Occasionally, one may experience minor musculoskeletal injuries such as a strain (an overstretching/tearing of a muscle or tendon) or a sprain (an overstretcing/tearing of a ligament). In the event of a musculoskeletal injury, self-treatment can often provide an effective means for relief. The self-treatment program recommended by many health care professionals over the years is known by the acronym “RICE,” which stands for “rest,” “ice,” “compression” and “elevation.” Although “RICE” can be beneficial for minor strains and sprains, the injured individual should seek a physician’s help if symptoms are or become severe.

“R” = REST
- The simplest method of fighting inflammation is to let the body part that hurts rest
- After the resting period, one should try to perform minimal exercise, gradually building up to a full range of motion without pain
- Sometimes modifying an exercise can serve as a form of rest

“I” = ICE
- Especially important for acute injuries (those which have just occurred), but may also aid some chronic problems
- Ice reduces swelling
- Ice reduces pain
- Ice can help prevent secondary damage to cells not originally involved in an injury. For instance, injured cells may release enzymes that disrupt membranes of the neighboring cells, causing the eventual death of those cells. Pressure from injured cells may also interfere with optimal oxygen delivery to neighboring cells, triggering their death, as well.
- Apply an ice pack for approximately 15-20 minutes (or until the iced area becomes numb), 3-4 times a day
- Caution should be taken when using chemical-based “cold packs,” since the colder-than-ice temperature placed on the skin can increase risk for damage.
- When ice “massage”—direct application of ice to the injured area—is recommended, the amount of icing time is usually decreased
- Placing a towel between the skin and the ice/cold pack can reduce the likelihood of skin tissue damage.

“C” = COMPRESSION
- If the injured site can be gently compressed, it helps the body absorb excess fluid.
  Compression can also aid in alleviating pain
- A wide elastic bandage can be used to compress the injured area
- Avoid compressing the injured area too tightly

“E” = ELEVATION
- By elevating the inflammed joint, gravity helps in draining excess fluid which often accumulates at the site of injury

It is important to keep in mind that specialized treatment will vary from one injury to another and that “RICE” is designed for acute, activity-related minor injuries. In 2013, the National Athletic Trainers Association published a position statement in the Journal of Athletic Training, that prompted questions about the RICE method’s effectiveness. More specifically, research
evidence supporting the RICE method for ankle sprains was assessed as a grade of “C,” or based on usual practice, consensus, “disease-oriented evidence, or series of diagnosis, prevention, or screening” (Kaminsky, et. al). While the evidence from randomized controlled research appears to be lacking, there is still strong evidence supporting the method as a way to treat injury.

References: