



Injuries: When To Ice, When To Heat

It has become very apparent that there is a great deal of confusion concerning when to use ice and when to use heat on an injury. I hope the following will clarify the issue.

What you do during the first few hours after spraining your ankle or sustaining a muscle injury - before you get to your chiropractor at Berkeley Heights Chiropractic Center - can help determine whether you are back to your normal routine after a week, or still hobbling around. Traditionally, people first applied ice to the injury to reduce swelling, but quickly switched to hot towels or a heating pad to encourage healing. The consensus now among chiropractic physicians, sports physicians, physical therapists, and trainers is to stay with the ice in nearly all cases for at least the first 48 hours. The key is to start icing as soon as you can after an injury. Also, it is of utmost importance that you come for treatment as soon as possible after the injury.

Icing is recommended for acute injuries such as sprains, torn ligaments, bruises, and muscle strains and soreness. Not only does the ice dull the pain but it also reduces blood flow, thereby lessening internal bleeding and swelling. By reducing swelling, icing can limit the magnitude of the damage and cut recovery time. Heat, in contrast, stimulates blood flow and increases tissue damage and swelling.

During the first two days, apply ice for 10 to 20 minutes every hour or two during waking hours. To minimize swelling, especially in severe injuries, remember the acronym RICE: Rest the injury; apply Ice; apply Compression; and, Elevate the injured area above the level of your heart. Despite the proliferation of chemical ice packs, plain ice is still the cheapest, most efficient, and safest method: simply use ice cubes or crushed ice in a heavy plastic bag or hot water bottle. Wrap a towel or elastic bandage around the injury to apply pressure, then place the bag of ice over the towel or bandage; use the remainder of the bandage to secure the pack. If you have injured a foot or hand, you can instead immerse it in ice water for a maximum of 15 minutes at a time.

A few precautions: don't use ice on blisters or open wounds, or if you are hypersensitive to cold or have a circulatory problem. To avoid skin damage or frostbite, stop icing once the skin is numb; set a timer so that you don't go beyond 20 minutes or fall asleep while icing. Be especially careful with refreezable gel packs and self-freezing chemical-reaction packs, which may be colder than ice. Don't leave an unwrapped chemical pack against the skin without moving it, and beware of punctures, since the chemicals can burn.

Be particularly cautious when icing the elbow or knee, where the nerves are near the surface and can be damaged by prolonged exposure to cold. A recent article in the "Physician and Sportsmedicine" reported on a basketball coach who sustained a hamstring strain, applied a bag of ice to his knee, and fell asleep for an hour. Several days later, he fell asleep again while icing his knee. He subsequently suffered nerve palsy in his lower leg that lasted for more than four months. To avoid any possible nerve damage, never put an unwrapped ice pack over the elbow or the outside of the knee, and make sure you don't go beyond the 20-minute limit.



Turning UP the Heat

Although you should stay with ice for most sprains, tears and bruises, heat can play a role in the rehabilitative process of some injuries, but only once swelling has subsided. Heat speeds up healing. It also helps relieve pain, relax muscles, and reduce joint stiffness. There are two kinds of heat: moist (hot towels, hot water bottles, heat packs, or hot baths) and dry (heating pads or heat lamps). Check with your doctor about which form of heat is best for your injury. Whirlpools are an acceptable way to combine heat and gentle massage.

The obvious risk of heat therapy is burns. Always wrap a hot water bottle, hot pack, or heating pad in a towel, and don't apply heat for more than 20 to 30 minutes at a time. Also, avoid heat if you have a fever, show any sign of infection, or are bleeding. If you have a heart condition, consult your doctor before using a hot bath or whirlpool.

Helpful Hints

- 1) Wet a towel, wring it out so it doesn't drip, place in plastic bag and lay the towel in the microwave.
- 2) Turn on for 20 - 30 seconds and you have moist heat with no mess.

A FIRST AID TIMELINE

Naturally, speedy treatment of soft tissue injuries (muscles, tendons, ligaments), should promote healing. But knowing which first aid treatments to apply, and in what order, can accelerate the process – and may even mean the difference between days and weeks of recuperation. The well-known RICE formula (Rest, Ice, Compression and Elevation) still holds, with special emphasis on ice. Here's a guide to the timing and application of basic first aid measures.

FOR SERIOUS INJURY SEEK MEDICAL ATTENTION

REST and ELEVATION – immobilize the injured part for 24 to 48 hours, or longer if pain and swelling persists. Keep it elevated for as much of that time as possible.

FIRST 24 HOURS	48 HOURS	72 HOURS	THE NEXT FEW DAYS...
<p>ICE and COMPRESSION – begin icing the injury immediately; repeat at regular intervals for 24 to 48 hours, or up to 72 hours for injury to a large muscle (quadriceps or hamstring).</p> <p>WHEN and for HOW LONG – apply ice hourly for 20 to 30 minutes at a time for an ankle or wrist injury; 45 minutes for large muscle injuries. If possible, compress the injured area while icing it by wrapping the ice pack in an elastic bandage.</p> <p>WHY – icing the injured area controls the initial swelling; it constricts blood vessels, limiting internal bleeding, inflammation and further tissue damage. It also numbs nerve endings near the injury, helping to relieve pain.</p>	<p>HEAT – after the 48 to 72 hour icing period, if swelling & inflammation have diminished, heat can be applied to the area to help restore mobility to stiff joints.</p>	<p>EXERCISE – resist the urge to return to your usual exercise routine right away. Wait until the injured part can support the usual weight without pain. But don't wait too long, either. Start stretching and strengthening exercises as soon as pain & swelling subside.</p>	

(Source: The American Medical Association Encyclopedia of Medicine)