



This newsletter is brought to you by chocolate cake and post-race, post-vaccine Advil. Enjoy!

UTMB and the Adaptive Team

[Last week](#) I covered some stories from the Paralympics, and this week I want to cover some of Team Adaptive from UTMB! UTMB is the Ultra Tour de Mont Blanc, the largest trail running festival in the world, held in the Alps. This year, 12 athletes with disabilities competed in races from 40k to 171k. You can read more about all the athletes [here](#).

1. Travis Warwick-Oliver, who has a below-the-knee amputation, competed in OCC. [This video](#) shows him at an aid station, tending to his prosthetic, and then running out of the aid station.
2. Guillaume Pick, who is deaf, competed in UTMB. [This video](#) shows the finish line and the crowd cheering, twisting their hands in the air as sign language for clapping.

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.

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 downhill and relax on the uphill. 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!](#)

Science snapshot!

Question: "How many reps and sets should I be doing with strength training?"

Thank you so much for this question! Strength work is so important to staying healthy, strong, and resilient as an athlete. Traditionally, the practice is that shorter reps, higher sets, and heavier loads build muscle whereas the opposite build muscular endurance. [Recently, however, there are hypotheses that no matter what weight, if an athlete lifts until they can no longer do another rep, they will get the same muscular hypertrophy (building) benefits no matter the weight.] In my approach to strength training, I start with higher reps, lower sets, and lighter weights, then progress athletes to lower reps, continue lower sets, and adjust weights to align with their endurance goals (usually heavier, but lighter on recovery and taper weeks).

In [last week's newsletter](#), I talked about the four physical systems we train: biomechanical, neuromuscular, musculoskeletal, and cardiovascular. This week I'll provide another way of thinking about adaptations: central vs. peripheral. Central adaptations involve the nervous system and heart, whereas peripheral adaptations involve the muscle fibers and mitochondria. With strength training, depending on the sets, reps, and weight, we can target more central or peripheral adaptations.

Let's take a look at this 2011 [Review article](#) published in *Sports Medicine* about concurrent strength and endurance training for rowing and canoeing. Some key takeaways:

- Strength training should be periodized like endurance training.
- Limit fatigue from overlapping training adaptations (i.e. if doing endurance training focused on central adaptations, do strength training focused on peripheral adaptations).
- Manage recovery between strength and endurance training sessions, separating the two by at least 4 hours and preferably more.

The National Academy of Sports Medicine (NASM) also provides a useful [framework](#) for thinking about strength training phases:



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

[Email me!](#)



Ganache frosting tips

This was a cake I made for my cat's birthday last year, hence the ears.

Ganache is just heavy cream and chocolate. Not complicated, but super useful because it can be manipulated to the consistency and richness you'd like.

For a baseline, chop chocolate or pour chocolate chips into a microwaveable bowl. Add heavy cream until the chocolate is just barely covered. Microwave and stir until the chocolate is melted. Whip!

- For a lighter, whipped chocolate, add more heavy cream and whip longer.

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!

