

## Dandelions (*Taraxacum officinale*)

Friend or Foe?

Growing up, I remember seeing old Italian ladies digging up dandelions in neglected green spaces and on the edges of small fields. They would leave with a bag full, and in my ignorance, I thought they must be crazy! We desperately try to rid ourselves of these pesky weeds and they treat them like delicacies. It was always a mystery to me until I was much older and was introduced to the many benefits that dandelions have to offer.

If you are maintaining a golf course or competing for the best green lawn in suburbia, dandelions won't be on your welcome list. Dandelions will push out grass and other plants, as well as sapping water and nutrients away from surrounding plants. The best way to control them without using pesticides is digging out the long tap root and not letting them go to seed. Some people find this stubborn plant invasive and a nuisance, and feel it should be eradicated at all costs. This attitude is just one reason that lead us to the overuse of pesticides. However, the dandelion is a welcome sight for pollinators as it is one of the first sources of pollen and nectar to appear after a long winter.

Dandelions are tap-rooted, perennial, herbaceous plants, with leaves 5–25 cm long, simple, lobed, and form a basal rosette above the central taproot with yellow to orange flower heads. The roots hold the soil together to help prevent wind and water erosion. Since the plants grow so quickly, they spread widely to cover bare soil and act as a natural mulch by providing shade and conserving moisture. The long, strong taproots of dandelions push through into dry, cracked, compacted earth, helping to break it up, create channels for air and water to penetrate, and maintain a loose soil structure that allows earthworms to do their work.

The plants draw calcium, iron, and potassium from deep in the earth into their leaves. When they die and decompose, they leave behind mineral-rich organic matter that nourishes the soil.

The dandelion produces seeds that push up through the floret and develops a feathery filament called a pappus. This pappus (to the delight of children) can be removed by the slightest breeze and left to float in the air until it reaches its final destination to start the repeat process of germination.



*Taraxacum officinale* have been used in traditional herbal medicine for centuries for their wide array of medicinal properties by the Greeks, Romans, Egyptians and Chinese. This is not a native plant to North America, but is thought to have been brought here by the early European settlers for medicinal purposes.

Every part of the dandelion plant is edible and has health benefits. The root, leaves and flower can all be used to make health enhancing dandelion tea. Dandelion leaves are slightly bitter, but blanching sweetens them. They are packed full of vitamins (A,B,C,E and K), minerals (iron, calcium, magnesium, and potassium), nutrients and fibre and have more protein than spinach. The flower contains the highest form of the antioxidant called polyphenol, which helps prevent the negative effects of free radicals in your body. The root contains large amounts of inulin, which is a soluble fibre that promotes good digestive health and also contains a number of compounds with antioxidant activity which help to improve liver health, lower cholesterol and help lower risk factors associated with coronary heart disease. Medical research has shown that the dandelion root is a natural diuretic as it contains high levels of potassium which are thought to stimulate urination. According to the Mayo Clinic, diuretics are sometimes used in the treatment of high blood pressure. They also help flush sodium and excess water from your body. Therefore, the diuretic effect of the dandelion root may help lower your blood pressure.

All parts of the dandelion are beneficial for helping to control the symptoms of type 2 diabetes. The root contains anti-inflammatory properties and antioxidants, some of which are strong anti-diabetic agents which help regulate blood glucose, insulin, and lower cholesterol.

Since the effects of global warming now has the attention of the world, society has changed their attitude towards our fragile ecosystem and for the most part is embracing it as a whole, with every link in the chain depending on each other for survival. Through education, our foes are becoming our friends, whether plants or insects. We have a better understanding and tolerance of our diverse horticulture and are using it in ways to improve our health and work towards a more balanced ecosystem.

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