



This newsletter is brought to you by base building, praying for the river to unfreeze, and AI product design rabbit holes. If you enjoy it, I'd be grateful if you could share with one or two others!

Jumping into the unknown!

In 1998, French swimmer Benoit Lecomte was the first person to swim across the Atlantic Ocean (from Massachusetts to France). He swam about 6-8 hours a day for 73 days.

This November, eco-adventurers [Matthieu and Chloe Wilvoet will attempt a swim](#) from Cape Verde (Africa) to Martinique (in the Caribbean). Sounds bonkers to me, support crew or not!

Whether your unknown is climbing a mountain, going for a personal best, or swimming in the ocean, go for it and take that leap! It's all about the journey into the unknown that happens after that first step.



Coaching snapshot: adaptation timelines!

"Why am I doing this easy training? I feel like I'm not doing anything. What's actually happening to my body?" This is a common string of questions I get from athletes who are finally learning that "easy" really means go easy!

"Why should I do a hard session 7-10 days out from the race?" This is another really common question. Both get at the idea of an adaptation timeline. Some responses to exercise happen really quickly, within days, while others take years. So let's break down this topic a bit.

We get stronger and faster during the adaptation period, not during the hard work. The work breaks down the body; the adaptation and recovery gives the body time to heal back stronger. This is why it's so important to understand timelines for adaptation. A lot of this was researched in the 1980s-2000s. Some reference articles are [this one](#) about cardiovascular adaptations, [this one](#) about mitochondrial adaptations, [this one](#) about fuel utilization adaptations, and [this one](#) about neural and musculoskeletal adaptations.

There are a few categories I think about when it comes to adaptations (all times approximate time to achieve some measurable improvement/adaptation but by no means realize full genetic potential):

1. **Cardiovascular** — heart size and strength (3 weeks), blood volume (24 hours), hemoglobin mass (4 weeks), capillary density (4 weeks).
2. **Metabolic** — mitochondrial changes (1 week), storage and use of glucose and fat for fuel (2 weeks).
3. **Musculoskeletal** — muscle type (months-years), size (4 weeks), and strength (1 week) as well as tendon, ligament, and bone stiffness and strength (months-years).
4. **Neural** — recruitment of muscle fibers for maximal efficiency (1 week), rate of force development (2 weeks), interpretation of body signals, mental skills (weeks-years).

Generally, easy days are important for developing endurance-type muscle fibers, increasing mitochondrial mass, increasing muscle capillarization, and improving fat oxidation (using fat for fuel). They are also less biomechanically stressful than hard sessions, which helps make time for the musculoskeletal system to adapt with less injury risk (note the long adaptation timelines for tendons, ligaments, and bones!).

High-intensity days 7-10 days out from a race (including lifting weights) can help keep the neuromuscular system primed for maximum efficiency, generate further mitochondrial improvements, and refine mental skills. These systems that have faster adaptation timelines also have faster de-training timelines, so it's important to tune into them even when it feels close to a race.

Zooming out: though training sessions are framed as driving specific adaptations, in reality I think our bodies are much more complex. These processes do not occur in silos. We adapt to things on individualized, sometimes unpredictable or unanticipated timelines.

Reply to this newsletter or [email me](#) with questions, and I'll answer one in a few weeks!

Let your friends know that I'm taking more athletes! Send them to my [website](#) to submit an inquiry or just pass along my email. Thank you so much!

Chocolate protein cookies!

I've shared my regular protein chocolate chip cookie recipe in a past newsletter. Here's the chocolate version with just as much protein (8 grams per cookie)!

Ingredients: 80g cashew butter, 57g butter, 133g granulated sugar, 1 egg, 1 tsp vanilla, 70g protein powder, 80g oat flour, 3 tbsp water, 15g cocoa powder, 57g chocolate chips.

Mix together the cashew butter, butter, sugar, egg, and vanilla. Then mix in the protein powder. Then mix in the oat flour, water, and cocoa powder. Finally, add the chocolate chips. The dough is tough and crumbly, so this is easier with a stand mixer though I have also done it by hand! Bake at 350°F for about 15 minutes, until crispy.



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Hi, I'm Ramona!

I live with Coach Serena, and I'm a silly calico cat who loves boxes of all shapes and sizes. Over the next few weeks, I'll share a bit more about myself. Sending you snuggles and purrs this week!

