



## The Effects of Cold Therapy vs. Heat

This month's coach's email stresses the importance of using cold and heat therapy. Using one or the other at the wrong times can delay the healing process, and sometimes cause more damages. Here are some simple things to think about when using these techniques.

### Cold Therapy uses:

- Injury just happened. Using cold to slow down the inflammation process. You still want inflammation because it is the start of the healing process, but you don't want the excess amount of blood that the body will send to the injured site.
- Pain relief. If you have suffered an injury and believe that taking a couple tablets will benefit you the most, then you have not tried good ole ice. Along with inflammation control the ice will slow down the transmission of pain by decreasing the temperature of the peripheral nerves.
- Decrease muscle spasm. By cooling the peripheral nerves you help to relax the muscle and stop the spasm.

### Heat Therapy uses:

- Increase blood flow. Help to increase range of motion prior to activity.
- Help remove swelling and discoloration in an old injury. When blood has had a chance to settle in an injured site it is hard to remove with ice. By heating the area you essentially change a more solid compound into a liquid and attempt to put it into circulation and out of the injured site.
- Promote healing. The increase in blood flow to the area brings in oxygen and nutrients to the damaged tissue to help with the healing process.

### Tools to use:

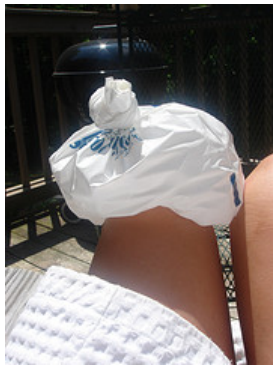
#### Cold Therapy

- Ice- most commonly used is the ice bag. Simple apply the ice bag for 20 minutes on injured area. Repeat every 1.5 to two 2 hours. The body needs to get back to normal temperature for repeat icing to be effective.
- Ice cups- great for shin splints. Adds a little massage with the cold therapy.
- Cold whirlpools- this type of therapy is very effective in cooling large areas. Using water between temperatures of 55-65° Fahrenheit is most effective. Do not go below 55°F. Time is also important. Certain parts of the body can withstand temperature changes better than others. The recommended duration of a cold whirlpool is 5-15 minutes.

- Ice Immersion- this is an extremely effective way in cooling an extremity fast. I would not recommend having a person do this for longer than 5 minutes. Especially for the foot and ankle. If you don't have toe covers, they may get frostbitten.

#### Heat Therapy

- Hot packs- causes superficial heat that in turn increases the blood flow to the area.
- Warm whirlpool- Just like the cold whirlpool, this form of therapy is great for large areas. Temperature of the water should range between 98-110°F. If you are looking to fully submerge the body, then the temperature should go no higher than 102°F.
- Exercise warm-up- This, in my opinion, should replace heat packs for any kind of before-game ritual. Getting on an exercise bike for ten minutes will warm up your muscles more effectively than any heat pack could ever dream of doing (I am well aware that heat packs do not dream, but to project this message, let's pretend they do).



[Cold vs. Heat](#)