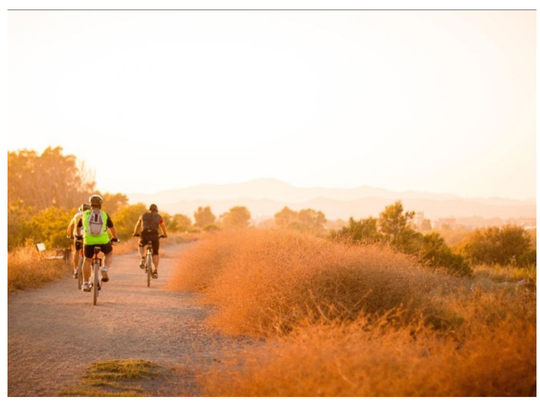
Week 4:

The Wisconsin AD Exercise Newsletter



Pro Tip

Are you having a tough time exercising because your gym is closed or has limited access?

Try mimicking your home work station, and make a mini-gym station! Set up your mat, resistance bands, and other equipment, to make it a ***snap*** to exercise at home!

Coach's Playbook

Types of Exercise - Garber et al. 2011 (position stand from American College of Sports Medicine)

Aerobic exercise involves repetitive contraction of major muscle groups. This stimulates the heart and respiratory rate to deliver oxygen to the skeletal muscles. A significant portion of the energy powering this exercise relies on oxygen delivery from the blood. There are several types of aerobic exercise categorized by intensity and structure. Some of the most common include:

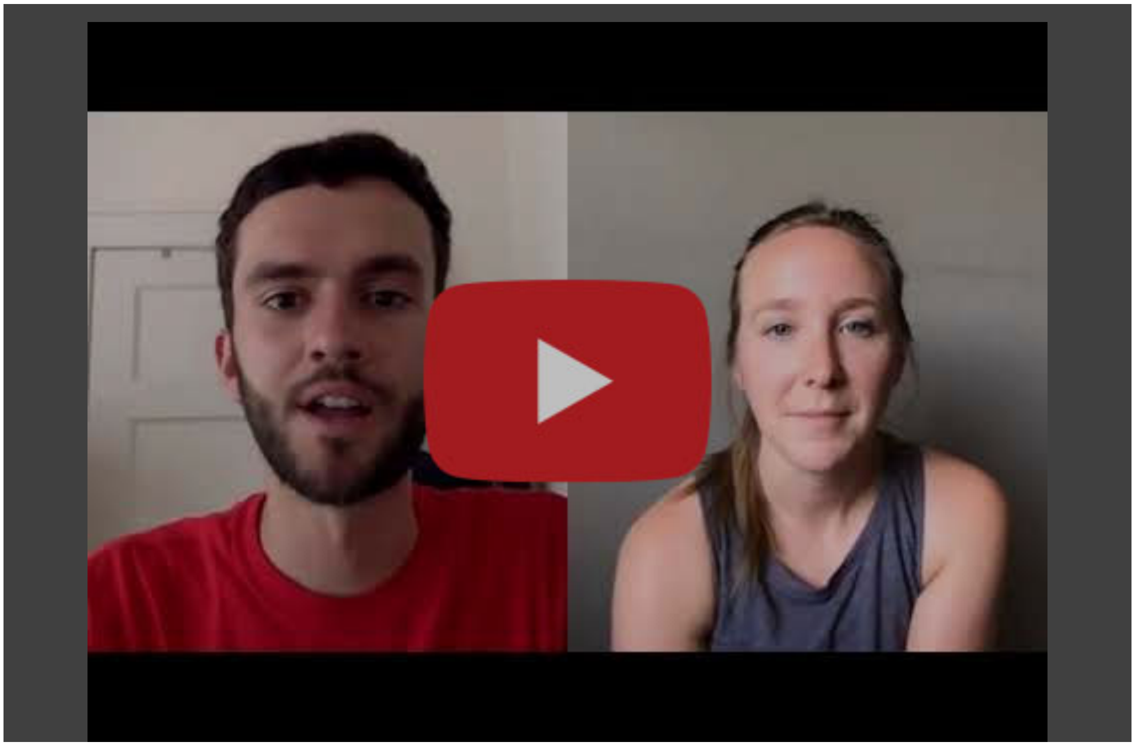
- Continuous-moderate intensity
- High-intensity
- High intensity interval (HIIT)
- Sprint interval
- Low-intensity training

Resistance exercise challenges your muscles to contract against a load. That challenge breaks down proteins within the muscle fibers responsible for contraction. In response, those proteins can repair to become bigger or stronger than before (provided they get adequate recovery - see below). There are several different characteristics you can train. For example, muscular strength is increased by gradually increasing the maximum amount of weight you can move within a muscle group. Muscular endurance is improved by increasing your ability to contract muscles over a period of time. Muscular power is enhanced by training your muscles to contract more quickly. You can engage in the different types of training listed above by using external resistance (i.e. weights, resistance bands) or by internal resistance (i.e. body weight).

Balance and flexibility exercise challenges the connection between brain and muscle that maintains posture, prevents falls, and keeps muscles functioning properly. Proprioception is a key component to successful balance and refers to the sense of joint position. It's a crucial part of all exercise because it allows the body to move through space safely. Likewise, flexibility exercise allows the muscles to contract and relax as intended, facilitating proper joint movement during all types of exercise including aerobic and resistance. Yoga, Tai Chi, specific balance, and flexibility training are examples that work this system.

Ask the Exercise Physiologist

What's recovery all about?



Do you have a question for our Exercise Physiologists?

Send your question(s) to Camille Conway.

You may be featured in an upcoming newsletter!

Tune-in next week for info on immune function and motivation!

Going the Extra Mile...

Here are a couple of additional resources to help you on your exercise journey.

Law et al. 2019. Cardiorespiratory Fitness Modifies Influence of Sleep Problems on Cerebrospinal Fluid Biomarkers in an At-Risk Cohort

Aichberger et al. 2010. Effects of Physical Inactivity on Cognitive Performance after 2.5 Years of Follow-Up: Longitudinal Results from the Survey of Health, Ageing, and Retirement (SHARE)