

Urinary Tract Infections

A urinary tract infection (UTI) can affect any part of the genitourinary system including kidneys, bladder, urethra, and prostate (in men). More than 3 million Americans (more common in women than men) experience a UTI every year. Symptoms include frequent, painful urination, pelvic pain and traces blood in the urine. The infection does not normally last long, and many patients self-diagnose and initially self-treat. When this occurs, for many, the first line of treatment is the often suggested cranberry juice. However, new research suggests that while **cranberry capsules** can help, cranberry juice may be little more than a panacea.

Cranberry capsules reduce the prevalence of UTI

A recent research study investigated 160 patients aged 23-88 years who were undergoing elective genitourinary surgery. Normally, 10-64% of patients undergoing this type of surgery or any surgery that requires catheter placement may develop a UTI following the removal of the catheter. Half of the patients in this study received **two cranberry capsules twice daily** - the equivalent in strength to two 8-ounce servings of cranberry juice- for 6 weeks after surgery. The others took a placebo. Results showed the **cranberry capsules lowered the risk of UTIs by 50% as compared to the placebo group**

Method of Action

Studies have shown that for a UTI to occur, bacteria must adhere to and invade the lining of the bladder. Cranberries contain A-type proanthocyanidins (PACs), which interfere with the bacteria's ability to invade the bladder wall, reducing the likelihood of infection. Patients need an extremely large concentration of pure cranberry to prevent bacterial adhesion and an infection. Researchers have found that cranberry capsules, the equivalent of 8 ounces of cranberry juice, can effectively provide this concentration. To meet the needed concentrations of PACs using juice, one would be required to drink large volumes for a prolonged period.

Summary

Studies have shown that while mild urinary tract infections may be limited by self-treatment with hydration and cranberry capsule use, treatment of UTIs can be complicated with a recurrence rate of 20-30 %. While antibiotics are often needed for recurrences, there may be concerns about their use for initial or mild occasional

recurrences which could lead to antibiotic resistance. This concern may cause both doctors and patients to be hesitant to use such medication in uncomplicated cases. As a result, some researchers have proposed using appropriate hydration and cranberry capsules as a safe alternative to antibiotics in the treatment of uncomplicated UTIs. While this information offers some insight to this common condition, medical advice should be sought when symptoms occur as UTI and other more complicated genitourinary conditions may have similar symptoms.

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