

ORGANIC CRANBERRY EXTRACT

Cranberries have a long history of use for urinary health, and research supports cranberry's ability to promote urinary tract health. Cranberries are rich in phytochemicals called proanthocyanidins that have cleansing properties; the evidence suggests proanthocyanidins work by making it more difficult for bacteria to adhere to the cells on the surface of the urinary tract, promoting healthy microbial balance.

Many trials have studied cranberry juice, cranberry powder, or cranberry extract supplementation over several weeks to several months, with positive results for urinary tract health. ^{1,2} The cranberry extract in UT Biotect is standardized to supply a high concentration of proanthocyanidins, 36 mg in a daily serving, to be consistent with research showing improvements in urinary symptoms following cranberry supplementation with a defined dose of proanthocyanidins. ³

D-MANNOSE

D-Mannose is a polysaccharide naturally found in fruits and other plant foods, including cranberries. Studies suggest D-mannose works similarly to proanthocyanidins to maintain healthy microbial balance and a healthy urinary tract. In randomized controlled trials, D-mannose at a dose of 2 grams daily over several months improved urinary tract health in women.^{4,5} D-mannose ingestion does not elevate blood glucose levels.^{6,7}



ORGANIC ARONIA BERRY POWDER

Aronia, also called chokeberry, is a deep purple, phytochemical-rich berry that also contains proanthocyanidins, similar to cranberry. Because of its similar phytochemicals, aronia has also been studied for its potential to improve urinary tract function. Laboratory studies suggest aronia phytochemicals could promote microbial balance by affecting bacteria growth, and one pilot study on chokeberry juice for urinary tract health in humans has been published, with promising results.^{8,9} Future research will be needed to establish the best dose of aronia berry to support urinary tract function, and to identify the specific phytochemicals involved. Since the preliminary data is promising, Dr. Fuhrman has included aronia powder in UT Biotect.

UT BIOTECT

Product Features

- Natural support for normal, healthy urinary tract function
- 36 mg proanthocyanidins per daily serving from organic cranberry extract
- 2 grams D-mannose per daily serving
- Organic aronia berry powder
- Organic hibiscus flower extract



ORGANIC HIBISCUS FLOWER EXTRACT

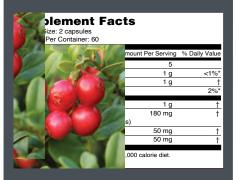
Laboratory studies suggest hibiscus phytochemicals help maintain a healthy microbial balance, by affecting bacterial growth and adhesion to the cells lining the urinary tract. In humans, a combination supplement including hibiscus has been investigated in European

studies, and improved urinary symptoms in women. 10-12 Future studies are needed to provide more information about the utility of hibiscus itself for urinary tract health, and whether there are specific phytochemicals or optimal doses. Like aronia berry, hibiscus is included in UT Biotect because of these promising preliminary results.

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- 4. Lenger SM, Bradley MS, Thomas DA, et al. D-mannose vs other agents for recurrent urinary tract infection prevention in adult women: a systematic review and meta-analysis. Am J Obstet Gynecol 2020, 223:265 e261-265 e213.
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- 6. Ala-Jaakkola R, Laitila A, Ouwehand AC, Lehtoranta L. Role of D-mannose in urinary tract infections a narrative review. Nutrition Journal 2022, 21:18.
- 7. Harding VJ, Nicholson TF, Armstrong AR. Cutaneous blood-sugar curves after the administration of fructose, mannose and xylose. Biochem J 1933, 27:2035-2042.
- 8. Handeland M, Grude N, Torp T, Slimestad R. Black chokeberry juice (Aronia melanocarpa) reduces incidences of urinary tract infection among nursing home residents in the long term—a pilot study. Nutrition Research 2014, 34:518-525.
- 9. Tache AM, Dinu LD, Vamanu E. Novel Insights on Plant Extracts to Prevent and Treat Recurrent Urinary Tract Infections. Applied Sciences 2022, 12:2635.
- 10.Cai T, Tiscione D, Cocci A, et al. Hibiscus extract, vegetable proteases and Commiphora myrrha are useful to prevent symptomatic UTI episode in patients affected by recurrent uncomplicated urinary tract infections. Arch Ital Urol Androl 2018, 90:203-207.
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- Passaro M, Mainini G, Ambrosio F, et al. Effect of a Food Supplement Containing L-Methionine on Urinary Tract Infections in Pregnancy: A Prospective, Multicenter Observational Study. J Altern Complement Med 2017, 23:471-478.

UT BIOTECT

Supplement Facts



Recommended use: Take two capsules, twice daily.

Other Ingredients: Hypromellose, microcrystalline cellulose, calcium laurate, and silica.

Allergen statement: Does not contain: eggs, dairy, peanuts, tree nuts, fish, shellfish, soy, wheat, or gluten. Not produced in an allergen-free or gluten-free facility. Produced in a facility with an allergen control program in place designed to properly handle, store and use materials in production to eliminate the risk of cross-contamination, in accordance with Good Manufacturing Practices (GMPs).

Caution: If you are pregnant, nursing, or on medication, consult with your healthcare practitioner.

For more detailed information about this supplement, visit

https://shop.drfuhrman.com/UT-biotect