Pre-meal water consumption: weight loss

**Intervention**

Drinking water 30 minutes before main meals during a low calorie diet.

Water intake during a meal may have the same or similar effect.

**Indication**

Gastric emptying slows down as people age, which may be why water helps older people feel fuller for longer.

Overweight and obese middle-aged and older adults.

There is less evidence for benefit in younger people.

**Contraindications**

- Congestive heart failure
- Severely impaired renal function.

**Precautions**

Any conditions where increased urine production may be problematic such as prostate conditions, incontinence, and immobility and difficulty getting to the toilet.

**Adverse Effects**

Water toxicity (hyponatraemia) is very rare in the general population. The typical victim is a marathon runner (unlikely to be overweight or obese).

**Availability**

Readily available and cheap.

**Description**

Drinking 500ml water (2 cups) 30 minutes before each meal.

When combined with a hypocaloric diet, premeal water consumption leads to greater weight loss than a hypocaloric diet alone:

- approx. 2kg greater weight loss over 12 weeks
- 44% greater rate of weight loss.

Water is readily available and inexpensive. No studies have tested differences in tap, bottled, mineral or spring water.

**Tips and Challenges**

Although this is extremely easy, as with any weight loss behavioural change, long term motivation may be a problem.

Older people are at risk of dehydration and this intervention may provide further benefit in this population.

Where drinking water quality is inadequate, buying bottled water may be cost prohibitive.

**Grading**

NHMRC Level 2.

**References**

Daniels MC, Popkin BM. Impact of water intake on energy intake and weight status: a systematic review. *Nutrition reviews* 2010; 68(9): 505-21