

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

UVA URSI

(*Arctostaphylos uva-ursi*)

SUMMARY

Uva ursi has been used primarily as an herbal remedy for mild cystitis. There are data from *in vitro* and animal studies and human case series to support this use, but no randomized, controlled trials evaluating its use in treating acute cystitis or pyelonephritis. There are no studies comparing it with standard antimicrobials. There are no scientific studies supporting its use as a treatment for childhood enuresis or adult renal stones, or for its use as a diuretic or to promote weight loss. Uva ursi and its constituents are ingredients in a number of topical skin lightening agents, and there is good experimental support for this use. Due to its high tannin content, uva ursi may cause nausea and intestinal irritation acutely. Due to its hydroquinone content and the resulting potential for hepatotoxicity, mutagenicity and carcinogenicity, it is only advised for limited, short-term use and is contraindicated during pregnancy, lactation and childhood.

POPULAR USES: Uva ursi's primary use is as a treatment for mild cystitis. It is also used as a diuretic, weight loss treatment, and remedy for childhood enuresis, renal stones, and irritable or spastic bladder. Topically it is occasionally used as a skin lightening agent.

ACTIVE CHEMICAL CONSTITUENTS: Hydroquinones: arbutin, methylarbutin, hydroquinones, tannins

SCIENTIFIC DATA

In vitro: Uva ursi and its constituents have bacteriostatic activity against *Bacillus subtilis*, *E.coli*, *Enterobacter*, *Helicobacter pylori*, *Klebsiella*, *Mycoplasma hominis*, *Pseudomonas aeruginosa*, *Shigella sonnei*, *S. flexneri*, and *Ureaplasma urealyticum*. Uva ursi extracts inhibit melanogenesis by blocking tyrosinase activity.

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In animals: In white rats with experimentally induced pyelonephritis, uva ursi extract exhibited marked antibacterial and nephroprotective effects. Topical application of uva ursi extracts inhibited growth of darkly pigmented hair in guinea pigs.

In humans: German case series support uva ursi's use in treating frequent and painful urination. In a randomized controlled trial of 57 women who suffered from recurrent urinary tract infections, there was a significant reduction in the number of UTIs in those randomized to uva ursi. There are no controlled clinical trials evaluating the effectiveness of uva ursi in treating acute cystitis or comparing it with standard antibiotics. Hydroquinones such as those found in uva ursi are standard ingredients in a number of non-prescription and prescription topical skin lightening products.

TOXICITY AND SIDE EFFECTS

Side effects:

External use: No reported toxicity. Allergic reactions are rare.

Internal use: Tannins in uva ursi can cause stomach irritation, nausea and vomiting which may be minimized by taking the herb with meals. Hydroquinones have been associated with hepatotoxicity, mutagenicity and carcinogenicity with chronic use.

Interactions with other medications:

External use: None known

Internal use: May be inactivated by medications or dietary supplements that acidify the urine

Contraindications:

External use: None known

Internal use: Typically not recommended for patients with severe renal disease or gastrointestinal irritation

Pregnancy and lactation: Contraindicated

Childhood: Contraindicated

ADDITIONAL RESOURCES

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