

Daily Nutrition Recommendations

to Optimize Sports Performance in High School Athletes

Important Terms

- **Glycogen** – a form of energy in the body stored in the muscles.
- **Whey Protein** – powder that carries essential amino acids to aid in muscle recovery that derived from dairy by-products.*
- **Meal** – does not mean a sit down 3-course dinner. Smaller meals more frequently can prevent a dip in low blood sugar

What Should I Choose?

- Picking a protein should be priority over carbohydrates or fat.
- If limited protein is available, carbohydrates should be chosen over fatty foods like pizza, chips or fast food.

Pre-Workout Meal	During Workout Snack	Post-Workout Meal
30 minutes prior to workout As far as 4 hours before workout.	During workout nutrition is important for workouts lasting more than 60 minutes.	Important to replenish lost glycogen. Keep fat intake minimal.
Avoid SLOW digesting carbs such as vegetables and grains because they can cause body to feel heavy or sluggish. Opt for a banana to help top off the muscles glycogen.	Intake of fast acting carbs (30-40g per hour of activity). Intake of fast acting protein (15 g per hour of activity). Whey Protein + Gatorade to limit GI issues.	Choose fast protein sources such as whey protein*, low sugar chocolate milk, egg whites or grilled chicken. Choose simple carbs such as white rice, cereal and fruit.

Remember: Be mindful of the body's digestion routine. Ingestion of large quantities or the wrong foods will increase gastrointestinal discomfort and further decrease individual athletic performance.

*Do not use whey protein or consult your physician if you have an allergy or sensitivity to dairy.

How Much Daily?

0.8-1.2 grams/pound (g/lb) of body weight for protein

- Example: 200 lb. male: $200 \times .8g = 160g$ of protein*
- Example: 200 lb. male: $200 \times 1.2g = 240g$ of protein*
- For reference: One chicken breast is about 50 g of protein

1.5 g/lb of body weight for carbohydrates (team sports)

- Example: 200 lb. man: $200 \times 1.5 = 300$ grams of carbohydrates *
- For reference: One cup of cooked brown rice is about 50 g of carbohydrates
- For reference: One large banana is about 25 g of carbohydrates

1.5-3.0 g/lb of body weight for carbohydrates (endurance athletes)

- Example: 120 lb. female: $120 \times 3 = 360$ grams of carbohydrates*
- For reference: One large baked potato is about 60 g of carbohydrates
- For reference: One cup of steamed broccoli is about 6 g of carbohydrates

0.3 g/lb of body weight minimum for fats

- Example: 120 lb. female: $120 \times .3 = 36$ grams of fat at minimum*
- For reference: Half of an avocado is about 18 g of fats
- For reference: 2 tbsp. of ranch dressing is about 13 g of fats and 2 tbsp. of creamy peanut butter is about 16 g of fats

* These examples are simple recommendations and may vary depending on activity/sport/goals of the athlete.

Tips During the School Day

Drink lots of water with a mixture of one, low-sugar sports drink.

Have granola bars, fruit or peanut butter and jelly sandwiches in backpack for in between classes, especially if student has the early lunch.

Yogurt, chicken, whole wheat pasta, protein packed salads and deli sandwich are all good lunch options to purchase at school or bring from home.



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