



Thirsty for weight loss ideas? Water for weight loss

CLINICAL QUESTION

Does increasing water lead to meaningful weight loss?

BOTTOM LINE

The effects of water on weight are uncertain due to inconsistent results, in small-moderate size studies with widely variable designs and compliance issues. Replacing caloric beverages with diet beverages or water inconsistently improved weight loss and differences between diet beverages and water was even less clear. Preloading water (500ml) before meals may improve weight loss by 1-2kg over 3 months.

EVIDENCE

- Only randomized controlled trials (RCTs) presented. Results statistically different unless noted. Baseline BMI 31-36 (76-101kg).
- Increasing water:
 - Two RCTs (38 adolescents; 240 women consuming ~400 calories/day from sugary drinks) comparing counselling +/- advice to drink water.^{1,2} After 24-36 weeks:
 - Weight loss: Not different.
 - One trial provided water (2-3L/day).¹
 - Only 1/19 achieved target water intake in 1 RCT.²
- Replacing caloric beverages:

- Adherence counselling plus replacing >2 caloric beverages with water or diet beverages versus weight loss advice³: 318 patients consuming ~350 calories/day from sugary drinks. After 6 months:
 - Weight loss: Not different.
 - >5% weight loss: 20% (water/diet beverages) versus 11% (advice), number needed to treat (NNT)=11.
- Replacing diet beverages:
 - Cognitive behavioral therapy with continued diet beverages or water^{4,5}: 303 patients consuming ~700mL of beverages daily. After 52 weeks:
 - Weight loss: 6kg (diet beverages) versus 2kg (water).
 - Funder: American Beverage Association.
 - Hypocaloric diet +/- replacing diet beverages with water^{6,7}: 71 women. After 18 months:
 - Weight loss: 0.1kg (diet) versus 1.7kg (diet + water).
 - Similar RCT^{6,7}: 81 women. After 24 weeks:⁸
 - Weight loss: 5.3kg (diet) versus 6.4kg (diet + water).
- “Pre-loading” water (500mL, 30 minutes before meals):
 - Hypocaloric diet +/- water⁹: 48 patients. After 12 weeks:
 - Weight loss: 7.4kg (pre-loaded water) versus 5.5kg (diet).
 - Water versus “imagining being full”¹⁰: 84 patients. After 12 weeks:
 - Weight loss: 2.4kg (pre-loaded water) versus 1.2kg (imagining).
 - >5% weight loss: 27% (pre-loaded water) versus 5% (imagining), NNT=5.
- Systematic review found similar.¹¹

CONTEXT

- Obesity guidelines do not provide recommendations for water intake.^{12,13}
- Limitations included compliance issues² and analyzing only study completers.⁹

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