Dehydration Can Affect Your Ability to Think Clearly

Losing water, especially during hot weather, can lead to mental confusion, impaired motor skills and poor decision-making.

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It's well known that physical abilities suffer when the body becomes dehydrated. But now new findings suggest that an excessive loss of water affects cognitive capabilities, according to an article published in the journal Medicine & Science in Sports & Exercise, reports Reuters.

Researchers conducted a meta-analysis, or evaluation, of 33 studies involving a total of 413 adults. Participants lost fluids amounting to 1 to 6 percent of their body mass either through exercise alone, exercise coupled with heat, heat alone or fluid restriction.

Findings showed that athletes with fluid loss equal to 2 percent of their weight experienced impaired attention span, motor coordination and executive function (e.g., map recognition, proofreading, mental math).

Symptoms of dehydration include fatigue, muscle weakness, decreased urine output and confusion. But dehydration isn't always easy to diagnosis, which is why experts recommend that athletes track their fluid intake and loss.

"It's important to know the right water balance," said Mindy Millard-Stafford, PhD, a professor in the school of biological sciences and director of the physiology lab at the Georgia Institute of Technology and the study's coauthor. "You need to know that you can have not just too little but also too much."

One way individuals can monitor fluid levels is to check the color of their pee. Almost colorless urine is an obvious sign that a person is drinking too much water, while dark gold liquid waste can mean that the body is dehydrated.

Click here to learn how water is key to all biological processes.

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