

Weight loss effects of water

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The apparent **weight loss effects of water** have been subject to some scientific research.^[1]

This evidence has been used by some of the scientists who worked on this research, and by others, to bolster suggestions that people who are trying to lose weight can benefit from augmenting – but not replacing – their dietary programs by drinking water, either before meals or at any time. Such advice had previously been given by dietitians even before the most recent research was published.^[2]

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Energy impact

Energy regulation

There is some evidence drinking water before or during a meal may help aid weight loss when used in conjunction with a calorie-controlled diet.^[1]

Drinking water prior to each meal may help in appetite suppression. A promising approach to reducing appetite which does not involve taking any drugs, and is very safe, is to drink circa 4-5 dl of water 30 minutes before a meal. Though this had been a folk remedy for overeating for many years, and is recommended by some dietitians and stipulated in some scientific studies, it was only recently that the approach was subjected to a scientific randomised controlled trial to see how much effect it had:

- A 2008 study concluded that *drinking water is associated with weight loss in overweight dieting women independent of diet and activity*.^[3]
- A 2010 study concluded that people that consumed two cups (500 mL) of water right before eating a meal ate between 75 and 90 fewer calories during that meal.^[4]
- A 2010 study conducted those who drank two eight-ounce glasses of water before each meal consumed 75 to 90 fewer calories while eating. Over three months, water-drinkers lost an average of five pounds more than the dieters who were parched.^[5]
- A 2011 study conducted on obese children concluded that water drinking on resting energy expenditure

was significant.^[6] Pediatricians agree that hydration in children may be optimal only in breastfed infants.^[7]

- A 2011 study conducted on middle-aged and older adults (aged ≥ 40 years) given 500 mL 30 minutes before meal 3 times daily for 12 weeks found that the individuals lost 2 kg body weight compared to the control group.^[8]
- A 2013 study conducted on adults 18-23 concluded that when they were given 500 mL given 3 times daily for 8 weeks they lost body weight.^[9]
- A 2013 study concluded reviewed that *Studies of individuals dieting for weight loss or maintenance suggest a weight-reducing effect of increased water consumption.*^[10] Noor Al Khatib Nour Al Jawhary Nour Al Bahsa Maraim Tabba Mira Daoud Laila Sabbagh Haya Al Hashem Jiezel Billeh Aiysha Tarawneh Noor issa Farah Rawashedeh

Thermoregulation

Thermoregulation is the process that allows the human body to maintain its core internal temperature. Cold induced thermoregulation has been proven to be a successful weight loss experiment.^[11] One study found that drinking 500 ml of water increased metabolic rate by 30% after 30-40 min with a total thermogenic response of 100 kJ (24 kcal). About 40% of the thermogenic effect originated from warming the water from 22 to 37 °C.^[12] However, a later study in 2006 states that approximately 500 mL 3 °C cold water caused only increase in energy expenditure by 4.5% for 60 minutes.^[13]

Motivation for higher water intake

Carbonated water

One study states that consumers of carbonated water prepared at home had significantly higher mean drinking water intake (tap + bottled + carbonated water) in percentage of total water intake than non-consumers, and lower mean intakes of milk, bottled water and tap water, respectively;^[14]


Other Health Benefits

Water is essential to maintain all the normal functions of the mammalian body including controlling body temperature through sweating, lubricate and cushion joints, carry nutrients and oxygen to cells and keeping the blood stream liquid enough to flow through the blood vessels.^[15]



See also

- Anti-obesity medication
- Water intoxication (dilutional hyponatremia)
- Weight loss
- Body water
- Diet

Further reading

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