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## Health myths: Drink eight glasses of water per day

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It's the myth that just won't go away. Almost everyone thinks they don't drink enough water, but the idea that we all should drink lots of it - eight glasses per day - is based on no scientific data whatsoever.

No one really knows where the eight-glasses idea comes from. Some blame the bottled water industry but plenty of doctors and health organisations have also promoted it over the decades. The source might be a 1945 recommendation by the US National Research Council (NRC) that adults should consume 1 millilitre of water for each calorie of food, which adds up to about 2.5 litres per day for men and 2 litres for women.

According to Barbara Rolls, a nutrition researcher at Penn State University and author of the 1984 book Thirst, this amount is about right for people in a temperate climate who aren't exercising vigorously. And 1.9 litres is what you'll get from drinking eight 8 -ounce glasses of water - the $8 \times 8$ rule - as per the US version of the myth.

What most people don't realise, though, is that we get a lot of that water from our food, as the NRC pointed out at the time. Foods contain water and are broken down chemically into carbon dioxide and more water. So if you are not sweating buckets you need only about a litre a day - and 1.2 litres is what you will get from the eight 150 -millilitre glasses recommended by the UK's health service.

But any talk of glasses is misleading because there is no need to drink pure water. The fluids that people drink anyway, including tea and coffee, can provide all the water we need, says Heinz Valtin, a kidney specialist at Dartmouth Medical School in Lebanon, New Hampshire, who has reviewed the evidence (Regulatory Integrative and Comparative Physiology, vol 283, p R993).

According to the myth, however, caffeinated drinks don't count because they are diuretic, stimulating the body to lose more water than it gets from the drink. Not true. A comparison of healthy adults in 2000 found no difference in hydration whether they got their water from caffeinated drinks or not (Journal of the American College of Nutrition, vol 19, p 591). Even one or two mildly alcoholic drinks will hydrate you rather than dehydrating you.

Hydrophilics respond by saying that pure water is better than other drinks. Even this claim is arguable, but the crucial point is that if you are a healthy individual already drinking enough
tea, milk, juice or whatever, there is no evidence that swigging down water as well will achieve anything other than making you go to the bathroom all the time.

The final aspect of this myth is that we need to force ourselves to drink because by the time we are thirsty we are already seriously dehydrated. Not so. Rolls showed nearly 30 years ago that we get thirsty long before there is any significant loss of bodily fluids. It takes less than a 2 per cent rise in the concentration of the blood to make us want to drink, while the body isn't officially regarded as dehydrated until a rise of 5 per cent or more.

So relax and trust your body. Don't force yourself to gulp down gallons of water if you don't want to - that can be dangerous - just drink the beverage of your choice whenever you're thirsty.

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