

ICE BATHING – THE MAD WAY OF RECOVERING?

“Why in the world would you get into a bath filled with ice and freezing water, have you completely lost your mind...!!”

How many times have you heard people use these words? Is there method in the madness of athletes using contrast baths, or ice baths for recovering from strenuous activities or sport? Or is this just a medieval way of torture disguised by coaches and sport trainers to get back at players?

It is said that for athletes to benefit fully from training and to prevent injuries occurring, adequate recovery is essential. Unless adequate recovery occurs, athletes suffer from symptoms like:

- Fatigue
- Impaired Performance
- Tiredness
- Impaired Mental Toughness/Resilience



So, what happens to a sportsman while training, or while playing a game – whether it is cricket, rugby, hockey etc.? Gregg Wells, who is a physiologist at the Hospital for Sick Children in Toronto, says that, while training, micro tears appear in the muscles used. This is a good thing, as micro tears in muscles stimulate muscle growth. Unfortunately, this very occurrence also produces muscle soreness, build-up of lactic acid and eventually stiffness. These negative effects are usually felt a day or two after the training session. This is known as: delayed onset of muscle soreness, or DOMS!!

It is exactly these negative physiological effects that cause sportsman problems when training for a big occasion, or while playing in a tournament or multi-day match. Interference with training schedules, or impairment of optimal performance can lead to another, but very important downside for a sportsman – being mentally affected in a negative way. Ian Cohen of the University of Toronto's MacIntosh Sports Medicine Clinic says that when it comes to the pro's and those who swear by the use of ice-baths, the knowledge that tomorrow they will feel better, boosts their attitude and mental approach for the next day.

What do ice-baths do to the body on a physiological level when it so easily affects the minds of a lot of sportsman? Cryotherapy, or cold therapy causes the blood vessels to constrict and by doing this, the metabolic rate of the body slows down due to less blood being able to flow. Now, if you slow the metabolic rate down, the physiological processes also slows down and can thus lead to the reduction in swelling and tissue breakdown that might occur. When the person then eventually gets out of the ice bath and the skin is no longer in touch with the cold source, the blood vessels relax (dilates) and a faster flow of blood occurs. This pump-effect helps the circulatory system to not only flush out any inflammation, but also returns by-products of cellular breakdown to the lymph system for efficient recycling by the body. One of these by-products, are lactic acid and we all know what that does to a set of hamstrings, or calves after a serious workout!!



Another theory involves the fact that after a while, the body overcomes the natural fight-or-flight response (that feeling you get when you had a big scare) of being dumped in freezing water and sends a rush of blood to all the muscles. This in turn causes the same pumping effect with the same physiological effects on the body.

The only significant negative effect of an ice bath, chattering teeth aside, would be the possibility of tissue damage when the water temperature is below 5 degrees Celsius...

Even though there has been research done to support the positive effects of ice-baths on recovery, it must be said that no exact protocol has been put in place, nor has the exact temperature for optimal



Mobile: +27 83 410 9089
Tel: +27 11 477 5866
Email: cliffedeacon@cdphysio.co.za
Web: www.cdphysio.co.za

recovery been established, only guidelines. These guidelines are a water temperature of between 15 and 20 degrees Celsius and a period of emergence of between 10 and 20 minutes.

So, whether you are a fan of ice baths, or you have a massive fright getting in, it looks like you will feel better the next day...!!!!

*Fick Physiotherapists
Cliffe Deacon*

