PEARLS

Practical Evidence About Real Life Situations

Do cranberries prevent urinary tract infections?

Clinical Question	How effective are cranberry products in preventing urinary tract infections (UTIs) in susceptible populations?
Bottom Line	The current body of evidence suggests that cranberry products (either in juice or as tablets or powder) compared to placebo or no treatment probably reduces the risk of symptomatic UTIs in women with recurrent UTIs, in children, and in people at risk of UTIs following an intervention. The data did not support the use of cranberry products to reduce the risk of symptomatic UTIs in elderly men and women, in pregnant women or in adults with neuromuscular dysfunction of the bladder and incomplete bladder emptying. However, data in these latter groups are limited to small studies with considerable uncertainty around the results.
Caveat	Cranberry products may be associated with a slight increased risk in gastrointestinal adverse events. Other adverse events did not appear to differ between groups. It remains unclear what the optimum dose of cranberry should be. Ex-vivo studies suggest that the PAC dose should be at least 36 mg/day. Only 13 studies could be included in meta-analyses, which evaluated the efficacy of different doses of PAC on symptomatic, culture-verified UTIs, with most evaluating low-dose PAC. No conclusions could be drawn from these analyses as to the relative efficacy of different doses of PAC. Proper standardisation of cranberry products for PAC content and correlation of the PAC content with anti-adhesion bioactivity may be important to ensure that cranberry products contain sufficient PAC to be effective.
Context	Cranberries (as cranberry juice, tablets or capsules) have been used for many years to prevent UTIs. Cranberries contain proanthocyanidins (PACs), substances that can prevent bacteria from sticking to the walls of the bladder. This may help prevent infections and reduce the need for working people to take time for medical appointments. However, there is currently no established regimen for what PACs dose to use and no formal regulation by health authorities of cranberry products.
Cochrane Systematic Review	Williams G, Hahn D, Stephens JH, Craig JC, Hodson EM. Cranberries for preventing urinary tract infections. Cochrane Database of Systematic Reviews 2023, Issue 4. Art. No.: CD001321. DOI: 10.1002/14651858.CD001321.pub6. This review contains 50 trials with a total of 8857 participants.

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Systematic review link:
https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001321.pub6/full