



## Heat vs Ice

Ice Therapy Versus Heat Therapy – It's one of the questions we hear most often from patients. "Should I ice the injury or apply heat?"

The answer is... **yes.**

Both heat and ice offer benefits to injured areas. And often, the two work well when used in combination.

- Ice Therapy

With any sprain, strain or bruise there is some bleeding into the underlying tissues. This may cause swelling, pain and delay healing. Ice treatment may be used in both the immediate treatment of soft tissue injuries and in later rehabilitation. During immediate treatment, the aim is to limit the body's response to injury. Ice will:

- Reduce bleeding into the tissues
- Prevent or reduce swelling
- Reduce muscle spasm and pain
- Reduce pain by numbing the area and by limiting the effects of swelling which cause pain

These effects all help to prevent the area from becoming stiff by reducing excess tissue fluid that gathers as a result of injury and inflammation.

In the later, or rehabilitation phase of recovery the aims change to restoring normal function. At this stage, the effects of ice can enhance other treatments such as exercise by reducing pain and muscle spasm. This then allows for better movement. If you have to do exercises as part of your treatment it can be useful to do them immediately after ice is removed when the area will still be a little numb or alternatively with ice in place. This reduces pain and makes movement around the injury more

comfortable.

- Heat Therapy

Do not use heat on a new injury! For example, soaking in a hot bath, or using heat lamps, hot water bottles, and deep heat creams are all not advisable. Applying heat will simply increase bloodflow and make the problem worse.

When an injury is older than 48-72 hours (depending on the amount of inflammation present), heat can be applied in the form of heat pads, deep heat cream, hot water bottles or heat lamps. Heat causes the blood vessels to dilate (open wide) which brings more blood into the area. This optimizes the healing/rehabilitation environment in tissues through the influx of cells involved in tissue repair.

Additional effects of heat include:

- Relief from tension, muscle spasms or tightness in muscles
- Possible reduction of joint stiffness
- Possible pain relief
- Increased flexibility

There are a few considerations to keep in mind if heat is to be used:

- Heat applied to the skin should not be hot. Gentle warmth will suffice.
- There is the risk of burns and scalds if the heat applied is too intense. The skin must be checked at regular intervals.

Ice often gives better and longer lasting effects on the circulation than heat. The pain killing properties of ice are also deeper and longer lasting than heat.

Precautions When Using Heat and Ice

Do not use cold packs or heat:

- over areas of skin that are in poor condition
- over areas of skin with poor sensation to heat or cold
- over areas of the body with known poor circulation
- if you have diabetes
- in the presence of infection

Also, do not use ice packs:

- on the left shoulder if you have a heart condition
- around the front or side of the neck