

The Athlete's Kitchen

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Runners Staying Away From Carbs: *Really?*

"I stay away from bagels and bread. They have too many carbs."

"I'm on the Paleo Diet; I don't eat wheat or other grain foods."

"I don't eat pasta dinners any more. I have a big salad instead."

Too many of my clients are "staying away from carbs." One woman, an Ironman triathlete, was trying to train on a diet based on protein powder, almond butter, egg whites, and chicken, with a few spinach salads and apples on the side. No wonder she was struggling to complete her workouts! Her diet was short on wholesome grains that can easily fuel her muscles and help her perform at a high level.

The definition of that "enemy" carbohydrate varies from runner to runner. For some runners, carbs means bagels, bread, and pasta. For others, carbs means any food made with white flour and sugar. For me, carbs includes grains, fruits, vegetables and all forms of sugars and starches. These all digest into glucose, feed the brain, and get stored as glycogen in the muscles. If you eat too few carbs, your muscles will feel needlessly fatigued.

As I mentioned in last month's *Carbohydrate Confusion* article, some popular diet books (including *The Paleo Diet*, *Grain Brain*, and *Wheat Belly*) have convinced many runners to avoid carbohydrate-rich foods. The authors paint the picture that carbs are inflammatory, fattening, and bad for you. Their hype fails to clearly explain that the anti-carb message is not appropriate for athletes who are lean, fit & healthy.

The carbs-are-bad messages are targeted to the masses of overfat, sedentary people who consume excessive amounts of calories, often from sweets and treats. For those unfit (often unhealthy) people, excess carbohydrate can contribute to elevated blood glucose, which triggers the body to secrete extra insulin. Consistently high insulin can be inflammatory and lead to nasty health problems. Yet, well-trained runners can handle carbs with far less insulin than the average American—and without carbs causing "sugar crashes" or weight gain.

Carbs for runners

For runners who routinely train hard 4 to 6 days a week, carbs enhance performance and should be the foundation of each meal. The International Olympic Committee's research-based recommendations for an optimal sports diet include far more carbs than you may realize:

<i>Amount of exercise</i>	<i>Gram carb/lb body wt</i>	<i>Gram carb/kg</i>
Moderate exercise (~1 hour/day)	2.5 to 3	5-7
Endurance exercise (1-3 h/day)	2.5 to 4.5	6-10

Extreme exercise (>4-5 h/day)	3.5 to 5.5	8-12
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So what does this recommendation look like in terms of food? For a 150-lb runner who trains hard an hour a day and remains somewhat active the rest of the day (that is, does more than just sit in front of a computer for 8 hours), this comes to 375 to 450 grams of carbohydrate per day, the equivalent of 1,500 to 1,800 calories of carbs. This is more than a few blueberries, a spinach salad, and a pile of broccoli!

While I suspect many of you are rolling your eyes right now and thinking, “*My body is different from everyone else's. I could never eat that many carbs without getting fat*”, believe it or not, this is an appropriate intake. Here’s how that 150-lb runner might want to evenly distribute carbs throughout the day. Notice how this menu sharply contrasts with the low-carb menus I commonly see: breakfast, protein shake; lunch, salad+chicken; afternoon snack, almonds; dinner, pile of veggies+protein; then evening snacks, often uncontrollable...

TIME	MEAL	CARB (g)	SAMPLE MEAL	(g carb/food item)
6:30	Pre-exercise snack/	40	Clif Bar	(40)
7:30	Post-exercise Breakfast	110	1 cup dry Oatmeal cooked in 1 cup milk extra large (9”) banana drizzle of honey handful (22) almonds	(55) (10) (40) (10) (5)
11:30	Early lunch	125	Turkey sandwich fruit yogurt 4 fig newtons	(40) (30) (55)
3:30	Snack	45	Trail mix (nuts, raisins) latte with lowfat milk	(35) (10)
7:30	Dinner	110	Protein +2 cups Brown Rice 1.5 c cooked carrots	(90) (20)

If these meals look “fattening” to you, please notice the lack of snacking before and after dinner on crackers or sweets. Nor are there food binges every three days when the runner succumbs to devouring the whole bag of cookies. This plan offers a hefty dose of carbs and calories throughout the active part of the athlete's day, when the body needs the fuel.

Replacing grains with fruits and veggies

Grain-phobics, take note: If you have sworn off bagels for breakfast, here's what you need to put in your fruit smoothie to replace the 60 grams of carbohydrates in a 300-calorie Dunkin' Donuts-size bagel:

16 medium strawberries + 1 cup blueberries + 1 medium banana

If you have nixed your lunchtime sandwich and pretzels, here's how many veggies you need in your salad to replace the 62 g carbs from 2 slices (220 calories) wholesome bread and a 100-calorie bag of pretzels:

*24 cherry tomatoes (15 g carb) + 2 whole 7" cucumbers (8 g carb) +
2 whole 8" carrots (14 g carb) + 2 large green peppers (16 g carb) +
5 cups (10-ounce bag) mixed salad greens (9 g carb)*

Alternatively, you could heap a whole cup of chickpeas on top of the greens. Either way, you end up with a pile of food that is time consuming to eat if you are a busy runner.

No more pasta for dinner? To replace those two cups of happiness (1/4 of a 16-oz box dry pasta=84 g carb), you'd need to eat this many veggies to fully refuel your muscles and load them up for the next day's workout:

*3 c cooked zucchini squash sautéed with 1 large onion (45 g carb)
+ 2 c cooked kale (15 g) + 8 spears broccoli (24 g).*

The bottom line

Wholesome grains have a helpful role in a sports diet. While fruits and veggies offer some carbs, you need to eat lots of them to compensate for lack of grains. Your efforts to eat healthfully might end up contributing to a sports diet that fails to support your hard training. Please, fuel wisely!

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