

PLANT-BASED PROTEIN FOR PERFORMANCE

You need to be in the know when it comes to the quality, quantity and distribution of your athlete's daily protein intake. Athletes eating plant-based protein must pay attention to optimizing protein intake at each meal. Adequate amounts of the branched-chain amino acids (BCAAs) — especially leucine that's most involved in muscle protein synthesis — are critical.¹

Certainly, plant-based athletes can meet their daily protein requirements. However, serving for serving, animal-based protein sources contain higher levels of leucine,¹ so work with your athletes to maximize the volume of plant-based foods required to meet daily protein needs with the tips below.



WHAT'S ENTICING ABOUT PROTEIN²

NUTRIENT	QUANTITY	SOURCES	BENEFITS	STRENGTH OF EVIDENCE
Protein	0.13 g/lb. post-training 0.13 g/lb. across meals	High leucine sources: whey/milk High-quality animal and plant protein sources	Muscle protein synthesis Muscle repair and remodeling	Good

PROTEIN CONTENTS OF PLANT FOODS^{3,4}

FOOD	PROTEIN (grams)	CALORIES
Quinoa, 1 Cup Cooked	8	222
Whole Wheat Bread, 1 Medium Slice	4	91
Broccoli Rabe, 1 Cup Cooked	5	60
Brown Rice, 1 Cup	4	216
Potato, White, Skin-On, Medium (5.3 oz. / 148 g)	3	110
Beans, 1 Cup Cooked	13	210
Lentils, 1 Cup Cooked	18	230
Tofu, Extra Firm, 1/2 Block	22	207
Hummus, 1/3 Cup	5	175
Edamame, 1 Cup	22	254
Oats, 1/2 Cup Dry	5	150
Almonds, 1 Cup	30	825
Peanuts, 1/3 Cup	11.4	281
Peanut Butter, 1 Tablespoon	7	90
Hemp Seeds, 1/4 Cup	3	227
Sunflower Seeds, 1/3 Cup	8.2	245

WHAT DO PLANT-BASED MEALS OFFER YOUR ATHLETES?

- + AFFORDABILITY
- + SHELF STABILITY
- + PALATABILITY
- + VERSATILITY
- + AVAILABILITY
- + MINIMAL WASTE

SPOTLIGHT ON POTATOES

Choose russet, white, red, yellow, blue or purple potatoes in a range of sizes. They can be baked, boiled, grilled, fried, mashed or roasted. Potatoes also have a place on the plate at all meals and snacks.

One medium-size (5.3 ounce) potato with skin-on provides 3 grams of plant-based protein.

HELPING YOUR ATHLETES WITH PLANT-BASED: FAMILIARITY RULES

FAMILIAR RECIPE

BURGER

STIR-FRY

SMOOTHIE

CHILI

TACO

OMELET

PLANT-BASED OPTION

- ▶ Think blended burgers or plant-based burgers.
- ▶ Serve veggies and beans over rice or noodles.
- ▶ Blend fruits and/or vegetables (i.e. potatoes) with nut butters and ice.
- ▶ Add more beans and serve over different potato preparations (i.e. baked, hash browns, mashed).
- ▶ Make with potatoes, add extra veggies, salsa and beans.
- ▶ Prepare with potatoes and other vegetables. Can also be made as a frittata.



VISIT [POTATOESFUELPERFORMANCE.COM](https://www.potatoesfuelperformance.com) FOR MORE MEAL IDEAS!

As a sports nutrition professional working with extremely active individuals, it's important to keep in mind that the nutrient requirements of your athletes may vary from individual to individual. Having individualized fueling and recovery plans in place can ensure your athletes meet their nutrition and health goals.

The guidance provided in this handout should not be generalized to other populations, skill levels, sport types or training amounts and the individual's nutrition and health goals should always be considered.

1. Thomas DT, Erdman KA, Burke LM. Position of the Academy of Nutrition and Dietetics, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *Journal of the Academy of Nutrition and Dietetics*. 2016;116(3):501-528.
2. Heaton LE, Davis JK, Rawson ES, et al. Selected in-season nutritional strategies to enhance recovery for team sport athletes: A practical overview. *Sports Med*. 2017;47(11):2201-2218.
3. USDA, ARS. FoodData Central. <https://fdc.nal.usda.gov/index.html>. Updated March 2019. Accessed November 2019.
4. FDA. FDA Top 20 Raw Vegetables. <https://www.fda.gov/Food/LabelingNutrition/ucm114222.htm>. Updated December 2018. Accessed November 2019.

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