

This newsletter is brought to you by apples, oranges, and acorns. Enjoy!

Times on roads, vibes on trails

My opinion on the Boston qualifying times (also now 5 minutes faster than previously) is best summed up by what one of the athletes I coach wrote after he did a nice long uphill treadmill session (just the type of thing to get thoughts flowing!):

"Most importantly — please keep running if it brings you joy and meaning, that's by far the best reason to run. The sport is only better when more people run for these reasons.

...the Boston Marathon making its qualifying times faster by 5 minutes perpetuates some of what I believe can be the worst parts about running. It would be hypocritical of me to just say that running [is] accessible to all, since even big trail races like Western States have cutoff times to some extent. However, my experience with trail running is that nobody uses Western States (or any of the big trail races) as a marker of "who's a good runner and who isn't", whereas the big marathons seem to at least carry somewhat of this sort of status (certainly far from universally, but still sufficiently prevalently). Especially as somebody who's really a beginning runner, it is easy to find this very discouraging....

I understand people who... want a race like Boston, and I understand that people are just getting faster and in some sense "forcing" the race to make qualifying times faster, but this solution seems a bit lazy to me. I have no clue what a better solution is, but that doesn't mean there isn't one... Let me also clarify that I'm a fan of the field getting faster, we're getting to see things that are truly inspiring."

As I said before, I do want to cover non-pro and non-"elite" athlete stories, so please email me if you've done a race or have a training story or idea you're grappling with that you'd like shared! There are fewer platforms sharing those equally meaningful and diverse experiences, and I want to be one of them.

Coaching snapshot!

Question: "Why am I getting faster on flats if most of my runs right now are uphill around 10-18% on the treadmill?"

First, wow, that's some steep running! As I mentioned in the newsletter a few weeks ago, there are four physical systems we train: biomechanical, neuromuscular, musculoskeletal, and cardiovascular. Let's break each of these down with respect to uphill running, using this 2017 Review article in *Sports Medicine* as a guide.

- Biomechanical: Foot strike pattern (shifted towards fore- or mid- foot strike), ground reaction force, swing/aerial phase duration, impact shock, and hip/knee/ankle joint position and movement pattern may be grade-specific.
- 2. Neuromuscular: Muscle activation is grade-specific, and generally the iliopsoas (hip), gluteus maximus (hip), adductors (inner thigh), hamstrings, vastii (¾ of the quads), tibialis anterior (front of shin), soleus (deep calf), and gastrocnemius (calf) are more activated in uphill compared to level running.
- 3. Musculoskeletal: Hip is the most stressed joint (creates the highest mechanical output), followed by ankle, then knee, in uphill running. See above for muscle activation.
- 4. Cardiovascular: Energy generation is greater than absorption in uphill compared to downhill running.

So, there are a number of reasons uphill running has made you faster on flats! Though the biomechanical and neuromuscular demands of uphill running are very much grade-specific (i.e. practice at inclines you'll be racing at to get efficient at those grades!), the muscular power and cardiovascular benefits you've gained from training on uphills will only help you on flats. The strength and power you've gained in the hip muscles especially will translate to more power on flats. Furthermore, it's possible that by doing lots of uphill running you have avoided injuries and been able to train more consistently and harder than you would have otherwise, leading to significant cardiovascular gains that will make you faster at all grades.

For some quality uphill running technique, check out the video of Kilian Jornet racing below. Sorry for the lack of photos in this newsletter -- I was unable to upload new ones today!

What questions do you have about training and racing? Reply to this newsletter or <u>email me</u>, and I'll answer one next week!

Kilian's uphill



Pumpernickel power

Pumpernickel is a strong, delicious flavor, and its bread is full of protein and fiber. I struggled to find a recipe online for a bread made mostly with pumpernickel flour and no random potato or malt ingredients, so here's one I made myself! Delicious soft out of the oven or nice and crispy toasted the next day. The caraway seeds add a nice complement and occasional crunch!

Recipe

New pickup system!

S.S. Endurance is done vending at the Harvard Farmers Market for 2024. Instead, I have a new pickup system! I am offering pickup **Tuesday mornings at 6:30am at Weeks Footbridge, Cambridge side** of the river. Order online by 8pm Sunday night for Tuesday pickup. For updates, make sure to follow me on Instagram @coach_serena326. For questions, feel free to email me by responding to this email!

In case you missed it... TARC Fall Classic 50k race report!

I raced in the Trail Animals Running Club Fall Classic 50k this past weekend, and I've posted my race report on the blog. This organization is so special, and the race was a blast! Check it out here.

"I had one goal for this race: run the whole thing. In the back of my head, I also had the idea I'd try to negative split it, but that went out the window the second I started running and decided a better tactic would be to run faster on the flatter, less technical sections and downhills and relax on the uphills. This freed me to go out and get into it. I knew Kevin was planning to really go out hard and see how long he could hold on, so that empowered me a bit as well..."



Race report!

