Post exercise ice water immersion as a form of active recovery.

Ice water immersion and contrast temperature water immersion therapy post exercise is fast becoming a common practice among athletes involved in a variety of sports. Taking a post exercise plunge into an ice bath at 12-15 C appears to be common practice among many elite athletes. Many use ice bath immersion for a period of 5-10 min (sometimes reported up to 20 minutes.)

Recovery from exercise is crucial for athletes, especially repeated bouts of exercise. In competitive situations, where athletes compete numerous times over several days, enhancing recovery may prove a competitive advantage. Immersion in water is a practice that appears to be catching on among many athletes.

Water immersion may cause physiological changes in the body, such as intracellular – intravascular fluid shift, reduction of muscle edema as well as increased cardiac out-put helping with enhanced blood flow, nutrient distribution and waist transportation. There may also be a psychological benefit, whereby there is a reduction of the feeling of fatigue during immersion.

Water immersion appears to affect a similar physiological response to active recovery without the need to expend extra energy.

When a body or a large portion of it is immersed, hydrostatic pressure acts on the body’s fluid within the immersed region. Fluid moves into the vascular compartment, reducing exercise-induced increase in muscle volume and also reducing soft tissue inflammation. The blood volume increase is redistributed to increase the cardiac preload, stroke volume, cardiac output and blood flow through the body. These cardiovascular responses occur without any increase in energy expenditure.

Training and competition creates an overload to stress the body, which in turn produces fatigue followed later by improved performance. What athletes do after their exercise and work-out regime can affect their muscle recovery. The post exercise routine can impact both fitness and sports performance. It is thus important to have an after exercise recovery plan. Some recommendations include:

- Sufficient rest
- Gentle stretching
- A good nutritional plan
- Adequate fluid replacement
- Sport specific related massage
- Ice water immersion

A holistic approach to recovery will give a better response rather than an isolated recovery technique.