



FAQ: HydroWorx Cold Plunge Pool

After Exercise Ice Bath - Does It Help Recovery?

Taking an after exercise plunge in an ice water bath (50 degree ice water) is a common practice among many elite athletes as a way to recover faster, and reduce muscle pain and soreness after intense training sessions or competitions. For many elite athletes, the ice bath is a standard practice routine. So, what's behind the ice bath and does it really work?

The Scientific Theory

The theory behind ice baths is related to the fact that intense exercise actually causes microtrauma, or tiny tears in muscle fibers. This muscle damage not only stimulates muscle cell activity and helps repair the damage and strengthen the muscles ([muscle hypertrophy](#)), but it is also linked with [delayed onset muscle pain and soreness \(DOMS\)](#), which occurs between 24 and 72 hours after exercise.

The ice bath is thought to:

- Constrict blood vessels and flush waste products, like [lactic acid](#), out of the affected tissues
- Decrease metabolic activity and slow down physiological processes
- [Reduce swelling](#) and tissue breakdown

Then after the athlete gets out of the cold pool and the body warms up, the increased blood flow speeds circulation, and in turn, improves the healing process. Although there is no current protocol regarding the ideal time and temperature for cold immersion routines, most athletes or trainers who use them recommend a water temperature between 50 - 55 degrees and immersion times of 5 to 10 minutes. So, while that's the theory behind the cold water immersion for exercise recovery, conclusive research about the pros, cons and ideal time and temperatures is still in process.

Sample Scientific Research

One study from the July 2008 issue of the International Journal of Sports Medicine found cold water immersion and contrast water therapy may help recovery from short maximal efforts, or during events like stage races where athletes repeat high-intensity efforts on successive days. In this study, researchers had cyclists complete a week of intense daily training routines. After each workout, they used one of four different recovery methods and took nine days off between each week of workouts.

The four recovery methods included:

1. Immersion in a 15 degree C (59 degree F) pool for 14 minutes;
2. Immersion in 38 degree C (100.4 degree F) water for 14 minutes;
3. Alternating between cool and hot water every minute for 14 minutes;
4. 14 minutes of complete rest.

They reported that the cyclists performed better in the sprint and time trial after cool water immersion and contrast water therapy, but their performance declined with both hot water baths and complete rest.

HydroWorx Cold Pool at the ECNL National Event #1 (Phoenix) October 8 - 10, 2011

Where will the HydroWorx Cold Plunge Pool be located at? The HydroWorx Cold Plunge Pool will be setup at the Reach 11 Soccer Complex.

When should an ECNL Player use it? Cold Plunge Recovery Pools are used for post-game rejuvenation. When your game is done you can stop by on your way to your car. The cold pool will be available all day each day of the event and **should be used after your game** NOT before.

- **How long do I use the HydroWorx Cold Plunge Pool for?** – Players will be in waist deep 50 degree water for 5 minutes. There will be timers that can be set to count down from 5 minutes.
- **What do I wear?** – Make sure you pack in your team soccer bag EACH DAY the following:
 - A pair of shorts other than your team shorts. The pool water is chemically treated and it will fade your uniform so bring a pair of old shorts.
 - T-shirt, tank top with sports bra...again...do not wear your team jersey
 - Slides – so you are not walking around bare foot. You can take the slides off before getting in and put them back on as soon as you get it.
 - Towel
- **How many players are permitted to use the pool at one time?** 7 – 8 players at a time so you will need to be patient and stand in line. Please respect the established line and other ECNL players. It is also important to be very careful entering and exiting the pool by using the steps. **No jumping in or out of the pool.**