

# Sprains and Strains

What is the difference between a sprain and a strain?

A **sprain** is a stretch or a tear to a ligament or the tissue that connects bones to each other.

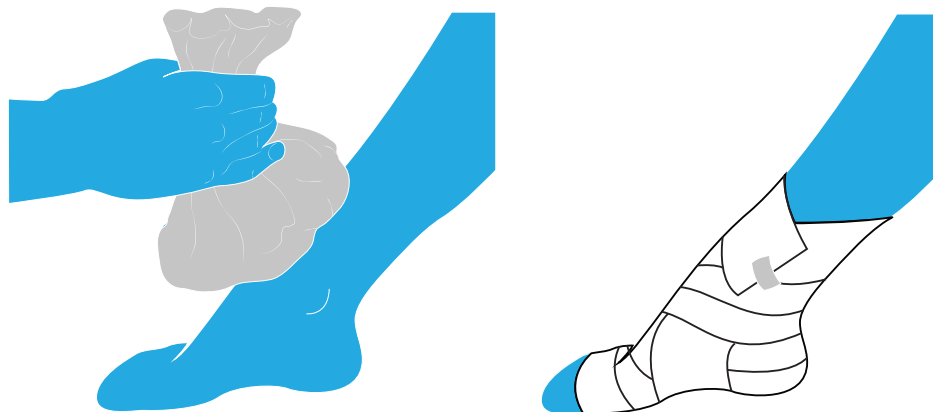
A **strain** is a stretch or a tear to the muscle or tendon that connects muscles to bones.

## Treatment of Sprains and Strains

When treating muscle sprains and strains the goal is to reduce swelling, pain and to speed the rehabilitation and recovery of an injury.

Following the R.I.C.E. therapy (Rest, Ice, Compression and Elevation) for the first 24 - 48 hours after injury occurs is the most effective form of treatment to reduce swelling.

### R.I.C.E. Therapy



#### Rest

Rest the ligament and avoid putting weight on the injury for 48 hours. Using crutches may help shift and relieve the weight off of the injury.

#### Ice

Ice the injury for 20 minutes, four to eight times a day using a cold pack or crushed ice in a towel. Do not apply the ice for more than 20 minutes at a time to avoid cold injury.

#### Compression

Compression of the injury helps to reduce swelling. A compression bandage may be an elastic wrap, special boots, and splints.

#### Elevation

Elevating the injury on a pillow also helps decrease swelling. Make sure that the injury is elevated above the level of the heart

# Rehabilitation for Sprains and Strains

Rehabilitation is used to restore normal function to a sprain or strain. After performing the RICE theory and the pain and swelling have reduced, gentle exercises may begin. Depending on the type of injury professional therapist may custom exercises to improve range of motion, flexibility and strength.

Rebuilding strength is a slow and gradual process, and only when done correctly can the athlete consider returning to sports. It's tempting to resume full activity despite pain or muscle soreness, but returning to full activity soon increases the chance of re-injury and may lead to a chronic problem.

The amount of rehabilitation and the time needed for full recovery after a muscle sprain or strain depend on the severity of the injury and individual rates of healing. A moderate ankle sprain may require three to six weeks of rehabilitation and severe sprain can take eight to 12 months to rehab completely and avoid re-injury.

## Preventing Sprains and Strains

These are a few tips for athletes to follow to help lower the risk of muscle sprains and strains.

- Perform balance and proprioception exercises.
- Practice rehabilitation exercises.
- Wear shoes that fit properly.
- Replace athletic shoes as soon as the tread wears out or the heel wears down on one side.
- Ease into any fitness routine and get into proper physical condition to play a sport.
- Warm up before participating in any sports or exercise.
- Wear protective equipment when playing.
- Avoid exercising or playing sports when tired or in pain.
- Run on even surfaces.