

## INJURIES AND OVERTRAINING

# Exercise module

### Stop exercising and see your doctor as soon as you can if:

- An injury causes severe pain that lasts more than a few minutes or pain that radiates, if it's difficult to move a body part, or swelling, bruising or numbness occur

### Take a few days off from exercise if:

- An injury causes pain that develops gradually with minor or no swelling
- You are feeling very tired or achy; you have a decrease in restful sleep or your resting HR\* is over 20 bpm higher than usual (these are signs of over-training and a need for rest to prevent injury or a drop in your immune system)

\* HR = Heart Rate. For more information on monitoring your heart rate, consult with your provider or ask them for the Exercise Module entitled *Determining Your Heart Rate*.

### Limit your exercise intensity to Zone 1\*\* (recovery level) for a few days if:

- You are sore or stiff after a particular workout
- You are feeling tired, sore or your resting HR is over 10 bpm higher than usual (these are signs of over-training and a need for rest to prevent injury or a drop in your immune system)

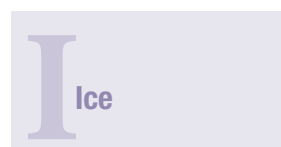
\*\* This refers to different Heart Rate Zones for exercise. For more information on monitoring your heart rate and heart rate zones, consult with your provider or ask them for the Exercise Module entitled *Determining Your Heart Rate*.

An advanced way to determine your readiness for exercise or your overall stress level is to check your Heart Rate Variability (HRV) score. A well-rested, healthy heart has a HR that varies several beats as you breathe in and out. As you become stressed, tired or over trained, your HR has very little variation, almost like a metronome. All you need is a Bluetooth HR strap and a smart phone or tablet with an app that measures HRV. Most apps will tell you if it is OK to exercise like normal, take it easy or avoid exercise the following day based on your HRV.

### For treating minor pain and injuries – think R.I.C.E.



See above.



Cold reduces swelling and relieves pain. Apply ice, frozen gel pack or a bag of frozen vegetables to an injured area for 10–20 minutes. Don't go over 20 minutes at a time to prevent frost bite. Reapply every few hours for 48 hours.



An elastic bandage (ACE) wrapped around the injured area helps reduce swelling and bruising. See a Physical Therapist or search YouTube for instructions on how to apply and what kind to buy at the drug store.



If you injure a limb, prop up the leg or arm to reduce swelling. Do not use heat yet. Heat increases blood flow and makes swelling worse. When swelling decreases (usually within 48 hours), use heat (20–30 minutes, a few times a day)

**Easy does it:** Once you're pain free, start back exercising lightly. Include more light flexibility exercises in your program and gradually increase your activity level over the course of two-three weeks. To prevent re-injury, determine what originally caused your injury and correct the problem, if possible.

## A Word About NSAIDs

NSAIDs are non-steroid anti-inflammatory medicines that you can buy at the drug store. Examples include: ibuprofen (Advil®) or naproxen (Aleve®). Although they can decrease pain and swelling, they are not safe for everyone. In fact, 16,000 people die every year from complications of their use. If you have high blood pressure, heart disease or kidney disease, ask your doctor before use. If you do use them, limit them to a low dose that works and for the shortest time you need. Try cutting the pill in half to see if that does the trick, and make sure you avoid taking them on an empty stomach.

Alternatives to Pain Medicine	
<b>Arnica Gel</b>	Apply directly to bruised, inflamed or painful area.
<b>Biofreeze</b>	Apply directly to bruised, inflamed or painful area. Wash your hands immediately after applying — you do not want to get this in your eyes.
<b>Capsaicin Cream</b>	Apply directly to bruised, inflamed or painful area. Wash your hands immediately after applying — you do not want to get this in your eyes.
<b>Aspercreme®</b>	Apply directly to inflamed or painful area (avoid it you have an aspirin allergy).
<b>Salonpas® Patch</b>	Apply to inflamed or painful area (avoid it you have an aspirin allergy).
<b>Castor Oil Pack</b>	Apply directly to painful area (see instructions below).

### Castor Oil Pack Instructions

Items to get:

- Castor Oil (food grade)
- Something to hold the oil: dish cloth or a 10" x 12" sheet of cotton flannel
- Medium sized heating pad
- Something to keep the heating pad from getting oil all over it: plastic wrap or empty zipper close storage bag or Castor oil pack

Apply to painful area on medium heat for one hour

A simple online search can provide you the names of retailers that carry these items.