

## MONDAY 9/11—DYNAMIC WARM UP

20 seconds	<b>Butt Kicks</b>	Develop proper mechanics
20 seconds	<b>Knee Drives</b>	Improving mechanics, posture, and turnover
20 second	<b>Pogo Jumps</b>	Prepares body for mechanical load (shock absorption)
20 second each leg	<b>Unilateral Pogo Jumps</b>	preparing the body unilaterally is very important because you're always loading your body unilaterally in running
3x10 meters	<b>Heel Walks into Backward Pedal</b>	proprioception and shin splints prevention
5	<b>Single Leg BW RDL</b>	mimics hamstring pulling/extending)
5	<b>Hip CARS/leg</b>	Controlled articular rotation; mobilize hip joint
10	<b>Pawing Drills</b>	Foot landing under body of mass and enhances hip extension

credits: @meg\_takacs

### **My own notes and reasoning:**

**Hello! I am not a professional by any means. I am only a student of exercise science and kinesiology. I try my best to only use information that I've learned from professionals. Take the information I relay with discretion. I am happy to offer my own experience but please seek professional help if dealing with an injury.**

### ***Why not static stretching? (passive!)***

Static stretching is teaching your brain to quiet certain proprioceptors which allow your muscles to relax their elasticity. Like a rubber band that becomes more and more relaxed as you hold it into a stretch. However, before our runs, we want that elasticity! The bounce and spring! Static stretching is a passive form of stretching but why would we be preparing our muscles to be passive right before a run when we need them?

*So how do we maintain elasticity but also prepare our body for the intensity of runs?*

Dynamic stretching!

### ***Why dynamic stretching? (active!)***

Dynamic stretching is an *active* form of stretching that uses our muscles to bring about a stretch while going through movement that simultaneously mobilizes our joints that we want to be fluid before activities to utilize FROM.

#### GOALS OF THESE DYNAMIC STRETCHES:

1. Training specificity: there's a lot of stretches out there but we want them to be intentionally designed for running. That is why you might notice that these drills mimic the mechanics of a running stride.
2. Gently elevate the HR
3. Prepare/warm-up/prime our muscles which protect our bones and joints from load. I believe jumps and plyos are underutilized in longer distance running, we tend to only see it in sprinters. However, I find them incredibly important for teaching our muscles and tendons to absorb shock and load, stabilizations in conjunction with mobilization, and unilateral movement especially with our hamstrings which help us pull (contract)

#### ***Just some anatomy notes to understand running posture/form.***

***\*\*In running, your hip and knee flex as your knee drives up. The opposite leg will extend through your hip and knee. Arms driving in opposite directions.***

- The quadriceps lengthen (antagonist) to extend your knee; hamstrings contract (agonist) and hip extends.
- When the hamstrings lengthen (antagonist), your quadriceps flex (agonist), and hip flexes.

