

What is a sprain?

- A sprain is the stretching or tearing of a ligament
- Common in knees, ankles, toes, shoulders, elbows, wrists, and fingers
- Three grades of sprains: mild, moderate, and severe
 - Mild: ligament is stretched; minimal pain, swelling, and little/no loss of function
 - Moderate: ligament is partially torn; joint instability and swelling
 - Severe: ligament tears completely from bone; no function and intense pain

What is a strain?

- A strain is a twist, pull, and/or tear of a muscle or tendon
- Common in back, shoulders, arms, and legs
- Symptoms may include pain, muscle spasm, and weakness, as well as localized swelling, cramping, and/or inflammation
- Three grades of strains: mild, moderate, and severe
 - Mild: muscle or tendon is stretched or pulled slightly
 - Moderate: muscle or tendon is overstretched and slightly torn; some function is lost
 - Severe: muscle or tendon is partially or completely ruptured; severe pain and little or no function

Overuse Injuries

- An overuse injury occurs when muscles and tendons become irritated and inflamed by repetitive movements and awkward postures
- General symptoms: pain or soreness, mild swelling, restricted mobility of the joint, and weakness or numbness
 - Tendonitis – irritation or inflammation of a tendon
 - Most common around shoulders, elbows, and knees, but can also occur in hips, heels, and wrists
 - Repetitive stress injuries – too much stress is placed on a part of the body from repeating the same movements
 - Generally affect people who spend a lot of time on a computer or playing video games

Self-Care

- The RICE method will help for the first 2 – 3 days after a mild sprain, strain, or overuse injury.
 - **Rest** – rest the injured area by reducing daily activities and stopping regular exercise
 - **Ice** – ice the area for 20 minutes at a time, several times per day. Wrap the ice pack in a towel rather than applying it directly to the injury
 - **Compression** – use an ace wrap to help reduce swelling by firmly bandaging the area, but not too tightly. Wrap the bandage in a spiral motion toward the heart until it is 4 – 6" above the injury
 - **Elevate** – elevate the area on a pillow so it is above the heart
- Over-the-counter drugs, like ibuprofen, are helpful for inflammation and pain. Be sure you can tolerate these drugs before taking them
- Once the pain and swelling have gone, begin gentle strengthening and stretching. If pain and/or swelling return, stop and begin the RICE method again.

Prevention Tips

- Maintain a healthy, well-balanced diet to keep muscles strong
- Maintain a healthy weight and good physical condition
- Maintain good posture when standing and sitting
- Maintain a low level of stress
- Stretch daily and maintain a high level of flexibility
- Wear proper shoes and always wear socks with shoes

Workout Prevention Tips

- Always warm up and cool down
- Increasing intensity on a gradual basis
- Wear proper equipment that fits correctly
- Always use proper form and technique
- Drink a lot of water before, during, and after exercise

When to Seek Professional Help

- If pain and swelling have not reduced after 2 days
- If the pain is severe and you cannot put any weight on the injury
- The area around the injury is very tender
- The injured area looks crooked or has lumps and bumps
- You cannot move the injured area
- There is numbness in any part of the injured area
- Redness or red streaks are spreading from the injured area
- The injured area has been injured several times before
- You have a fever and the area appears warm and swollen

American College Health Association [ACHA]. (2010). *Sprains, strains, and overuse injuries: Self-care and prevention*. Hanover, MD