safety and consumer acceptability (KRATCHANOVA & al. [3]). Various herbs and spices have been reported to exhibit antioxidant activity, including *Ocimum sanctum*, *Piper cubeba* Linn., *Allium sativum* Linn., *Terminalia bellerica* (Gaertn.) Roxb., *Camellia sinensis* Linn., *Zingiber officinale* Roscoe and several Indian and Chinese plants (KHALAF & al. [4]). Dandelion (*Taraxacum officinale* L.) is found in all parts of the North Temperate Zone, in pastures,