

Drinking water? There's an app for that

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The human body is well equipped to maintain an adequate level of hydration through the various biological feedback control mechanisms of homeostasis. However, this regulation relies on an adequate supply of water. While there is much mythology surrounding how many glasses of water we each must drink daily to stay healthy. Many people sip at a water bottle throughout the day in the belief that this will keep them well

hydrated without considering the possibility that it might nudge their systems to expect such levels of water consistently and so when they have no access to their bottle they feel far more thirsty and suffer a feeling of dryness more than another individual who drinks water only when they feel thirsty and is perfectly well hydrated nevertheless.

Of course, the problem with recommendations for how much we each need and when we should drink it varies from person to person, changes with [body weight](#), environment and specifically temperatures and humidity, personal fitness level, physical activity, age, and illness.

Monitoring water intake, which comes from drinks and food, of course, is the top of a paper published by a team in China in the *International Journal of Embedded Systems*. Bin Dai, Rung-Ching Chen, and Yuan-Yu Ding of Xiamen University of Technology. They have used "fuzzy" reasoning taking into account the various personal factors such as age, weight, temperature, activity level etc, to develop an application on the Arduino platform that uses Bluetooth electronic scales to connect to a smart phone and can monitor a person's water intake and give them a recommendation on whether they need to drink more or less water.

More information: Bin Dai et al. A practical approach for estimating human daily water intake, *International Journal of Embedded Systems* (2019). [DOI: 10.1504/IJES.2019.098297](https://doi.org/10.1504/IJES.2019.098297)

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