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DEFINING THE STANDARD



# FUELING PERFORMANCE:

## SPORTS NUTRITION CONSIDERATIONS IN SCHOOLS

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# One important element of athletic performance is often overlooked: **food**.

There is substantial evidence touting the academic, social, psychological, and health benefits of sports participation.<sup>1</sup> Athletics can lead to a college scholarship, launch a professional or Olympic sports career, foster personal development and health, and provide socialization and a sense of belonging. The benefits student athletes experience cannot be overstated.

A robust athletics program can set a school apart from its competition, strengthening recruitment, admissions, and retention efforts. Schools invest significant sums to build and maintain training facilities and equipment, as well as employ skilled athletic directors, coaches, and trainers. Yet one important element of athletic performance is often overlooked: food.



Nutrition to support physical performance — commonly known as **sports nutrition** — is the science explaining how food influences and improves athletic performance. Proper nutrition is a vital factor in human performance. In a joint position statement, the Academy of Nutrition and Dietetics (formerly known as the American Dietetic Association), the Dietitians of Canada, and the American College of Sports Medicine acknowledged **“the performance of, and recovery from, sporting activities are enhanced by well-chosen nutrition strategies.”**<sup>2</sup> It is even more critical for adolescents who participate in athletics to fuel development as well as activity.<sup>3</sup>

**Most athletes lack nutrition knowledge<sup>4</sup>** and struggle to access evidence-based nutrition information. A study conducted on NCAA Division I, II, and III collegiate athletes found that fewer than 10% had adequate nutrition knowledge.<sup>4</sup>



# Lack of evidence-based nutrition resources can put **student athletes at risk.**



One such risk is **underfueling**, which negatively impacts performance.<sup>2</sup> Competitive adolescent athletes need to increase their nutrient intake to meet the demands of training sessions,<sup>1</sup> especially on intense training and game days.<sup>5</sup> Without proper nutrition, they will not have adequate energy available to support normal growth and development, much less physical demands.<sup>3,6</sup> Studies show that athletes tend to eat the same balance of macronutrients (carbohydrate, protein, and fat) every day, despite the evidence that consuming more carbohydrates is essential to fuel intense training and game days.<sup>5</sup> Without the additional carbohydrates or adequate intake of other macronutrients, they risk developing micronutrient deficiencies, which may have long-standing consequences.<sup>7</sup> For example, insufficient intake of vitamin D and calcium impacts bone health, increasing the risk of stress fractures and osteoporosis.<sup>7</sup>

Another risk is **supplement usage**, which is surprisingly common. Research shows 82.2% of adolescent athletes report using at least one supplement to enhance performance.<sup>8</sup> Over 35% of adolescent athletes feel using a supplement is important to athletic performance, despite 72.1% being aware of the associated health risks.<sup>8</sup> Since supplements are not regulated or tested, usage puts athletes at risk of inadvertent doping from contamination,<sup>8</sup> which can disqualify them from competition. Supplement usage is a risk factor for future illicit substance use.<sup>8</sup>

**Disordered eating**, which can lead to eating disorders and affect long-term health, is also a concern for adolescent athletes. Athletes, especially those competing in sports that emphasize leanness,<sup>6</sup> are more likely to experience eating disorders than their peers that do not participate in athletics.<sup>7</sup> They are vulnerable to fad diets and nutrition misinformation from the internet, social media, magazines, TV, and even coaches,<sup>8</sup> so careful guidance is needed.



# How can schools help?

There are three key approaches.

**Ensure athletes have access to research-based information** that will help them fuel their bodies for optimal performance. Start by assessing the know-how of your athletic directors, trainers, and athletics department staff. If there is a gap in nutrition knowledge, a school can elevate that competency by providing continuing education for athletics staff or inviting a qualified guest lecturer at the beginning of each season to speak with the staff and potentially the athletes.<sup>8</sup> Support the athletics staff by contracting with a registered dietitian (RD) that specializes in sports nutrition or partnering with a local or professional sports team.

**Provide a supportive dining services program.** Lunchtime is an opportunity for student athletes to fuel up for practices, training sessions, or games, which are often scheduled in the afternoons and early evenings. It is essential to offer a variety of options, as athletes' needs differ while in season, during the offseason, and on training and game days. Beyond lunch, it is important that student athletes have access to pre-and post-activity snacks to refuel and recover, as well as grab-and-go meal options to keep them nourished when travel is required for competitions. Meal selections should be **inclusive**, considering food allergies, medical needs, and other dietary practices. If these criteria are not currently addressed, schools can **consult with an RD** for guidance or contract with a knowledgeable food service provider to bridge the gap.

**Aid student athletes' knowledge** and ease the burden on athletics department staff with a sports nutrition program like SAGE's Performance Spotlight® program. Created by RDs, Performance Spotlight® incorporates science-backed recommendations from leading sports organizations and sports nutrition research. It offers **mealtime guidance** designed to provide the right foods and nutrients at appropriate times to help athletes fuel for, hydrate during, and recover from physical activity. The program also includes house-made sports bars, sports drinks, and protein smoothies with simple, whole ingredients and no nuts. Performance Spotlight® is supported by educational infographics and includes recommendations for fueling outside of mealtime. Unlike a traditional training table, athletes enjoy many choices at mealtimes, with Performance Spotlight® picks highlighted throughout the server. Offerings are inclusive to accommodate food allergies and other dietary needs and preferences yet balanced to encompass all food groups to encourage healthy eating habits.



## In summary,

athletics programs will remain a priority for schools, and the focus on sports nutrition will only continue to grow as athletes experience the benefits of proper fueling. If athletics are important to your school, it is crucial to rely on professionals who stay current on the latest research, reference credible resources, and promote adequate fueling. Employing knowledgeable staff ensures student athletes have access to appropriate nutrition information and support. If that is not feasible, well-informed food service providers like SAGE can be a supportive partner in fueling athletic excellence.

# NOTES

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