



Orthopedics & Spine Center

TIP OF THE MONTH

ICE VS. HEAT

MAKING THE RIGHT TREATMENT CHOICE

ICE	
WHY	Pain relief with numbing & decreased swelling and inflammation
WHEN	Use for all acute (recent) injuries: contusions (bruises), strains, sprains, broken bones. It is also useful after exercise to minimize pain (including pain from chronic injuries), swelling, and muscle soreness. May be used in injury recovery/rehabilitation phase prior to therapeutic exercise to reduce pain and spasm allow better movement.
HOW	Apply no longer than 20 minutes once every 1-4 hour(s) = 20 min. on and at least 40 minutes off. Be sure to use a thin towel or layer if using a chemical ice pack as you can receive a frostbite burn. The skin should appear pink or red when you are done icing.
TYPES	Ice cubes in bag, Gel ice pack, Chemical ice pack, Cold water submersion (such as ice water in a bucket), Bag of frozen peas, Homemade mixture for own ice slush pack- Fill plastic sealable (like Ziploc®) bag with mixture of 2-3 parts water to 1 part isopropyl alcohol 2:1 or 3:1 and put in freezer. It should be slushy. If it is solid, add more isopropyl alcohol and add water if it is too slushy.
EFFECTS	<ul style="list-style-type: none"> * Decreases feeling in area by decreasing the nerve's ability to conduct impulses * Decreases metabolism & blood flow * Increases stiffness * Stops bleeding by causing a temporary constriction of the blood vessels * Decreases spasms & swelling

HEAT	
WHY	Reduce spasm & stiffness, increase relaxation, and aid in healing of tissues
WHEN	Use for chronic injuries with stiffness and spasm: tendonitis, non-traumatic neck and back stiffness, muscle strains after 72 hours (assuming no re-injury episodes). Also may be used before exercise to increase tissue blood flow and elasticity.
HOW	Apply no longer than 20 minutes or long enough to for the skin to become pink or red. As with ice, be sure to allow the area to return to normal skin temperature before reapplying.
TYPES	Heating pad, Warm wet towel, Gel hot pack, Chemical hot pack, Warm water immersion (warm bath, hot tub, etc.), Homemade hot pack: fill a cloth bag with wheat kernels and microwave for 1-2 minutes. Microwave power varies so be sure that it is not too hot for use.
EFFECTS	<ul style="list-style-type: none"> * Increases elasticity of muscles * Increases cellular metabolism, which increases blood flow * Increased blood flow from heat helps in the healing process (once acute swelling has subsided) * Decreases spasms and stiffness