

## **Fiber-rich Carbs**

In this series thus far, we've covered some easy ways you can build up your meals with strength and wellbeing in mind.

- Anchor your plate with protein, remembering that beef, and other animal proteins, are considered "high quality" or "complete" proteins.<sup>1</sup> Aim for 20-30 grams of protein per meal to ensure your athlete is on his or her way to meeting protein needs for the day
- 2. Pair that protein with plants. Half of your athlete's plate should be comprised of fruits and vegetables.

And the third component of a strengthfocused meal is fiber-rich carbohydrates. Carbohydrates are the primary source of fuel used by the body during physical training and competition; they are essential to an athlete's diet.<sup>2</sup> Athletes can get carbohydrates from milk, yogurt, fruit and vegetables, but to pack your plate with fiber, it's important to also include whole grains, starchy vegetables, as well as beans and legumes.

**FUN FACT:** The easiest way to select whole grains is by looking at the ingredient list. Choose products with "whole grain" or "whole wheat" as part of the first ingredient (that tells you that there's more of this whole grain than anything else in that product).<sup>5</sup> Terms like "Multigrain", "wheat", "made with whole grain", "stone ground", or "100% wheat" don't necessarily indicate a 100% whole grain product. Brown rice, popcorn, quinoa, and oatmeal are whole grain foods that may not necessarily say "whole" on the ingredient list.

Adding fiber-rich carbohydrates to your athlete's diet can impact today's performance as well as his or her future health. The fiber found in whole grains and starchy vegetables can have positive effects on cholesterol levels,<sup>6</sup> support metabolic health by blunting blood sugar spikes,<sup>7</sup> promote the growth of "good bacteria" in the gut,<sup>8</sup> and promote feelings of fullness at mealtime.<sup>9</sup>

## WHOLE GRAINS VS REFINED GRAINS

The US Dietary Guidelines suggest that at least half your grains be whole grains<sup>3</sup>. Whole grains include the entire kernel (or seed) of the plant: the bran, germ, and endosperm. These parts of the kernel provide carbohydrates in addition to important vitamins, minerals, antioxidants, fiber and some protein. Refined grains (things like white bread, white rice, and white pasta) typically have the bran and germ removed. This process removes about a quarter of the grain's protein, one-half to two-thirds of many nutrients and almost all the fiber. To make up for these losses, manufacturers usually enrich the flour with a few (but not all) of the nutrients that were lost in the processing.<sup>4</sup>



## **FIBER-RICH CARB FAVORITES**

- Whole-Grain Bread look for at least 5 grams of fiber per serving and "whole" as part of the first ingredient
- Oatmeal a staple for breakfast but can also be blended into a snack-time smoothie or as substitute for breadcrumbs in your meatloaf/meatballs
- Quinoa similar in size/texture to rice, but with more protein and considerably more fiber; prepare it using low-sodium beef broth (rather than water) for additional flavor
- Beans/Legumes canned low-sodium beans and legumes are a quick and easy way to add fiber, carbs, protein, and other nutrients to beef soups, stews, salads, or a beef stir fry
- White Potatoes baked, boiled, pressure cooked, oven-roasted, or air-fried, potatoes don't only provide carbs and fiber; they're rich in magnesium, B vitamins, and potassium too<sup>10</sup>

The combination of protein, colorful fruits and vegetables, and fiber-rich sources of carbohydrate will help you prepare healthy, balanced meals that are bound to boost strength. Future articles will contain even more practical tips and suggestions to use nutrition to your advantage in the pursuit of strength.

## **REFERENCES:**

- 1. Phillips SM, Fugoni VL, 3rd, Heaney RP, Nicklas TA, Slavin JL, Weavver CM. Commonly consumed protein foods contribute to nutrient intake, diet quality and nutrient adequacy. Am J Clin Nutr. 2015;101(6):1346s-1352s.
- 2. Kanter M. High Quality Carbohydrates and Physical Performance. Nutr Today. 2018;53(1):35–39.
- United States. Department of Health and Human Services. Unites States. Department of Agriculture. United States. Dietary Guidelines Advisory committee. Dietary guidelines for Americans, 2020-2025. Ninth edition. Washington, D.C.: U.S. Department of Health and Human Services and U.S. Department of Agriculture; 2020.
- 4. Old Ways Whole Grains Council. What's a Whole Grain? What's a Refined Grain?. *https://wholegrainscouncil.org/whole-grains-101/whats-whole-grain-refined-grain#:~:text=All%20grains%20start%20life%20as%20whole%20grains&text=A%20grain%20is%20considered%20to,was%20growing%20in%20the%20%EF%AC%81elds*. Accessed 4/6/2022.
- 5. Old Ways Whole Grains Council. Identifying Whole Grains. *https://wholegrainscouncil.org/whole-grains-101/identifying-whole-grain-products#:*<a href="https://www.itext=The%20100%25%20Stamp%20assures%20you,whole%20grain%20per%20labeled%20serving">https://www.itext=The%20100%25%20Stamp%20assures%20you,whole%20grain%20per%20labeled%20serving</a>. Accessed 4/6/2022.
- 6. Grundy SM, Cleeman JL, Merz CNB, et al. Implications of Recent Clinical Trials for the National Cholesterol Education Program Adult Treatment Panel III Guidelines. Circulation. 2004;110(2):227-239.
- 7. Silva FM, Kramer CK, de Almeida JC, Steemburgo T, Gross JL, Azevedo MJ. Fiber intake and glycemic control in patients with type 2 diabetes mellitus: a systematic review with meta-analysis of randomized controlled trials. Nutr Rev. 2013;71(12):790-802.
- 8. Markowiak P, Slizewski K. Effects of Probiotics, Prebiotics, and Synbiotics on Human Health. Nutrients. 2017;9(9).
- 9. Jenkins DJ, Jenkins AL. Dietary fiber and the glycemic response. Proc Soc Exp Biol Med. 1985; 180(3):422-431.
- 10. US Department of Agriculture. Agricultural Research Service, Nutrient Data Laboratory. USDA National Nutrient Database for Standard Reference, Legacy. Version Current: *https://fdc.nal.usda.gov/fdc-app.html#/*. Accessed 4/6/2022.

For more information on Beef as a source of strength, scan this code.

