

MYTH: Ice is Better Than Heat to Treat Pain

FACT: There are tons of myths about hot and cold packs. But, the truth is – it depends. The reason it depends is that heat and cold do different things to your body.

Heat causes the temperature in your tissues to increase which relaxes your muscles and also allows the blood vessels to expand (this is called vasodilation) and deliver more oxygen and nutrients to an injured area. Since heat increases blood and lymph flow, warmer tissues may have more swelling (inflammation).

On the other hand, cold works by decreasing the temperature of the tissues. This causes the area to become numb (cold acts as a local anesthetic, which can be very helpful in relieving pain) and blood vessels to narrow (vasoconstriction), thereby lessening swelling and inflammation.

When to Worry About Pain: 4 Rules

For a new injury – especially in the first 24-48 hours – the goal is often to limit swelling and inflammation, so icing is used in the common sports medicine mnemonic “PRICE” (Protect, Rest, Ice, Compress, Elevate). Moreover, if there are cuts, lacerations, open wounds or the risk of internal bleeding, then heat isn’t a good idea as it promotes more bleeding. Keeping ice on for too long (more than 20 minutes or so) can cause tissue damage or “burns.” Also, it’s important to avoid using ice on fingers and toes in people who have circulation problems as the ice causes even less blood to flow and may permanently injure these parts of the body.

After the first day or two, the muscles around the injury may get very tight (this happens a lot in whiplash injuries after a car accident). Then, heat can really be helpful. For chronic injuries, heat is often the best modality to use to relax the muscles and improve flexibility. However, in chronic joint pain, such as arthritis, then cold may be better because it numbs the area and reduces inflammation.

For a new injury, if you aren’t sure whether to use hot or cold packs, talk to your doctor. If you have a chronic injury, consider which one of these has helped you the most in the past – that’s probably the one to use regularly for the best relief.

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