



## ***Muscle Activation Routine (MAR) Guide***

### ***Mental cues to work on***

If you already implement strides after some of your easy days, this will be when we focus on the mental cues for this week.

If you don't already perform strides or don't know what they are, [here is a good, in-depth article](#).

In short, strides are 20 to 35 second sprints at your mile race pace, or roughly 85 to 95% effort. Typically, they are assigned to a running schedule after an easy recovery run or before a big workout or race.

Because strides are a great place to work on form, and you'll be running fast, they are the perfect place to start working on improving hip extension. You should perform four to six 20-30 second strides after your easy runs this week, up to 4 times for the week.

As you perform your strides, consciously work on generating power through your hip as the foot contacts the ground and travels beneath your body. Make a mental note of your speed and effort when you change the amount of force you apply to your hip extension. You should notice you run faster and with less effort with greater hip extension.

Try not to focus on how far back your leg travels – the degree to which your leg travels back will be a function of how much power you generate. So, just let it come naturally and take note of the difference as you run at different speeds.

First 2 set of strides - we want you to work on feeling the proper push off angle. On a few of your strides, try generating more power from your toe off directly under your body so you go higher in the air. Then, practice running over the ground with no bounce, like you were hovering. In both cases, pay attention to the horizon in front of you. How much does it bounce or not bounce?

Now, perform the rest of your strides with the mental picture of what too much or too little push off looks like from the horizon. If you notice your stride looks too much like one or the other, you know you need to slightly improve your push off angle. Continue to tweak until you get a "horizon bounce" somewhere between your two test cases.

Second set of strides - For the recovery phase, we want to work on ensuring that you let the stretch reflex function naturally. If you noticed a very slight hamstring lift and hip drive in your treadmill video from week 1, you can initiate a very slight hamstring pull to your butt directly after toe off. However, don't overdo it and make sure it happens at





the beginning of the cycle, not end the end by lifting the knee. This only needs to be a very slight lift and only if you notice very little hamstring lift when running at a faster pace.

## Active stretching

Throughout this course, you'll also be assigned active stretching movements to help ensure you have a full range of motion. A good range of motion will help you take full advantage of the stretch reflex and ensure you have the flexibility to execute the proper movement patterns.

These stretches are what we call active isolated stretching and influenced heavily by the work of Jim and Phil Wharton.

The underlying theory behind active isolated stretching is that if a muscle is stretched too far, too fast, or for too long, it elicits a protective action known as the myotatic reflex, causing it to automatically and ballistically recoil in an attempt to prevent the muscle from tearing. This occurs about three seconds into a stretch.

Therefore, with active stretching, you will hold a stretch for only a second or two, before the myotatic reflex kicks in. You will then relax the muscle and repeat 10 times for each body part. Using this technique, the muscles should exhibit a greater range of motion over the course of the 10 repetitions.

The other key to active stretching. is to contract the opposing muscles to allow the target muscle to relax. For example, when stretching the hamstrings, the quadriceps muscles on the front of the leg are contracted, relaxing the hamstrings and making them more susceptible to stretching.

This brings up the "assisted" aspect of active stretching. You will coax the muscle through the last few degrees of motion using a stretching rope or band that is wrapped around the foot or leg in various ways depending on the direction of the stretch (we will demonstrate exactly what you need to do with each stretch).

To get started this week, we're going to introduce some of the basic dynamic stretches. The goal is to get you comfortable with active isolated stretching and begin to improve the range of motion and flexibility in some of your major muscle groups. As we move through each module, we'll focus on specific areas, but it's important to practice with the basic active stretching movements before trying more advanced and complicated exercises.





## Implementation

Here's how a typical week should look if you want to implement the MAR routines

Monday	Easy Run/Off + Stretching	-
Tuesday	Harder Workout + Specific Strength	-
Wednesday		-
Thursday	Easy Run + Drills	-
Friday	Harder Workout + Specific Strength	-
Saturday	Easy Run/Off + Stretching	-
Sunday	Long Run/Easy Run + Drills	-

