

# Ice and Heat

## How and When to Use It

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Ice is used to reduce pain, decrease swelling, slow metabolism and reduce muscle splinting/spasm.

In ice application, it may take from 8-12 minutes for the full effect to be felt. The temperature of the ice should be 32 degrees F or 0 degrees C. Human skin will not frostbite until approximately 28 degrees F. Evaporative wraps and "instant" cool packs do not get cold enough to create optimum effects. Gel packs take the temperature of your freezer. If your freezer is 15 degrees F the gel pack will be 15 degrees F and this could lead to tissue damage if applied directly to the skin. Ice is best. It's handy, cheap and a 2-3 pound bag can offer additional compression as it cools which helps to reduce inflammation. Crushed ice or small cubes are good because they conform to the body's surface.

### Ice Application:

- place crushed ice, cubes or a bag of frozen vegetables into a dampened tea towel
- apply to the skin: ice is used
  - 10 minutes at a time for ankles, feet, wrists, hands, elbows, neck
  - 15 minutes at a time for shoulders, knees, middles of the back
  - 20 minutes at a time for thighs, pelvis, lower back
- ice should be used a minimum of 6 times per day
- best is the use of ice every 2 hours, maximum use is once an hour

Ice may be used on injuries of conditions that are in the first (acute inflammatory) and second (healing/repair) stages of the healing response. These stages may last from 24 hours to 6 weeks depending on the extent of damage and aggravations. Remember, the earlier ice is applied to an injury the better the healing result will be. It always takes longer to decrease swelling then it does to prevent it in the first place.

### Heat - How to Apply It

Use heat to increase the metabolism and blood flow to the area involved. Heat speeds up healing in a chronic situation, chronic meaning long-term. Heat is to be used in the rehabilitation stage of healing, not in the initial stage. Heat is only used when there is no swelling, no skin redness or any newly acquired tenderness/pain.

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You may want to get moist heat from other sources such as a hot shower or a soak in a hot bath. Do not shower or soak longer than 15 minutes. Remember to be careful when handling your heat source and use a sufficient dry towel to cover it so you do not get burned. If you have any questions, please ask Dr. Smith.