



Does Carb Cycling Boost Weight Loss and Athletic Performance?

By Cyrus Khambatta, PhD
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Over the past few years, we've seen an uptick in interest in carb cycling—a strategy of alternating between periods of increased carbohydrate intake and periods of low carbohydrate intake, typically with the goal of losing weight, overcoming a weight-loss plateau, or optimizing athletic performance. But is carb cycling effective in these health and fitness goals? Let's explore the principles behind the practice.

What Are Carbohydrates?

First, a brief rundown: Carbohydrates are found in the grocery store in one of two forms—refined and whole. Although refined carbs represent only a subset of carbohydrate-rich foods, they're what most people think of when they hear the word “carb”: white breads, pretzels, pastries, refined cereals, and other highly processed snack foods. We recommend staying clear of refined carbohydrates, as they can increase your risk for [fatty liver disease](#), [insulin resistance](#), [prediabetes](#), and [type 2 diabetes](#); lead to [unwanted weight gain](#); and [increase triglyceride levels](#).

In sharp contrast to foods containing refined carbohydrates, whole carbohydrate-rich foods such as fruits, vegetables, beans, [lentils](#), peas, and [whole grains](#) are some of the most nutrient-dense foods on the planet. For a deep dive into the differences between refined carbs and the carbs found in whole plant foods, see [How Carbs Became a Dietary Supervillain](#) by [Sofia Pineda Ochoa, MD](#).

What Is Carb Cycling?

“Carb cycling” refers not to a specific diet but a general strategy of manipulating the amount of carbohydrates consumed in an effort to achieve a desired outcome. The practice has been fairly common among endurance athletes for years, but recently it has drawn attention from the general public as a potential weight-loss strategy.

The general idea is to eat a high-carb diet on training days to increase glycogen stores in the muscles and liver; then restrict carbohydrate intake to burn more fat on rest days. In this way, carb cyclers are attempting to switch between days of “carb burning” and days of “fat burning,” effectively flipping a metabolic switch from one to the other. Some carb-cycling proponents advocate taking one day every week or two to “re-feed” by overeating and exceeding one's daily caloric requirements, in order to overcome the negative effects of being in a caloric deficit.

Periods of “carb loading” can [increase glycogen stores](#) in the liver, providing an extra fuel supply during exercise, which is why it's common for endurance athletes to eat a large carbohydrate-rich meal the night before a competition. However, this approach overlooks an important point: Because glycogen stores in both the liver and muscle are influenced by one's total carbohydrate intake, eating a healthful high-carbohydrate diet every day is a simpler way to ensure that your glycogen stores are maximized on a daily basis, not only in the days prior to a competition.

Short-Term Results, Long-Term Risks

One of the main benefits that people report when carb cycling is changing their body composition, losing fat and gaining muscle. In the short term, low-carb diets can indeed be effective for [weight loss](#) and can lower fasting blood glucose, post-meal blood glucose, and A1C value. However, in the long term, low-carbohydrate diets dramatically *increase* your risk of [insulin resistance](#)—which, more than any other condition, is the strongest predictor of chronic disease, underlying type 2 diabetes, type 1 diabetes, type 1.5 diabetes, gestational diabetes, coronary artery disease, atherosclerosis, cancer, high cholesterol, high blood pressure, obesity, polycystic ovary syndrome (PCOS), peripheral neuropathy, retinopathy, Alzheimer's disease, chronic kidney disease, and fatty liver disease. (We go into extensive detail about the mechanisms behind insulin resistance and chronic diseases

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in our book [Mastering Diabetes](#).)

Additionally, research has found that limiting carb intake can [negatively impact athletic performance](#). And [randomized controlled trials](#) have found that low-fat, high-carbohydrate diets can promote weight loss [as effectively as a low-carbohydrate diet](#), especially when whole carbohydrates [make up the majority](#) of all carbohydrate energy. So in effect, both low-carbohydrate and high-carbohydrate diets can promote weight loss.

The Bottom Line

For healthy individuals who avoid processed foods and maintain an appropriate calorie balance, short periods of carb cycling will likely not pose serious health risks. However, one concern with any low-carb dietary strategy (including carb cycling) is that eating high-fat, high-protein meals can significantly [increase your risk](#) for insulin resistance.

If you're looking to lose weight, reduce your risk of type 2 diabetes and cardiovascular disease, and promote better metabolic health overall, consider centering your diet on whole plant foods.

[World-class athletes](#) find that eating a low-fat, plant-based, whole-food diet is an exceptionally effective way to train and compete, without the need for carbohydrate manipulation.

To learn more about a whole-food, plant-based diet, visit our [Plant-Based Primer](#). For meal-planning support, check out [Forks Meal Planner](#), FOK's easy weekly meal-planning tool to keep you on a healthy plant-based path.