

Warm-up and Cool Down - Two Crucial Details on Race Day

by Timothy G. Hale,

- Former Men's Head Cross Country/Track Coach at Rochester University

- Currently Athletic Director at Greece Arcadia in Rochester, NY

In thirty years of coaching successful distance runners I listened to, read about, or discussed with colleagues the merits and shortcomings of many different types of training programs. Many people, athletes in particular, seemed to spend countless hours discussing the benefits of things like high mileage, intense intervals, and hill training. Everyone was looking for the magic formula that would result in huge improvements and the ability to run at the next level and beyond. I don't know how many people found that magic formula but my observations have led me to believe that many athletes and coaches spent all that time for nothing because they spent too little time planning two crucial aspects of racing – WARMUP AND COOLDOWN.

Very simply, the human body is not ready to race in its' normal state. An athlete is very similar to an automobile; they both become more efficient when they have been warmed up. Everyone knows this and is aware of the fact that during the warm-up the respiration rate increases, the heart beats faster and pumps more blood, the muscle temperature and body core temperature increases and the body begins to efficiently process oxygen that is needed to support extreme effort. These and many other things occur to get the body ready to race and once you get the body ready you want to keep it ready until the race begins. Any thing you do to negate the effects of warm-up (like sitting around –too much time between warm-up and race, allowing the body to cool off) will adversely affect the athlete's performance. Timing is crucial, if you stand around too long after the warm-up you will lose most of the benefits and you will have to warm-up in the first part of the race. By that time the race will be over for you. The second area of concern is how much warm-up is needed. While this will vary according to the length of the race and things like weather conditions it is safe to say that you should feel warmed up. If you have not broken a sweat, if you do not feel the things mentioned above, you might not have warmed up enough. Experimentation will help determine the correct amount of warm-up but as a general guide I would suggest 20-30 minutes of activity with the culmination of activity coming with 10 or fewer minutes remaining before the race. Once the warm-up is finished get racing shoes on, keep moving and be race ready when the gun goes off. If you make an error on timing it is better to finish the warm-up too close to the race than too long before hand.

Think about this point regarding timing. For practice sessions I have observed that most athletes jog a little, stretch, go out for a short distance run and upon returning to the track they change into flats or spikes, do some accelerations and then jump into the meat of the workout. At the conclusion of the workout they change shoes again, go out for an easy distance run, and upon returning they stretch again to complete their workout. There is little time between any of the phases of the routine and most athletes would express that they felt ready to go when the workout began and they felt fairly good the next day. This is the way you should do it –on practice and race days. However, on race day I have observed many athletes abandon this type of routine for a different one, one with less total warm-up time and they often finish the process too long before the race begins. Why? It may be that they are trying to save energy for the race but any energy saved will be useless because the body is not prepared to use it.

At recent High School and NCAA meets I saw exactly what I have discussed here. The first thing I noticed was people warming up way too early. I watched several teams begin their warm-up run as early as 2 hours before the race. While there might be a good reason for this I could find none as I watched these teams. Almost to a team they returned to the start area within fifteen minutes and that was the last significant activity they did. There may have been stretching and some accelerations done (not in every case) but I am confident that these athletes were closer to a resting state than they were to being race ready when the gun went off. The other fault was that they probably did not warm-up long enough. Fifteen minutes is probably not enough but in this case their timing would have ruined even the best warm-up.

Following the race the next most important thing an athlete will do that day will be the cool down. It is the first and most crucial part of recovery from the race effort and a good thorough cool down will not only help get you ready for upcoming workouts but will help prevent injury. In practice your body learns to handle stress and develops the ability to recover through moderate exercise. You must use this ability to get ready for future workouts and races. It is important that each athlete cool down at a pace that is comfortable for them but it is also important that it not be too brief. A nice easy distance run of approximately the race distance is a reasonable rule of thumb and with some thorough stretching will help the athlete begin the recovery process and get ready for what lies ahead. Athletes who do a complete cool down always feel better the next day than when they do not do one. They are ready to go out and resume training for the next race. Too often I have observed athletes heading for the showers shortly

after the race and I know they will not recover as well as the person who cools down properly.

In summary, don't waste endless hours of planning a training regimen by cutting corners on two crucial race day needs. Warm-up thoroughly and time it so that you are "warmed up" at race time and ready to go. When the race is over begin your recovery with a complete cool down and you will be preparing the body for the challenges ahead.