

## Science gets a grip on finger wrinkles

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File picture. Getting "pruney fingers" from soaking in the bath is an evolutionary advantage, for it helps us get a better grip on objects under water, scientists suggest. Digit puckering was long thought to be caused by a swelling of the outer layers of skin on the fingertips and toes, but recent research showed it was actually a nervous system response to immersion in water.

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The purpose, though, was a mystery.

A team from the Institute of Neuroscience at Newcastle University tested the usefulness of wrinkling by human volunteers handling wet objects with creased and uncreased fingers.

Those who had their hands immersed in warm water for 30 minutes were much faster than those with dry digits in a test that entailed picking up glass marbles and lead fishing weights between thumb and [index finger](#) and transferring them from one container to another.

"We have shown that wrinkled fingers give a better grip in [wet conditions](#)," research leader Tom Smulders said of the findings.

"It could be working like treads on your car tyres which allow more of the tyre to be in contact with the road and gives you a better grip."

Smulders told AFP the wrinkling was probably an evolutionary adaption, possibly to improve mobility on wet surfaces.

"This would explain why it happens to both hands and feet, and might have been an adaptation in some primate ancestor well before humans evolved, who might have walked on all fours," he said.

It may also have been useful in gathering food from wet vegetation or streams.

The study found that wrinkling had no adverse impact on the handling of dry objects, which raises the question why we do not have permanently

creased fingers and toes.

Finger wrinkling may carry a cost, though, by diminishing fingertip sensitivity, Smulders added.

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