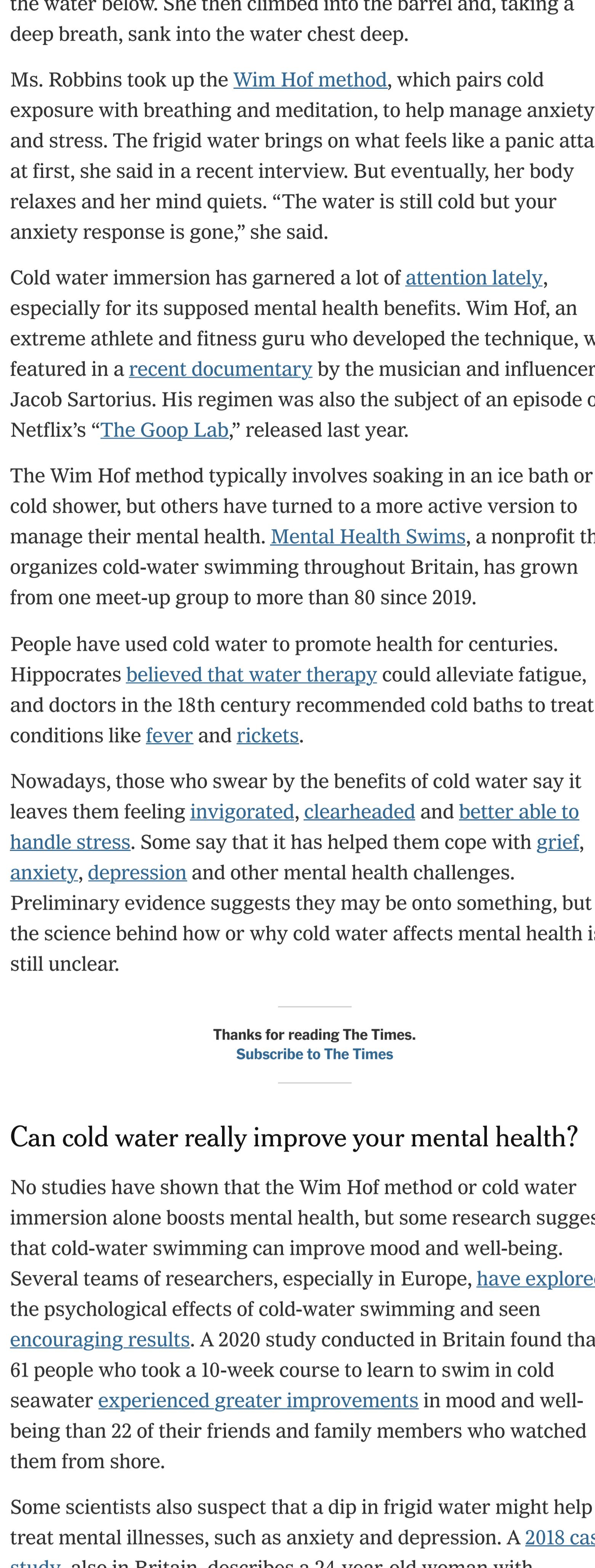


SCAM OR NOT

Cold Water Plunges Are Trendy. Can They Really Reduce Anxiety and Depression?

Early research suggests this age-old practice might benefit mental health, but more research is needed.

[f](#) [g](#) [t](#) [m](#) [b](#) 190



Tyler Comrie

By Chloe Williams

Published Feb. 20, 2022 Updated Feb. 21, 2022, 9:34 a.m. ET

Sign up for the Well newsletter, for Times subscribers only. Essential news on health, fitness and nutrition, from Tara Parker-Pope. [Get it with a Times subscription.](#)

In a [TikTok video](#) from January, self-help author Mel Robbins held a hammer in 12-degree weather in her backyard in Vermont. “We’re about to do the cold plunge,” she said to the camera, after breaking through a layer of ice on the surface of a barrel to expose the water below. She then climbed into the barrel and, taking a deep breath, sank into the water chest deep.

Ms. Robbins took up the [Wim Hof method](#), which pairs cold exposure with breathing and meditation, to help manage anxiety and stress. The frigid water brings on what feels like a panic attack at first, she said in a recent interview. But eventually, her body relaxes and her mind quiets. “The water is still cold but your anxiety response is gone,” she said.

Cold water immersion has garnered a lot of [attention lately](#), especially for its supposed mental health benefits. Wim Hof, an extreme athlete and fitness guru who developed the technique, was featured in a [recent documentary](#) by the musician and influencer Jacob Sartorius. His regimen was also the subject of an episode of Netflix’s [“The Goop Lab”](#), released last year.

The Wim Hof method typically involves soaking in an ice bath or a cold shower, but others have turned to a more active version to manage their mental health. [Mental Health Swims](#), a nonprofit that organizes cold-water swimming throughout Britain, has grown from one meet-up group to more than 80 since 2019.

People have used cold water to promote health for centuries. Hippocrates [believed that water therapy](#) could alleviate fatigue, and doctors in the 18th century recommended cold baths to treat conditions like [fever](#) and [rickets](#).

Nowadays, those who swear by the benefits of cold water say it leaves them feeling [invigorated](#), [clearheaded](#) and [better able to handle stress](#). Some say that it has helped them cope with [grief](#), [anxiety](#), [depression](#) and other mental health challenges. Preliminary evidence suggests they may be onto something, but the science behind how or why cold water affects mental health is still unclear.

Thanks for reading The Times.
[Subscribe to The Times](#)

Can cold water really improve your mental health?

No studies have shown that the Wim Hof method or cold water immersion alone boosts mental health, but some research suggests that cold-water swimming can improve mood and well-being. Several teams of researchers, especially in Europe, [have explored](#) the psychological effects of cold-water swimming and seen [encouraging results](#). A 2020 study conducted in Britain found that 61 people who took a 10-week course to learn to swim in cold seawater [experienced greater improvements](#) in mood and well-being than 22 of their friends and family members who watched them from shore.

Some scientists also suspect that a dip in frigid water might help treat mental illnesses, such as anxiety and depression. A [2018 case study](#), also in Britain, describes a 24-year-old woman with depression and anxiety who undertook cold-water swimming and, after four months, no longer required medication. Since then, researchers have followed up with a [larger trial](#), but the results have yet to be published.

These early findings are promising, but getting strong evidence is challenging, said Jeremy Howick, a senior researcher at the Centre for Trials Research at Cardiff University who studies evidence-based medicine. Researchers can’t hide the fact that someone is getting cold water treatment, he said, and their positive expectations may lead them to experience a placebo effect. Mr. Hof has suggested as much in his book “The Wim Hof Method,” writing that “to get the most out of the method, you have to mentally invest in it.”

Even if it’s not the placebo effect, it’s still unclear which component of cold-water swimming may contribute to reported improvements in mood and well-being, said Mike Tipton, professor of human and applied physiology at the University of Portsmouth in the United Kingdom, who studies the body’s reaction to extreme environments. Not only are swimmers immersing themselves in frigid water, but they are also often exercising, socializing, spending time outdoors and taking on a challenge — all of which may boost mental health. “No one has done the studies that tease out the active ingredient,” he said.

Why do people think cold water is key?

There are several reasons to think that cold water might provide mental health benefits. Immersing yourself in icy water triggers the release of stress hormones, such as [noradrenaline](#) and [cortisol](#). This is likely why people say that a dip in cold water wakes them up, Dr. Tipton said.

Some studies have also reported increases in brain chemicals that regulate mood, such as [dopamine](#), following a cold soak, which may explain the post-swim “high” people feel. In addition, putting your face in cold water can [activate the parasympathetic branch](#) of the nervous system, which prompts the body to relax after a stressful event. This may help people feel calm and tamp down inflammation. Several conditions, including [depression](#), are tied to chronic inflammation, said Mark Harper, an anesthesiology consultant at Royal Sussex County Hospital, who is studying cold water swimming as a treatment for depression.

Some researchers also hypothesize that adapting to the shock of cold water may improve a person’s ability to cope with other stresses. A small [2010 study](#) showed that people who were habituated to cold water had a reduced stress response when they were subjected to another strain — in this case, working out in a low oxygen environment. But enduring hypoxic exercise is not the same as enduring psychological stresses, however, and more work is needed.

Although cold water immersion clearly has some [physiological effects](#), “there have not been enough high-quality studies” to recommend it as a mental health treatment, said Sophie Lazarus, a clinical psychologist at Ohio State University. Other treatments for anxiety and depression, such as [cognitive behavioral therapy](#), have more scientific backing, she said. They may also be safer.

Can cold water immersion be harmful?

Yes. Researchers know more about the [dangers of cold water](#) than its potential therapeutic effects. One of the most obvious ones is hypothermia, which usually sets in after about 30 minutes in adults. But cold water presents significant risks long before that.

The initial shock of being plunged into icy water can cause arrhythmias and heart attacks. The risk of arrhythmias is [increased](#) when people put their faces underwater while experiencing this initial “cold shock.” The combination activates opposing branches of the nervous system, which send conflicting signals to the heart. Cold shock also [triggers the gasp reflex](#), followed by hyperventilation. If your airway is underwater, this can lead to drowning. Adding to the risk of drowning is the fact that swimming in frigid water quickly [leads to exhaustion](#).

Most experts recommend checking in with your doctor before taking a cold plunge. People planning to swim outdoors should also consider joining a group, make sure they know about local water hazards, avoid diving in head first and ensure they have a way to get out of the water before they get in.

Should you try cold water immersion?

Done safely, cold water immersion may be worth a shot. “It’s not going to cure you,” Dr. Harper said, but it may help people manage their mental health. It also doesn’t require any specialized equipment. Although you can [spend thousands](#) on a plunge pool, your bathtub or a nearby body of water can do the trick.

Researchers still don’t know the best way to reap the mental health benefits of cold water or the minimum “dose” required. If it turns out that the initial cold shock is important, though, the water doesn’t have to be glacial. The cold shock response peaks between 50 and 59 degrees Fahrenheit, and a few minutes in the water is probably enough to experience its effects.

It’s important to remember that more is not necessarily better when it comes to cold water immersion, Dr. Tipton said. “A little bit is good for you, too much is not,” he said.

Chloe Williams is a science journalist who covers health and the environment.

[READ 190 COMMENTS](#)

[f](#) [g](#) [t](#) [m](#) [b](#)

Managing Anxiety and Stress

Stay balanced in the face of stress and anxiety with our collection of tools and advice.

- First, bring calm and clarity into your life with [these 10 tips](#).
- Next, identify what you are dealing with: [Is it worry, anxiety or stress?](#)
- Consider a mental health day. [Here is how to make the most of them](#).
- Stress is unavoidable in modern life, but it doesn’t have to get you down. [This guide can help you keep in check](#).
- Struggling with anxiety? Tap into your [feelings of discomfort](#) and [turn them into a resource](#).

Suggested newsletters for you

The Morning DAILY **The Morning** Make sense of the day's news and ideas. David Leonhardt and Times journalists guide you through what's happening — and why it matters.

Breaking News AS NEEDED Alerts when important news breaks around the world.

Science Times WEEKLY Stories that capture the wonders of the human body, nature and the cosmos.

Don't show me this again

Most Popular

Bernie Madoff's Sister and Her Husband Are Found Dead in Florida

Farewell, Readers, It's Been a Remarkable Ride

U.S. Men's Hockey: Last-Minute Olympians

The Next Affordable City Is Already Too Expensive

Woman Sues Over Death of Child Born in Georgia Jail

Hank the Tank, a 500-Pound Bear, Ransacks a California Community

Got a Covid Booster? You Probably Won't Need Another for a Long Time

In France, a Racist Conspiracy Theory Edges Into the Mainstream

Jimmy Kimmel Critiques Trump's Latest Rambling Statement

Charitable Offer by Melania Trump Is Rejected, a Move She Calls 'Politics'

More in Mind

Too Young to Feel So Old Feb. 10 Photo illustration by Michael Marcelle for The New York Times

Need a Life Coach? This 5-Year-Old Can Help. Feb. 3 Edmon de Haro

Can MDMA Save a Marriage? Feb. 9 Shuhua Xiong

It's Time We Reclaim Our Focus Feb. 16 Adam Amengual for The New York Times

Editors' Picks

What Was Stonehenge For? The Answer Might Be Simpler Than You Thought. Feb. 17 English Heritage

Anna Sorokin on 'Inventing Anna' and Life After Rikers Feb. 14 Jefferson Siegel for The New York Times

Special offer. Subscribe for €2.50 a week.

Photo illustration by Michael Marcelle for The New York Times

Contact Us Accessibility Work with us Advertise Site Map Help Subscriptions Privacy Policy Terms of Service Terms of Sale

Go to Home Page