

Cold therapy (cryotherapy)

It has long been understood that a cold ice pack or bath can help us recover from exercise and injury by reducing swelling as it constricts the blood vessels and decreases the circulation, reduces inflammation, and creates a numbness to the pain.

It seems, however, that cold therapy has far wider reaching health benefits on both the mind and the body, including boosting mood, helping with depression and anxiety, improving heart health and the cardiovascular system, type 2 diabetes and boosting our immune system. An additional study also suggested that it could even help shed belly fat! However, it's the boost to the immune system and combating stress that I find particularly interesting.

Our ancestors were conditioned to deal with serious stress, from starving to death or being eaten by a predator, to adapting to extreme environments. The fact that we have been able to inhabit virtually every part of the planet proves our adaptiveness and sheer resilience.

In the modern world, many of us live in a comfortable environment, with warm clothes, temperature controlled homes, offices and cars, warm duvets and plentiful food. However, the challenge of modern day life is that our stress is low grade and constant, our autonomic nervous system is on red alert all the time from modern day outside sources; financial, family, work,

social media, we are bombarded with constant interruption 24/7.

It's like we have our foot both on the accelerator and brake at the same time, putting tremendous strain on the body – many modern day illnesses and particularly chronic stress can be attributed to our current everyday environment.

So how does cold therapy help?

Primarily, by putting us back in control and in charge of our stress. A cold shower increases our heart rate and floods our system with adrenaline but we can control it by using breathing and meditative focus – we can tell ourselves it's okay, we are in charge and can cope.

Wim Hoff, AKA 'The IceMan', discovered the benefits of cold and the power of breathing and through his integration of the two, has accomplished what we might have scientifically considered impossible things. Through his processes, he is able to submerge himself in ice, swim significant distances in icy cold waters and complete marathons in cold climates wearing nothing but a pair of shorts.

A cold shower can help us create a resistance to the stress response, enabling us to control the autonomic nervous system and take back charge until our stress becomes more muted. The technical term for this phenomenon is *hormesis* whereby a small amount of exposure to a stressor can actually have a beneficial effect, making us stronger and more resilient.

I have been taking cold showers for years. In the early stages, I would scream and shout but gradually I came to see the cold as a friend, supporting me and equipping me to take better control of my emotions and to be more resilient to some of the external pressures of life.

Through measuring the inflammation markers like cytokines and leukocytes, research has shown that regular exposure to cold has been linked to reducing heart rate, better functioning of the cardiovascular system and has positive effects on the immune system. A randomised controlled experiment in the Netherlands during winter showed that those who took regular cold showers had 30 percent less days off sick than those in a controlled experiment who had warm showers.

Tests have also shown that the benefits arise from a shorter immersion rather than a long one, with benefits possibly associated with skin cooling rather than the deeper tissue getting too cold which is associated with hyperthermia.

Start gradually, by splashing cold water on your hands and face and back of your neck and progress to the shower or bath. Try turning the thermostat down a few notches each day, building up to a minute or two in full cold.

To help regulate your breathing, take short sharp breaths – you can even use Wim Hof's 'horse stance' and breathing technique, see link below.

Take small steps – we are a tropical animal, we like our temperature to be in the comfortable 20s. So take steady, short bursts of gradual temperature change. Personally, I find starting with a warm shower and turning to full cold for 60 to 120 seconds leaves my skin tingling, leaving me feeling invigorated, energised and ready to take on the day's challenges.

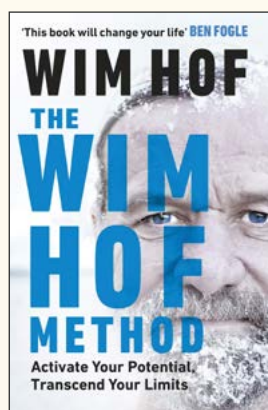
In summary – there are now reasons to suggest that regular cold exposure may have the ability to help us:

- Reduce stress
- Improve body composition
- Improve cardiovascular fitness
- Strengthen the immune system
- Elevate mood, attention and mental function

To quote Wim Hoff, "*a cold shower a day will keep the doctor away!*".

Before making any lifestyle changes, always take medical advice, particularly if you have any medical condition – particularly hypertension (high blood pressure) – and don't try it if you are pregnant.

RECOMMENDED BOOKS AND RESOURCE



The Wim Hof Method
Wim Hof

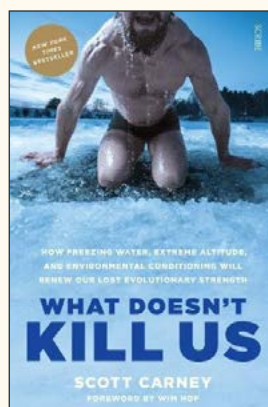
Watch:

Wim Hof horse stance and breathing protocol



Find out more about Wim Hof:

wimhofmethod.com



What Doesn't Kill Us, Makes Us Stronger
Scott Carney

Read:

Ben Greenfield – Why humans need cold exposure: An Evolutionary case for cold therapy

Listen:

Dr Michael Moseley's – Just one thing BBC podcast

