

The Longwood Herbal Task Force  
(<http://www.mcp.edu/herbal/default.htm>) and  
The Center for Holistic Pediatric Education and Research  
(<http://www.childrenshospital.org/holistic/>)

### Clinician Information Summary

# DANDELION

(*Taraxacum officinalis*)

## SUMMARY

The major modern and historical uses for dandelion are as a diuretic and liver tonic. Both uses are supported by animal data. Although there is long historical tradition to support these uses, no randomized, controlled trials in humans have evaluated dandelion's effect as a diuretic, appetite stimulant, cholagogue, hepatitis remedy or weight loss agent. Aside from gardener's laments and allergic reactions, dandelion is very safe. It is widely consumed as a salad green; the roots are roasted and used as a coffee substitute. There are no studies specifically evaluating its safety during pregnancy, lactation or childhood.

**POPULAR USES:** Diuretic, liver tonic, weight loss remedy

**CHEMICAL CONSTITUENTS:** Sesquiterpene lactones (bitters), triterpenoids, and sterols, Vitamin A, Vitamin C, tannins, alkaloids, inulin, beta carotene, caffeic acid, flavonoids (apigenin)

## SCIENTIFIC DATA

*In vitro:* Dandelion demonstrates effects against human herpes virus type 1 (HHV1) and some human tumor cell lines *in vitro*.

*In animals:* In rats and mice, dandelion leaf extracts had diuretic effects as potent as furosemide; the diuretic effect accounted for 100% of the weight loss found in these animal studies. In animal studies, dandelion increased bile output by 50-200%. In mice and diabetic rabbits, dandelion had no impact on blood sugar levels; at extremely high doses (500 mg/

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kg), dandelion had hypoglycemic effects in rabbits.

*In humans:* There are no randomized controlled trials evaluating any of dandelion's traditional uses.

### **TOXICITY AND SIDE EFFECTS**

*Side effects:* Allergic reactions do occur. No serious toxicity has been reported with acute or chronic use. There are no genotoxic, mutagenic or carcinogenic effects in animal models.

*Interactions with other medications:* None known. Some herbalists recommend that patients avoid combining dandelion with diuretic medications.

*Contraindications:* Herbalists recommend avoiding by patients with biliary obstruction, cholecystitis or ileus.

*Pregnancy and lactation:* No data.

*Childhood:* No data.

### **ADDITIONAL RESOURCES**

- HOME: <http://www.mcp.edu/herbal/default.htm>
- Dandelion Complete Monograph: <http://www.mcp.edu/herbal/dandelion/dandelion.pdf>
- Dandelion Patient Fact Sheet: <http://www.mcp.edu/herbal/dandelion/dandelion.ph.pdf>