

Running on plants: A Culinary Medicine approach for athletes

An optimal diet for maximizing athletic performance in endurance sports should do the following:

- Provide steady energy
- Enable efficient blood flow
- Promote post-exercise recovery and
- Improve body composition.

A diet comprised of whole, plant-based foods can accomplish all these goals, in addition to preventing chronic disease. Let's look at each of these positive effects. And all the recipes mentioned below can be downloaded here. They are delicious, easy and affordable so you can try them at home.

Provide steady energy

The primary fuel source for exercising and training comes from blood glucose and glycogen stored in muscle tissue. Complex carbohydrates in the form of beans, legumes, whole grains and root vegetables provide a steady, nutrient-rich source of glucose and a substrate to replenish muscle glycogen stores. Daily consumption of whole, plant-based complex carbohydrates also provides dietary fiber, which is essential to maintaining gut and cardiovascular health. Check out the Loaded Baked Sweet Potatoes and Fruit and Nut Oatmeal recipes.

Enable efficient blood flow

Good blood flow to and from exercising muscles, providing oxygen and then removing waste are all critical to athletic performance. Blood viscosity (thickness), as well as blood vessel elasticity (flexibility) are both influenced by dietary choices. The saturated fat found in animal meats, cheese and tropical oils cause blood to become thicker while making vessels less flexible. More viscous blood and less elastic vessels impair our ability to exercise and compete at a high level. To avoid this dietary pitfall, replace saturated fats with unsaturated plant fats. Check out the recipes for Spiced Toasted Almonds and Greek Nachos with Herbed Tahini Sauce.

Promote post-exercise recovery

Endurance sports and/or high intensity training can precipitate widespread inflammation and oxidative stress. Eating antioxidant-rich foods high in vitamins C & E, beta-carotene and nitrates, such as kiwifruit, nuts/seeds, butternut squash, green leafy vegetables and/or beets, will scavenge free radicals and dampen inflammatory effects in muscles and joints. As a result, you will feel better and recover faster. You can reduce your muscle soreness by enjoying a Tropical Green Smoothie for breakfast. Also, check out the recipe for Butternut Squash and White Bean Quesadilla. Add a green salad for a simple dinner.

Improve body composition

Increasing lean muscle mass and reducing visceral fat (or fat around internal organs) improves aerobic capacity and endurance. Achieving a leaner body composition is possible when consuming whole, plant-based foods, which are naturally low in calorie density. This approach allows you to enjoy the same

amount of food while consuming fewer calories. Calorie density is a powerful way to improve the quality of your diet while promoting a healthy and lean body composition. Check out the recipes for nutrient-packed, low-calorie Balsamic Marinated Mushrooms as well as Sautéed Swiss Chard.

To learn more about optimal nutrition for athletes, register for one of <u>the Spectrum Health Culinary Medicine classes</u>. And don't forget to download the recipes <u>here</u>.

Kristi Artz is a board-certified emergency medicine physician, certified in culinary medicine and plant-based nutrition.