

Evolve Your Warm-Up, Part I

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This is the first of a two-part series. The first article will discuss the “why” of warming-up. The second article will discuss the “how”, or what a proper warm-up should consist of.

Five minutes of light jogging on the treadmill followed by five minutes of static stretching. Now you’re loose and ready for your workout, right? In the early 90’s this may have been an acceptable practice, but two decades later with the disappearance of aerobics classes and an increase in higher intensity training, it has become very obvious that as our training methods have evolved, so must the ways we prepare our body to train.

Before I get into what constitutes an acceptable warm-up it would be good to know why these actions are so vital to the training process. A proper warm-up should physiologically do five things:

1. Increase your core temperature
2. Prime the central nervous system for performance
3. Increase the elasticity of the working muscles
4. Increase the pliability of the connective tissue
5. Increase the blood flow to the working muscles

I would like to call your attention to number 1 and number 2, as these seem to be the most overlooked aspects of warm-up at large today. Increasing your core temperature does not mean your warm-up ends as the first bead of sweat appears on your brow. Increasing your core temperature, in this sense, means you should have sweat dripping off of you. Now, this will be easier to come by for some than for others, so if you are one to not sweat much, like many females, then understand that and don’t extended your warm-up to be 45 minutes just so you can end dripping with sweat. On the other hand, if you are a heavy sweater, this does not give you the right to stop your warm-up after three minutes because you have already made a puddle on the floor.

Just as the training sessions themselves should be individualized, the amount of time needed to warm-up properly will vary from individual to individual, but in general your warm-up should be no shorter than 10 minute and no longer than 20 minutes. This will allow sufficient time to accomplish all five of the afore-mentioned criteria of a proper warm-up, with the end result being that you are ready to perform at your peak at the end of the warm-up, not 20 to 30 minutes in to your training session. Not only will this make for a more efficient training session, leading to faster and more dramatic results, but it will also decrease your chances of injury if your body is physically able to push itself when your mind tells it to do so.

Priming your central nervous system for performance may seem like a criterion that only applies to the competitive athlete population, not the weekend warrior or the early-evening gym folk. However, this step of the warm-up is vital for all populations, regardless of their competitive status. Just because there aren’t judges or a scoreboard does not mean that what you do in the gym is not a performance. In fact, I would argue that regardless of your goals, you are in the gym to increase your performance as a human being on an everyday basis. Whether you

are looking to drop fat, relieve stress, increase strength or muscle mass, or improve your capabilities in an athletic event, you are training with the goal of improving how your body functions, and in turn, how you as a human being performs. With this in mind, it is easy to see why you need to not just train, but train as efficiently as possible so as to get the most out of your time in the gym. In addition, it is important to acknowledge that there are other systems than the musculoskeletal system at work why you train, i.e., the central nervous system, among others. So, just as you need to make sure that your muscles and connective tissues are warm and pliable, you need to make sure your central nervous system is primed and ready to go as well.

The third and the fourth criteria go hand in hand with each other, but it is important to note that you need to take in to consideration multiple types of soft tissue during your warm-up, not just your hamstrings, quads, and whatever other muscle groups you may or may not have been passively stretching before you worked out.

The fifth criterion covers two things: an increase in your respiration rate and an increase in cardiac output. An increase in your respiration rate means you are taking in oxygen at a greater frequency than while you are at rest, which is measured in the number of breaths per minute. Nutrient-rich oxygen is vital for energy production at the cellular level, energy that is depended upon by your working muscles as your glycogen stores begin to deplete. An increase in your cardiac output means that there is an increase in either one of or both of the following: your heart rate and your stroke volume. Your heart rate is measured in beats per minute and is how often your heart beats. Your stroke volume is measured in milliliters of blood per minute and is a measure of how much blood is pumped out by your heart. So, by increasing either how often your heart beats or how much blood is pumped with each beat, or both, as well as how much oxygen is taken in during a given amount of time, you are increasing how much energy is available to be used by your working muscles. Just as before, this will lead to more efficient workouts as well as faster and more dramatic results.

Now that you understand why it is important for you to participate in a proper warm-up, you need to know what constitutes such a warm-up. Be on the lookout for “Evolve Your Warm-Up, Part II” where I will give you examples of what a proper warm-up should consist of, as well as how to implement these exercises in to your training routine so you can get the most out of your time in the gym.

Get big or die tryin’.

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