

The brain science behind thirst

It feels so simple. When we're thirsty, we drink.

But the brain science behind that decision is pretty complicated, a Caltech team [reports](#) in the journal *Nature*.

The study focused on just one checkpoint – near the liver — that the brain relies on to make sure we drink the right amount of water. But there are many other thirst-related checkpoints throughout the body and brain, says Yuki Oka, one of the authors and a Caltech researcher who has devoted much of his career to understanding thirst.

One of the first checkpoints is passed when water reaches your mouth, which “gives your brain a refreshing feeling,” Oka says.

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The intestine is responsible for moving water into the bloodstream, where there is yet another checkpoint – the one that is the subject of Oka's study.

His team used mice to study the vessels that carry blood from the intestine to the liver. And they found cells there that transmit messages up the vagus nerve, which runs from the gut to the brain, when an animal has been hydrating.

[This is an excerpt. Read the original post here.](#)