



## Saķert kurāžu

### Runner's High and Flow.

When it hits you. It's all good. It comes at the end of a long run or a tough tempo, maybe even an interval session. Your mind is flooded with feelings of euphoria. The pain of training starts to melt away. Your thoughts are suddenly a little clearer and more profound. On your newly pain-free legs you feel like you can run forever, as if this were exactly what you were designed to do. Even when you finally do make yourself stop, the good feelings linger, sometimes for hours. Is anything better than a **runner's high**?

Recent research has found the term to be apropos. The two main chemicals responsible for a runner's high are **endorphins** (morphine-like opioids produced by various parts of the central nervous system) and **endocannabinoids** ( your body's version of THC, the chemical in marijuana that makes people high). Unlike their synthetic counterparts, these chemicals are linked with positive mental health outcomes and don't lead to physiological addiction or dependence (Fetters 2014).

As a natural painkiller, it makes sense that specialized sites in the body, including the **prefrontal cortex**, would release endorphins into the bloodstream to help manage the trauma of distance running. Endorphins bind to opiate receptor sites to help dampen feelings of pain. Like all opioids, endorphins also increase the sense of well-being and reduce the effects of stress on the body.

Numerous theories abound as to why body produces endocannabinoids when you run. The most popular holds that it is an evolutionary byproduct of the hunter-gatherer days, when humans needed incentive to burn additional calories and risk injury in pursuit of food (Glaiser 2016). Other animals that travel long distances for their food, such as dogs, display similar chemical responses to distance running. This response only occurs from more strenuous forms of aerobic exercise. For instance, walking does not increase endocannabinoid production.

Not all runner's highs are the same. Your body releases these chemicals as dictated by the demands of that day's training and in response to numerous other physiological factors. Some runs will leave you feeling on top of the moon, some will still feel like a slog that you're happy to have finished.

Also note that a runner's high is not flow. While they no doubt have some brain chemistry in common, flow relies more heavily on psychosocial factors and is directly related to funneling your attention on one specific goal for extended periods of time.

A runner's high is a chemical response with a less pronounced carryover effect that requires no engagement.

A runner's high still matters, though. Flow is an oftentimes elusive experience that can require months, if not years of training. A runner's high asks that you get out the door and put in a little effort, and for that you'll likely be rewarded. And if you chase those runner's high long enough, you might get rewarded with the ultimate flow experience when it matters most.