

triathlete

Is Depriving Yourself Of Calories In Training A Good Idea?

• By Matt Dixon

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Triathlon coach Matt Dixon answers a question about utilizing fat as a source of energy by reducing calorie intake during long workouts.

Q: I have heard that to teach the body to utilize fat as a source of energy you should deprive yourself of calories during lower-intensity, longer workouts. What do you think of this theory—is it a smart option for the amateur triathlete?

A: Let's first look at how nutrition fits as an overall component of training. Many athletes and coaches fall into the trap of viewing each component of training as singular entities acting mutually exclusive of other factors. The art of creating a successful approach to training is to always maintain a broad view of the interrelating factors of

performance. For example, any training program employed will only be successful if it is balanced with the other life factors that provide stress to you as an individual. A successful training program should be integrated into life, not simply sit on top of life. With this lens, your approach to nutrition will either be a great supporter of training and health (if done correctly) or an additional stressor on your system (if done incorrectly, in terms of quality, quantity and timing). So, as we delve into answering this question, it's important to maintain a broad view of how nutrition fits in the overall training spectrum.

Your question is related less to nutrition and more to fueling, and that is an important distinction for an endurance athlete. I refer to "nutrition" as the daily calories you take in through your main meals spread throughout the day. These calories provide the vast majority of your nutrients, building blocks (proteins) and oils (fats). "Fueling" refers to the calories that you consume during and immediately following exercise, and the primary purpose of these calories is to fuel training. Your successful performance during any

workout, recovery from the workout, pursuit of optimal body composition, and support of training in terms of stress reduction, stems from fueling. This is the most important factor in nutrition for an endurance athlete to get right, but it's also the one area in which most athletes underconsume relative to energy costs. The primary fuel that your body utilizes during training is glycogen, a stored form of carbohydrate. No matter how trained at utilizing fat you become, you will always utilize plenty of your stored glycogen in activity. Failure to replenish those stores during and following activity activates a series of negative and highly stressful events in the body. An accumulation of these events results in impaired recovery, a possible retention of fat and long-term loss of muscle, and an increase in overall stress on your system.

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The peer-reviewed research focusing on carbohydrate deprivation during low-intensity exercise shows that there likely is an increase of lipid (fat) utilization. So, at first glance, it would seem like a good decision to limit carbs during a long, low-intensity training session, but here lies the problem of simply applying myopic scientific findings into real-life training approaches. As a coach I have experimented with fat deprivation in training before and, ultimately, have never seen positive long-term results. The overall stress created by reduced fueling has always resulted in a decline in training performance, impaired recovery and an increased frequency of illness and loss of motivation for training. In the big picture it does not add up to progressive performance improvements.

I recommend you take a longer term and global view of your training nutrition. Fuel every workout by "wrapping" the sessions with carbohydrates, get in your proteins, oils and nutrients (veggies and fruits), and allow the accumulation of training load, consistently applied, to increase your endurance and ability to utilize fat as a fuel source. You will be a better-trained, healthier and well-recovered athlete for it.

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