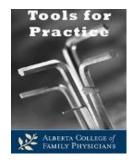
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**April 15, 2019** 



# **Drink Up: Increasing Fluid Intake to Prevent Recurrent UTIs**

Clinical Question: Does increasing water intake prevent recurrent urinary tract infections (UTIs)?

Bottom Line: Based on 1 RCT in women with recurrent UTIs (average 3.3 per year) and low fluid intake (less than 1.5L/day), increasing water intake by an additional ~1.5 L/day results in 1.5 fewer UTIs and 1.7 fewer antibiotic prescriptions per patient after 1 year compared to those who don't change intake. Over 90% of women with increased water intake will have fewer than 3 episodes of UTIs per year.

## **Evidence:**

- Only 1 Randomized Controlled Trial (RCT),
  - o 1 open-label RCT in 140 non-pregnant, premenopausal women (mean age 36) with at least 3 UTIs (mean 3.3) in last year and self-reported low fluid intake (less than 1.5 L/day). Randomized to increasing water intake by 1.5L/day or no change in intake. After one year (statistically significant unless indicated):<sup>1</sup>
    - Mean number of UTIs: 1.7 versus 3.2 control.
    - Number of women with fewer than 3 UTIs per year: 93% versus 12% control (number needed to treat=2).
    - Mean number of antibiotic regimens for cystitis: 1.9 versus 3.6 control.
    - Adverse effects: no difference.
      - Mean voids per day: 8.2 versus 5.9 control.
- Study managed by a bottled water company and water provided at no cost.

#### Context:

- To increase fluid intake, participants were instructed to start drinking new 500ml bottle of water at the beginning of a meal and finish it before the next meal.<sup>1</sup>
  - Similar approach to increasing water intake successful in other RCTs (not examining UTI prevention).<sup>2</sup>
    - "Bottles" were NOT required in other studies.<sup>2</sup>
- Low daily water intake associated with increased risk of UTIs.<sup>3</sup>
- Other considerations for recurrent UTIs:
  - Cranberry juice: inconsistent evidence and potential weight gain (5.8kg in 6 months) with routine use.<sup>4</sup>

- o Probiotics: no benefit. 5
- Vaginal estrogen (postmenopausal women): minimal evidence,<sup>6</sup> example versus placebo: NNT=3 for prevention.<sup>7</sup>
  - Adverse effects: not statistically different.
- Oral estrogens: no benefit.<sup>6</sup>
- Antibiotic prophylaxis versus placebo: NNT=3 for prevention.
  - Adverse effects: Number needed to harm=13.
    - Stopping for adverse effects: no difference.
- Most patients with recurrent UTIs do not have anatomical abnormalities.<sup>9</sup>

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#### **Disclosures:**

Authors do not have any conflicts of interest to declare

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