

# Sports Shorts

## Nutrition for Athletes with Dietary Restrictions

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*For Pediatricians*

Athletes are always looking for an edge to put them ahead of the competition. Young athletes train long hours to optimize their performance, but often fail to recognize the role proper nutrition plays within their workout plan. Additional benefits of a healthy eating plan include injury prevention, muscle recovery, improved stamina, and heightened attention span.

Some athletes take to fad diets, plant based alternatives, food group elimination, or pyramid schemes as their "answer" for improved performance. For athletes with food allergies and intolerances, concern arises for hindered performance. Regardless of whether an athlete has a medical condition or has electively opted to implement an alternative diet, healthy eating has to be a priority.

### Food allergies

According to FARE (Food Allergy Research & Education), researchers estimate up to 15 million Americans have food allergies, including 5.9 million children under age 18, or 1 in 13 children. The 8 most common food allergies are milk, egg, peanut, tree nuts, wheat, soy, fish and shellfish. Individual reactions to food allergies may vary, yet the importance of avoiding exposure to allergens and cross contamination is crucial. Athletes with multiple food allergies are at risk for nutritional deficiencies, food boredom, inadequate calorie intake, and poor growth.

### Popular diet trends and their associated nutritional risks

- **Plant Based Diet:** varying definitions including lacto-ovo (eats eggs and dairy), ovo-(eats eggs), pescatarian (will eat fish), and vegan (no animal based food items at all). The more restrictive an athlete is with-

out proper addition of plant-based protein and iron fortified foods, the more concern is heightened for low iron and protein, namely the nine essential amino acids.

- **Paleo Diet:** discourages refined processed food items, white sugar, white flour, whole grains, legumes, and dairy. Concern for inadequate carbohydrate and calcium intake if amount of vegetables, fruit, and calcium fortified foods are not increased.
- **Reduced Carbohydrate Diets (Ketogenic, Zone, Atkins):** eating very low amounts of carbohydrate triggers fat oxidation and utilization. Concern for not only inadequate carbohydrate intake, but overall calorie consumption. Many athletes use this diet as means for rapid weight loss which can also result in reduction of lean muscle.
- **Intermittent Fasting:** cycles between periods of eating and fasting. This trend does not include food group eliminations, but it does pose a risk for inadequate calorie intake.

### Is a young athlete at risk if they have a food allergy or dietary restriction?

This is a valid concern. Answers may vary based on the unique needs for each individual athlete. In general, most athletes should be able to consume a balanced diet despite their dietary preferences or restrictions. Empower athletes with the following strategies to help them eat a wide variety of foods within their limitations:

Actively engage them in meal and snack preparation. Children and adolescents are more likely to consume food they prepared with less fear or reservation.

Encourage families to explore new foods together. Try taking a cooking class and discover fresh techniques to prepare different foods!

Compared to children who do not have a medical condition, children with food allergies are twice as likely to be bullied. Make sure team meals are across the board allergy friendly and not drawing too much attention to athletes with a severe allergy, intolerance, or restriction.

Help young athletes notice positive changes in their performance when they fuel using healthful choices and proper meal timing strategies- especially when they are tempted to skip fueling opportunities in a new environment.

Pack a cooler and totes with a wide variety of meal & snack options.

Look at the drive thru menu ahead of time. This will ideally help alleviate fear with making a wrong choice or the risk of not eating at all.

### What are the next steps?

Regardless of dietary preferences or restrictions, try to focus on real food first instead of supplements or sports fuels.

Make sure diet modifications can fit the family's lifestyle. Consider the reasons families are changing and make certain athletes are seeking expert advice versus general information found online.

If an athlete is experiencing fatigue, syncopal episodes, weight loss, or persistent headaches they might be under fueling for their level of activity. Schedule an appointment with a pediatrician or local sports dietitian at <https://www.scandpg.org/search-rd/>.