



This newsletter is brought to you by freezing wind, fun downhill, and taper time. If you enjoy it, I'd be grateful if you could share with one or two others!

## Pushing the envelope

I've always thought the concept of human limits was fascinating -- like, what actually determines our limits (and, inversely, capacities)? It's cool how the natural environment tests us. Summitting Mount Everest without oxygen [pushes us to the edges of our physiology](#), and even then, only some can make it. Last week, Alo Slebir rode what might possibly have been a [record-breakingly tall 100-foot wave](#) at Mavericks, a famous surfing spot near Half Moon Bay in California. Sounds risky and pushing the envelope to me, but what do I know about surfing.

I love when something challenges the current scientific understanding of human limits. In a recent [case study](#) of Kristian Blummenfelt (an Olympic gold medalist and world champion triathlete), researchers found that his sustained energy expenditure over three years challenged the current understanding of human metabolic limits.

There are so many areas where research articles are still catching up to elite athletes when it comes to training, like with fueling, hydration, heat training, supplements, and more. 2025 should be an exciting year for sports science!

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## Coaching snapshot: routines!

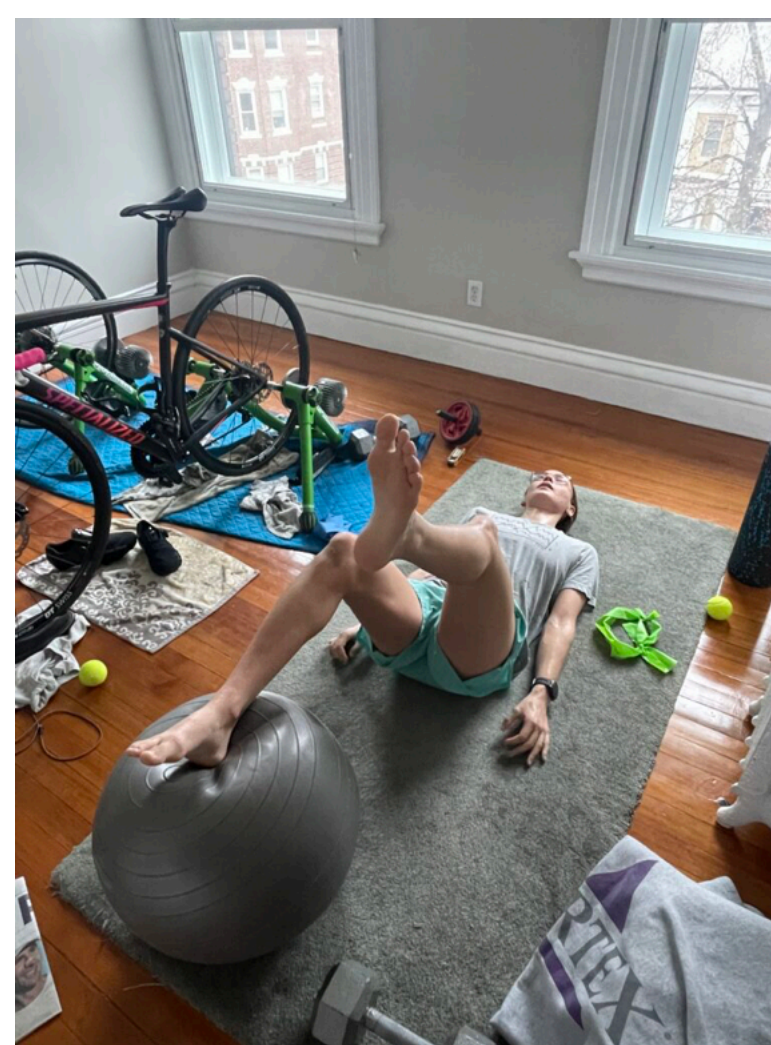
*Lots of people create new or re-commit to routines in the new year. Let's talk about routines in the context of sport.*

LeBron James throwing chalk in the air before a game. Michael Phelps, hood up, listening to music pre-race. Tom Brady running down the field yelling "let's go!". Routines are separate from superstitious behavior because they are task-relevant and engaging.

In the context of sport performance, routines or rituals help with three things:

1. [Arousal regulation](#). This includes both increasing and decreasing arousal via routines like listening to pump-up music or meditating.
2. [Focus](#). Minimizing internal (e.g. negative or anxious thoughts) or external (e.g. crowd noise) distractions by directing attention to executing the routine instead.
3. [Self-efficacy](#). Small, relevant task completions, like visualizing a positive outcome beforehand or taking a deep breath, can help athletes feel a sense of control.

Keep in mind, it's advantageous to be flexible, not rigid, in a routine. Choose a routine that can be done anytime, anywhere, or modified depending on environment.



Activation exercises are part of my pre-training routine. But I also have the flexibility of mind to go train without them!

Routines are useful in training too, which of course in the long term will improve performance. For example, laying out the clothes you'll wear during training the next day is an example of a routine. Little actions like this can make future decisions (like when or whether to train the next day) [easier](#) or non-existent.

What questions do you have about training and racing? Reply to this newsletter or [email me](#). I'd love to hear from you!

**I still have athlete slots open for running and triathlon coaching and depend on you to help spread the word :) Thank you so so much!**

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## Gluten-free chocolate chip cookies!

This recipe works with buckwheat flour, brown rice flour, oat flour, or a combo! Chewy out of the oven, crispy a few hours later, and always pretty!

Ingredients: 12 tbsp butter, 290g sugar, 1 egg, 200g any gluten-free flour, ½ tsp baking soda, chopped chocolate, dashes vanilla and salt.

Mix softened butter, sugar, egg, vanilla, salt together. Add flour, baking soda, and chocolate chips. Bake at 350 °F for ~12 minutes. Take out the pan and drop it on a hard surface so the centers deflate. Let cool slightly before transferring to rack.



[Recipe here!](#)

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