

# THE WHEN AND THE HOW TO APPLY COLD OR HEAT (OR BOTH) TO EASE PAIN AND IMPROVE RECOVERY FOR MUSCULOSKELETAL CONDITIONS



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## COLD

Ice, or cold is effective for acute stages of swelling and pain relief because it causes vasoconstriction (narrowing of the blood vessels), contracts the muscles and reduces inflammation to the tissues. Neurologically, cold signals actually travel faster than pain signals - blocking the pain signals from reaching our brains. On the flip side, ice can increase muscle tension and spasms and reduce the speed of healing due to reduced inflammatory response. This is why I only recommend ice on its own when necessary in early stages of healing.

### METHOD:

- Crushed ice chips in sealed plastic bag, cold pack, cold water soak OR topical application of \*herbal ice.
- HERBAL ICE refers to topical products that deliver cooling sensation to the skin. This is my preferred method of applying cold because these products vasodilate while cooling - so you reduce the amount of constriction in the healing tissues while benefiting from the same pain relief.

### APPLICATION:

- 5 mins direct contact - 3-5x daily for the first 24-48 hours after injury

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## HEAT

Heat is a vasodilator (expanding of blood vessels), which increases circulation. This reduces pain too, but through a different mechanism. Heat relaxes muscle tension, reduces cramping and promotes increased flow of nutrient rich blood into the tissues. For this reason heat can make inflammation worse, and this is why it might feel worse to put heat on an acute injury or painful flare up.

### METHOD:

- Heating pad, hot bath / hot tub, heat packs etc.
- DIY HEAT PACK: Fill an old sock with white rice, and sew closed. This reusable bag can be heated in the microwave for 60 seconds before use.

### APPLICATION:

- 15-20 mins - 3-5x daily as needed

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## HOT/COLD CONTRAST

Contrasting hot and cold works by first cooling to dull the pain and then heating to relax the muscles. Allowing simultaneous inflammation reduction, increased circulation, decreased muscle tension -reducing pain and speeding recovery.

### METHOD:

- Alternate any of the above methods OR apply a topical hot/cold ointment like tiger balm.
- WHOLE BODY CONTRAST: 30 sec - 3 min cold at the end of your hot shower!

### APPLICATION:

- 11-min COLD | 3-min HOT x3 rounds + final round 1-min COLD - 2-3x day as needed.