

# Hydrotherapy – Rehabilitation for athletes and after sport

After recently spending time at the Australian Institute of Sport (AIS) as a martial arts athlete, [Daniel Browne](#), *Physiotherapist*, from our Langwarrin Clinic took part in a PhD study looking at the effect of water loading and weight reduction in preparation for the Rio Olympics. During this time he was exposed to the latest information relating to athletic recovery. One topic he found particularly interesting was the use of hydrotherapy. In this article, Daniel shares some insights and best practice information on hydrotherapy as a recovery technique.

Whether you are an amateur, semi professional or professional athlete the difference between a win and a loss can be a matter of millimeters or milliseconds. It is for this reason that appropriate pre-habilitation, rehabilitation and ongoing maintenance is imperative. A structured strength and conditioning program in combination with physiotherapy continues to help many athletes take the next step in their sporting journeys.

## What is recovery and when is it most important?

Recovery can be defined as ‘the process by which an athlete’s physiological and psychological function is restored to resting or pre- exercise levels.

It is most important when you’re competing, when you’re training multiple times per day/week or have had a long training session, and especially when you feel fatigued – remember fatigue can be physical OR mental.

## What is [hydrotherapy](#)?

[Hydrotherapy](#) is the immersion of the body in water.

Hydrotherapy can involve either cold (10-15°) and/or hot water immersion (38.5-41°) and may occur in pools, showers, baths or the ocean. Note: typically a hydrotherapy pool will be around 34° whereas a spa will reach closer to 40°.

### ***Cold water immersion***

Cold water immersion works by decreasing skin, muscle and core temperature. This helps to reduce inflammation and subsequently pain; similar to how we would typically “ice” an injury.

**Recommendation:** 5 minutes at 15° is considered ideal and individuals are advised to not stay in water below 10°.

### ***Hot water immersion***

Hot water immersion increases blood flow and can increase range of motion due to relaxation soft tissues. The jets of a spa can also be utilized as a massage tool. Some considerations are that you may not want to bathe in hot water if you are already in a hot environment. You may want to limit use if you have a pre-existing acute injury or other health issues that may be exacerbated by heat e.g. multiple sclerosis.

**Recommendation:** 15 minutes at 38.5-41°

### ***Contrast therapy***

Contrast therapy involves the switching between cold and hot water modalities and can be useful as it combines the effects of hot and cold immersion listed above. The added benefit of the contrast is the change in blood flow, which has a greater effect at removing metabolites or exercise byproducts thereby decreasing stiffness or soreness the next day (DOMS). If you do not have two sources of alternate water temperature available, a shower will work just fine.

**Recommendation:** 2 minutes cold water then 2 minutes hot water

(x4) or 3 minutes cold water then 3 minutes hot water (x3) soon after the training session.

Please feel free to contact me for more information on [hydrotherapy](#), or book in a session if you too, want to optimise your athletic recovery.

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