

Cold plunging: Do the benefits outweigh the risks?

In 2022, we saw a number of video trends that went viral on the popular social media app TikTok that were being portrayed as health “hacks” to try at home. Some of these included [Nyquil-soaked chicken](#), [at-home mole removals](#), [storing avocados](#) in a container of water, and [mouth taping](#). Another health “hack” continues to go viral on the app: cold plunging. Everyday folks and celebrities like Hailey Bieber, Lizzo, David Beckham and Lada Gaga are trying it.

Cold plunging is not new. It involves submersion into freezing cold water and dates back to early ancient Egyptian and Greek practices. You have probably even seen professional athletes use ice baths for muscle recovery.

In the popular videos on TikTok, people are filling large tubs with water outside and, if they live somewhere that experiences cold winters, they are letting the surface of the water freeze overnight. The following day, they crack the ice and plunge themselves into the cold water. The individuals in the videos claim the cold plunging helps with many things, from improving sleep to supporting a healthy immune system.

Anne Orzechowski, an OSF HealthCare family medicine advanced practice nurse, says to take these claims with a grain of salt.

“There are some benefits of cold plunging if it is done safely, if you are used to it,” says Orzechowski. “Some studies from the colder climates show that there might be an increase in white blood cells, so there are thoughts that you might not get as sick. There is a decrease in triglycerides, an increase in endorphins – so some people say they feel better.”

The American Heart Association says while there are some studies that suggest people who adapt to cold water immersion reduce inflammation and other cardiovascular risks, there are other studies that have found prolonged cold water immersion to cause heart muscle damage.

So how does something that can potentially be beneficial and seem harmless to most people also pose such serious risk? First, it’s important to understand what exactly happens to our body when plunging into freezing cold water.

“The initial thing that happens when you jump into a cold body of water is that initial shock reflex – that gasp,” Orzechowski warns. “Your body hyperventilates. It tries to get your blood flowing a little faster, tries to get your heart rate moving a little faster, and get that blood moving a little bit. Then as you are in there greater than three minutes your body starts to kind of calm down and relax. But there is a real risk of hypothermia after that, so you have to be really careful with this.”

According to the Centers for Disease Control and Prevention (CDC), cold water immersion creates a specific condition known as immersion hypothermia that develops much more quickly than standard hypothermia, because water conducts heat away from the body 25 times faster than air.

“I would especially not recommend it for somebody with any sort of peripheral vascular disease, Raynaud’s, or any vascular issues associated with diabetes. You are not going to be able to feel your extremities very well and are not going to know when it is time to really get out,” says Orzechowski.

Orzechowski adds while some people claim that cold plunging helps to calm them and relieve stress, this calm feeling could actually be an effect of the constricting blood vessels. Furthermore, the National Center for Cold Water Safety warns that because blood vessels constrict in response to sudden cooling, cold water immersion causes an instant and massive increase in heart rate and blood pressure which increases the danger of heart failure and stroke.

Overall, the bottom line is that the risks of cold plunging tend to far outweigh the benefits. Orzechowski advises people who are intrigued by these videos to avoid trying it themselves.

“If you look up the TikTok ice plunge, you see a lot of people with hats on breaking into buckets of ice and jumping in. I really don’t recommend that. There is a risk of shock and there is a risk of arrhythmia,” cautions Orzechowski. “If you really want to do this, the takeaway point is just take a shower and turn the water to cold at the end, give yourself 10 to 15 seconds. That still has a benefit and has been shown to be beneficial as opposed to jumping into a bucket of ice outside.”