Post-Exercise Stretching to Prevent Injury

**Flexibility Exercise Recommendations**
- **Frequency:** 2-3 x week, with daily being most effective
- **Intensity:** stretch to the point of tightness/slight discomfort
- **Time:**
  - static stretch (10-30 sec) for most adults
  - static stretch (30-60 sec) for older individuals
- **Type:** a series of flexibility exercises that incorporate the major muscle groups
- **Volume:** 60 seconds of total stretching for each flexibility exercise
- **Pattern:** repetitions of each flexibility 2-4 times
- **Progression:** methods for optimal progression are unknown

**Stretching Essentials**
- Focus on major muscle groups
  - Hips, shoulders, low back, and Thighs
- **DO NOT BOUNCE WHEN YOU Stretch!!!**
- Stretch regularly: 2-3 times a week
- Hold your Stretch: 15 to 30 sec

(ACSM, 2014)

**Why do we Stretch post exercise**
- Engaging in flexibility exercises along with resistance exercises can improve postural stability and balance
- Your ROM (range of motion) around a joint is improved after performing flexibility exercises
- Possible reduction in musculotendinous injuries, low back pain, and muscle soreness are a few benefits to flexibility training

(Mayo Clinic, 2014)

**Types of stretching for the body**
- **Static Stretching:** holding a stretch for 15 to 30 seconds
  - (cross-body shoulder stretch)
- **Active stretching:** similar to static except you hold yourself with no assistance
  - (Hip-flexor stretch)
- **Dynamic stretching:** slow movement of parts of your body till you reach your max range of motion
  - (arm circles)
- **PNF:** proprioceptive neuromuscular facilitation
  - (hold-relax)- The muscle is stretched and held by a second person for 7-15 seconds, then relaxed for 2-3 seconds.
  - Repeat to stretch the muscle further than initially.

(MIT, 1996)