

7 reasons

why it's good to be cold

From boosting immunity to beating depression and helping athletes recover from exercise, getting cold is hot news! **Fiona Bugler** examines cold therapy for health and tries out a chamber where plummeting temperatures promise brilliant health.

1 Improves recovery after exercise

When exposed to the cold, the body will maintain blood in the core region to protect the vital organs. As soon as the cold is removed, the heart pumps blood back to the extremities, which helps bring back nutrients and oxygen to repair damaged tissues. "Application of Whole-Body Cryotherapy (WBC) during the post-exercise recovery period has now been tested with many sports," says Christophe Hausswirth PhD in his paper *The Effects Of Whole-Body Cryotherapy Exposure In Sport: Applications For Recovery And Performance*.¹ He points to a German study, published in January 2015², which showed an improvement in early recovery after intermittent high-intensity exercises. The study was significant because it was the first time a placebo effect had been included.

2 Boosts brown fat – the 'healthy' fat

When the body is exposed to very cold temperatures it is forced to work harder to heat and transport the blood around the body. "You go into fight or flight mode and this increases metabolism and overall calorie expenditure," explains Dr Harpal Baines, a surgeon who has followed a varied medical career path and now specialises in functional medicine, and owns the Harpal Clinic (harpalclinic.co.uk) in Central London, which houses a CryoAction cryotherapy chamber. Cold therapy, cold showers and being in cold temperatures are all believed to boost the production of brown fat,



which is considered to be 'healthier' than white fat (fat stored round the hips and stomach). "It's hard to quantify the effect of cryotherapy over a short period," explains Dr Baines, but, she adds, "other treatments such as cryolipolysis show cold therapy works where body fat is concerned – like liposuction but with fewer side effects."³

3 Improves sleep

In his paper, Christophe Hausswirth points to two studies that show WBC could help athletes to sleep better, particularly during phases when the training workload is increased. "During intense training periods, a deterioration in sleep is commonly reported (with sleep latency, reduced duration and efficacy of sleep); these effects were not observed when athletes were exposed to very intense cold on a daily basis," he says. "One of the most common things we hear from our clients after a cryotherapy treatment is that they had a good night's sleep," confirms Gary Read, operations manager at the Harpal Clinic. "We've also found positive effects on people with chronic fatigue syndrome," adds Dr Baines. "Someone with chronic fatigue can't get rid of toxins and absorb nutrients effectively. In layman's terms, cold therapy helps this process by opening the 'gates' of the body's cells, helping to clear out rubbish and take more energy in."

4 Beats depression

Studies of cold-water swimming are emerging which are confirming that it can help beat depression. TV doctor Dr Chris van Tulleken kicked off further research into the subject when he treated a 24-year-old for depression with cold water swimming, featured in a TV documentary and published in the *British Medical Journal* case studies⁴. Dr Baines says that, although it's hard to measure levels of serotonin and other neurotransmitters in the lab, she's witnessed how clients respond to being out of their comfort zone. "It's similar to suggesting someone does 30 seconds of star jumps – you can't help lift your mood when you alter your state dramatically," she says.

5 Improves your work productivity

Cold showers have long been linked to good health and mixing with hot and cold has also been seen as an age-old way to boost health in Scandinavian countries. One study found that switching between hot and cold showers resulted in improved work attendance. The study of over 3,000 18–65-year-olds published in 2016 by the Academic Medical Centre in Amsterdam⁵ found taking a 'hot-to-cold' shower every day saw a 29% reduction in self-reported sick leave from work.

6 Boosts your mental strength

Wim Hof is known as the Ice Man and is famous for submerging himself in freezing cold temperatures for long periods of time to help promote good health. By stimulating the body, the Wim Hof method of cold therapy and breathing aims to release your inner power, which he says is blocked in our artificial world. If you want to add the Wim Hof method to your skillset, you can train to become an instructor. Check out wimhofmethod.com/whm-academy-course-information

7 Enhances complexion

Exposure to cold temperatures is said to stimulate the production of collagen, leading to a return to youthful, glowing skin and a gradual reduction in fine lines and wrinkles. Stars such as Ruby Wax claim daily cold showers ward off wrinkles. "In the world of beauty, cold therapy is used in the same way that micro-needling and ultrasound frequency treatment is used," explains Dr Baines, who also runs a central London beauty clinic. "When the body senses damage is being done to the skin, it responds by a process of repair that results in collagen bundling – the skin produces the right type of collagen and more elastin resulting in better complexion," she says.

FitPro tries out CryoAction



Fiona Bugler tried out the CryoAction chamber based at the Harpal Clinic near St Paul's, Central London.

At the end of a long London working day, I was feeling sluggish and tired when I arrived at the Harpal Clinic. I hadn't really known what to expect and was apprehensive when I saw the temperature gauge showing -120°C.

Dressed in a sports bra, running shorts, long socks, hat, gloves and a face mask to stop my breath freezing, I anxiously stepped into the gassy chamber. I had read that I could walk in circles but must not touch the sides (I assume I'd get stuck to them). I'd also been told to be sure there was no moisture on my body – which of course would freeze. Gary, from the clinic, had explained that it wouldn't feel as cold as my daily 60-second cold shower. And he was right.

The three minutes went very quickly. In the last 30 seconds I felt a little pain in my left arm, radiating from a shoulder injury, but I was reassured that this meant the treatment was having the desired effect.

After it, I felt great; I really had been given a reboot to my sluggish system and my low mood lifted. A few days after, I ran a season's best over 5km, exactly one minute quicker than the week before. Dr Baines suggested that exposure to cold may have boosted my mitochondria levels to help me run faster. I'm all for marginal gains and would definitely try this again. **fp**

1. Cryotherapy in action

