ENGLEKING Rx Health & Wellness

UT Defender

CLINICAL APPLICATIONS

- *Provides Support for Healthy Urinary Tract Function*
- *Supports Healthy Microbial Balance in the Urinary Tract*
- *Helps Maintain a Healthy Mucosal Surface in the Urinary Tract*
- *Promotes Healthy Immune Function*

This product is designed to support kidney and urinary tract health, and to help to promote healthy microbial balance. The formula includes Anthocran®, a cranberry extract standardized to 36mg proanthocyanidins (PACs), which has been shown to be the optimal daily dose for urinary tract health. This product also includes dandelion leaf extract to naturally flush out urinary passages, and Ellirose™, an extract of hibiscus flower shown to promote healthy microbial balance in the urinary tract. Each capsule of this product includes 120 mg Anthocran®, 225 mg dandelion leaf extract and 200 mg Ellirose™.

Overview

The urinary tract is made up of the kidneys, bladder, and the tubes leading to and from these organs, the ureters and the urethra, and is responsible for producing urine and eliminating it from the body. As an important organ of elimination, a healthy urinary system is essential to the health of the entire body. Many individuals including pregnant women, and the elderly may benefit from additional support for the urinary tract. The Anthocran® in this product is standardized to contain 36 mg of proanthocyanidins (PACs), which is the daily dose needed to be clinically effective at maintaining microbial balance. Together with Ellirose™ and dandelion leaf, this product offers a full spectrum of kidney and urinary tract support, promoting microbial balance, healthy detoxification and urine excretion.

Cranberries/Anthocran®†

Cranberry juice has been used historically as a remedy for urinary tract health.[1] The mechanism of action of cranberry juice and its extracts is the inhibition of microbial binding to host cell surface membranes. In vitro studies have observed it to promote healthy microbial balance[2,3] facilitated by proanthocyanidins PACs), which impact bacterial adherence and maintain the microbial health of the urinary tract.[4] A recent meta-analysis of 10 clinical trials and 1,494 subjects, showed supplementation of cranberry-containing products supported urinary tract health and urine flow, in women and children, showing greater benefit for cranberry users by 38%.[5] A meta-analysis of the results of four randomized controlled clinical trials, found prophylactic use of cranberry significantly supported urinary tract health over a 12-month period, compared with placebo.[6] In a 2015 clinical trial comparing the use of Anthocran® plus lifestyle intervention to only lifestyle intervention, there was shown to be a 73.3% reduction in frequency of urinary tract challenges of the Anthocran® group compared to the lifestyle control group, which saw a 15.4% decrease. In addition, 31.8% of the Anthocran® subjects were symptom-free, and none of the control group were symptom-free. It was also noted there was a decrease in any urinary challenge duration from those that only received lifestyle intervention.[7]

Hibiscus sabdariffa†

H. sabdariffa extracts have long been used in herbal teas and for urinary tract support. *H. sabdariffa* calyx in a 10:1 extract (Ellirose™ extract) includes compounds that promote microbial balance, and prevent bacteria from adhering to the bladder wall, including substantial amounts of flavonoids, sambubiocides, anthocyanidins, proanthocyanidins and chlorogenic acids. In addition, other ingredients such as polysaccharides and a high concentration of simple organic acids provide urinary tract support. An in vitro study on Hibiscus calyx and protocatechuic acid has shown its ability to promote microbial balance, mediated by protocatechuic acid content[8] and a six-month, double-blind, placebo controlled study, found 200 mg of *H. sabdariffa* extract taken once a day, significantly promoted urinary tract health by 77%.[9]

Dandelion Leaf Extract†

Dandelion leaf has a history of use in various preparations including infusions, extracts, and fresh expressed juice for improving urinary tract function. A clinical study of 17 participants given an extract of *T. officinale* fresh leaf, found it contains the ability to increase the frequency and excretion ratio of fluids in these healthy subjects.[10]

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Directions
1 capsule per day or as recommended by your health care professional.

Does Not Contain
Gluten, corn, yeast, artificial colors and flavors.

Cautions
If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts V2

Serving Size 1 Capsule
Servings Per Container 30

1 capsule contains	Amount Per Serving	% Daily Value
Dandelion Leaf Extract	225 mg	*
Hibiscus Flower Extract (Ellirose™)	200 mg	*
Cranberry Fruit Extract (Anthocran®) (Standardized to contain 36 mg Proanthocyanidins)	120 mg	*

* Daily Value not established

References

1. Yarnell E, Abascal K, Hooper C. Clinical Botanical Medicine. Larchmont: Mary Ann Liebert; 2003.
2. Sobota AE. Inhibition of bacterial adherence by cranberry juice: potential use for the treatment of urinary tract infections. *J Urol*. May 1984;131(5):1013-1016.
3. Schmidt DR, Sobota AE. An examination of the anti-adherence activity of cranberry juice on urinary and nonurinary bacterial isolates. *Microbios*. 1988;55(224-225):173-181.
4. Howell AB, Vorsa N, Der Marderosian A, Foo LY. Inhibition of the adherence of P-fimbriated Escherichia coli to uroepithelial-cell surfaces by proanthocyanidin extracts from cranberries. *N Engl J Med*. Oct 8 1998;339(15):1085-1086.
5. Wang CH, Fang CC, Chen NC, et al. Cranberry-Containing Products for Prevention of Urinary Tract Infections in Susceptible Populations: A Systematic Review and Meta-analysis of Randomized Controlled Trials. *Arch Intern Med*. Jul 9 2012;172(13):988-996.
6. Jepson RG, Craig JC. Cranberries for preventing urinary tract infections. *Cochrane Database Syst Rev*. 2008(1):CD001321.
7. Ledda A, Bottari A, Luzzi R, Belcaro G, Hu S, Dugall M, Ippolito E, Corsi M, Gizze G, Morazzoni P, Riva A, Giacomelli L, Togni S. Cranberry supplementation in the prevention of non-severe lower urinary tract infections: a pilot study. *Eur Rev Med Pharmocol Sci*. 2015 Jan; 19(1): 77-80.
8. Liu KS, Tsao SM, Yin MC. In vitro antibacterial activity of roselle calyx and protocatechuic acid. *Phytother Res*. Nov 2005;19(11):942-945.
9. Allaert F. Prevention of recurrent cystitis in women double-blind, placebo-controlled study of Hibiscus sabdariffa L extract. *Lettre de l'Infectiologue*. 2010;25(2).
10. Clare BA, Conroy RS, Spelman K. The diuretic effect in human subjects of an extract of Taraxacum officinale folium over a single day. *J Altern Complement Med*. Aug 2009; 15(8):929-934.

† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.