

## The 3/2 Rule

I have discussed a little bit of this topic before, but it deserves a little more attention. This topic is that of speed and it's relation to the marathon specific segment. There is a lot going with this topic and it deserves a thorough examination. To start, when I first came to the Hanson's-Brooks ODP in 2004, there was a standing rule of what we will refer to as the 3/2 rule. This rule is simple: no more than 3 marathons in 2 years. So, unless there is a unique situation, like getting put on a World Team last minute, then you are not just going to run marathon after marathon. I know some of you are reading this in near discuss- 3 marathons in 2 years? Say what? That's right! I also know some of you are willing to run a marathon every month, or even every other week, if you could. If that is your situation, that's fine, but you probably don't need to read any further than this paragraph. For those of you who still interested, please continue...

At the time I first learned of this rule, I was 23 and still had dreams of fast track 5 and 10k's in Europe so it didn't particularly matter to me. I would have been happy running one marathon EVER, or even never. However, after running for a few years with several marathons, the rule has certainly started making more sense. Now, as a coach, I really see some pitfalls in running marathon after marathon and its effect on performance. I see elites chasing "big" paychecks that marathons can pay. I see them chasing time standards and think if they keep plugging away that it will just be forced into happening. I see it recreational runners chasing Boston Qualifiers and New York standards, time barriers, and personal bests. The point is, you can bang out a lot of mediocre performances (I am talking about a relative term here- what you are capable of), but at some point, performance will suffer.

So where does speed fit into this discussion? Well, a criticism of the Hanson's Marathon Method is that there is no speed work late in the race. If you are a coached athlete, you'll know that's not as simple as the basic plan, but the idea is the same- we spend the last several weeks dedicated to marathon specific work. This is on purpose and part of the reason has to do with the 3/2 rule. I (we) limit the number of marathons in a large macrocycle because we assume or will make you do a dedicated speed segment at some point. This could be between marathons, the beginning of a segment, or a short segment between two yearly marathons.

Let's look at this another way, since many of you reading this aren't in your 20's anymore. We slow down as we age, right? We have excuses- job, spouse, kids, life and these are all true, but how many of us chalk this up to aging and then say, well, my 10k time doesn't matter anymore, so we'll just stick with what we can still do well? Ok, I'll buy that to a point, but from a performance standpoint let's look at it- decline in VO2max? Loss of power? Loss of force? Believe it, or not, VO2max has little to do with it. The decline is pretty slow if you are healthy, fit, and train regularly. Basically, you keep it a lot longer if you use it. (This is true with heart rate, too, but that's not the point here) What happens when we age is that we lose the explosiveness and power in muscle contractions because we lose muscle mass. More specifically, the powerful fast twitch and intermediate muscle fibers tend to look more and more like slow twitch fibers, which make them physically smaller. Ultimately, it makes us slower. However, there is good news for all of us! Doing speed work helps maintain power, force, and the makeup of our muscle fibers. The end result is maintaining speed and potentially improving speed for a number of years.

How do we do this? Don't abandon speed segments. Take time away from the marathon and focus on running some shorter races and training for shorter races. This allows us to work on maintaining our abilities but it also gives a break from the monotony of marathon training. Our mileage doesn't have to be as high as it is for marathon training. Set new goals of setting new age group records or new decade records. Whatever it takes to get you motivated to do these works for me.

These segments don't have to be super long. If you are doing 16 week marathon segments, you can take solace in the fact that speed segments can be 8-12 weeks in length. There are also a number of things you can do throughout the year that can be done whatever segment you are in.

Hills- short hills of a moderate grade. These can be done after easy runs, during easy runs, I personally don't care as long as you can get them in.

Strides- Short (15 seconds is plenty) of hard sprints, maybe 95-100% of all-out effort. These are same as hills- during, after, whatever. I think before a workout, but after your warm up, is also great.

Running Drills- coupled with strides after a warm up is great pre workout routine to do. Keep basic, like skips, high knees, bounders, etc until you become comfortable.

Resistance training- not just core work and light weights. Don't be afraid to make those glutes, quads, and hamstrings stronger through 3 sets of 10 reps of higher weights. If you are over 40, you really need to look at dedicating a couple 30 minute sessions throughout the week.

The purpose of these things is obviously to improve the overall strength, but also the neuromuscular connections to the muscle fibers open. If you don't use the fibers you have, your body will close the connections to them. Keep them open and they stay "awake."

Here's a quick breakdown of events:

Your slow twitch fibers are the easiest fibers to contract- it doesn't take much to get them to contract. While they can contract for a long time, they do so with a trade off in force of contractions. Even these fibers fatigue (especially in the marathon) and the next "easiest" to get to fire are the intermediate fibers, followed by the fast twitch fibers. So, if the nervous system isn't hooked up to these fibers, they don't fire. If there are less of them around, then the body is relying on the slow twitch that will ultimately fatigue. The end result? You slow down due to a decrease in force caused by fatigue. This could mean bonking, even if enough carbohydrate is still available.

To keep the connections open and free flowing, the fibers have to be stressed and stressed fairly often (not abandoned for years or a couple workouts during a marathon segment). If you feel like it's too late, don't start crying yet! It has been shown that people all the way up to their 80's have been able to rebuild and put on muscle mass, or at least show the increases in strength associated with better neuromuscular connections. Even if it's been awhile, it can be done!

The take home:

Limit the number of yearly marathons (at least high level) you do if performance increases are your concern

A speed segment done between marathon segments is a great way to keep your necessary muscle fibers, neuromuscular connections, and even rebuild or re-establish these components

To maintain during a marathon segment, you don't need a lot of speed during the race specific if you have done a segment prior.

You can also maintain and improve by doing the options listed- hills, strides, resistance training, form drills

By doing this, you don't necessarily have to lose a lot of your running performance ability as you get older. It can even help you improve your personal bests, regardless of age (potentially).