

Do you Do Ice Or Do You Do Use Heat?

When I get this question regarding Ice or Heat I typically say it depends. First why are you using it. If you just had an injury the most common modality most used has been ice. If the injury has been lingering it has been heat. But both of these treatments have caveats and new suggestions. If it is an injury to a joint or a tendon with swelling then ice is what I would use initially (24 to 72 hours). Medical studies agree that 20 minutes of icing is most effective with at least 30 minutes off. You should ice with a cold compress or ice pack that is the temperature of a melting ice cube with something between the ice and the skin. **If it is an acute injury to the belly of a muscle then ice might not be the best option (see section below).** Heat works best in larger muscle groups if there is a lingering muscle spasm or tightness, but not if it has recently been injured such as a strain (see section below for why). What might work best is light, non-painful movements and isometrics (contractions with no movement) in many soft tissue, non-joint issues. See upcoming article on isometrics or read this article ([Peace and Love Principle](#)). In case of Osteoarthritis the [NHS](#) suggest heat before exercise, when a joint is stiff, and when experiencing pain. Cold can also relieve pain, and it might also be useful if the joint is inflamed, particularly if there is swelling after activity. So there is no clear cut Ice or Heat winner. It depends.

In a New York Times article points to [an animal study](#), which found that icing alters the molecular environment inside injured muscles in detrimental ways, slowing healing. The study involved mice, not people, but adds to mounting evidence that icing muscles after strenuous exercise is not just ineffective; it could be counterproductive according to the article. Previous thought is that icing a cold muscle decreases inflammation and pain, but there is mounting evidence that this may delay healing: A [2011 study](#), for example, people who iced a torn muscle felt just as much leg pain later as those who left their sore leg alone, and they were unable to return to work or other activities any sooner. Similarly, a [review concluded](#) that athletes who iced sore muscles after strenuous exercise — or, for the masochistically minded, immersed themselves in ice baths — regained muscular strength and power more slowly than their unchilled teammates. And a [sobering 2015 study of weight training](#) found that men who regularly applied ice packs after workouts developed less muscular strength, size and endurance than those who recovered without ice. Going back to the mice the researchers saw clear evidence of damage to many of the muscles' fibers initially in both groups (iced and not iced), but in those that **had not been** iced there was a rapid removal of cellular debris and by the end of two weeks, these muscles appeared fully healed. This was not the case in those mice iced. It took seven days in these tissues to reach the same levels of pro-inflammatory cells as on day three in the unchilled muscle and after two weeks, these muscles showed lingering molecular signs of tissue damage and incomplete healing. **This mice study replicated what would happen if such a muscle was significantly strained or torn, and not simple soreness or fatigue. If it is the simple one either heat or ice or a combo may make it feel better but I am not sure if it will help in recovery. .**

Self-checks: Solving problems before they happen.