

Sport-Specific Nutrition: Football

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Football is a game of strength and speed dominated by short bursts of high-intensity exercise (1). This type of sport requires immediate fuel (carbohydrate) availability for muscle strength and power while also providing enough protein in the diet to build muscle. Players must eat to provide their body appropriate fuel whether they are lean and quick receivers or power-driven linemen.

Nutrition Recommendations for Football Players • Eat six times per day.

To keep energy levels high and to ensure adequate calorie intake, eating six times per day is ideal. Eat a combination of carbohydrates and lean protein. An intake of 5-7 grams of carbohydrate per kilogram of body weight per day (430-600 grams) should cover most athletes. A protein intake of about 1.5 grams per kilogram of body weight per day (120-130 grams) is an ideal level of protein. Keep in mind these are general scientific guidelines. It is best to work with a sports nutritionist to determine your exact nutrition requirements.

• Eat "good" fats.

With high energy requirements, it is easy to feel as though you can eat whatever you want. For optimal performance, it is important that you still limit the amount of fried food, fast food and greasy pizza you consume. Greasy fatty foods will slow speed and recovery. Focus more on getting your fats from peanut butter or other nut butters, hummus, plain peanuts, almonds, cashews or other nuts, fish, olive oil-based salad dressings and spreads. Players engaged in the full 48 minutes of a game will put a significant drain on their muscle glycogen (fuel) stores. To promote rapid recovery and muscle growth/ repair, consume a carbohydrate and protein rich snack within 30 minutes after play. Low-fat chocolate milk, ready to consume nutritional drinks such as Ensure® or a sports drink with peanut butter crackers are good combinations. For a more complete list of ideas see the ICYF "On the Go Snacks for Athletes" guide.

• Eat protein AND carbohydrate to gain muscle

If your goal is to gain muscle mass, it is critical that you increase your overall energy intake. Some high school football players may need over 4000 calories a day! A proper balance of carbohydrate, protein and fat is still required. High protein diets do not build muscle faster and should be avoided. Research shows eating more than 1 gram of protein per pound of bodyweight can result in dehydration, kidney damage and poor performance. Too much protein and not enough carbohydrate will cause your body to utilize muscle reserves for energy instead of building bulk. Consuming adequate carbohydrates will allow readily available fuel for your muscles to help maintain and increase muscle mass. In summary, do NOT follow a reduced carbohydrate diet to gain muscle. Good sources of carbohydrate to facilitate muscle development can be found on the ICYF "Athlete Shopping List" guide.

• Eat within 30 minutes of competition and training to speed recovery time.

• Be cautious of supplements.

Supplements are not a substitute for adequate eating. The supplement industry is not well regulated and allows supplements to be on store shelves until proven harmful.

Information contained in this document is not intended for medical advice.



This means there are many supplements out there that could hurt you and your ability to play football. To read more about supplements that can help performance and supplements that may hinder, see the ICYF "The Scoop on Supplements" guide.

Stay hydrated

Hydration before, during and after exercise should be well planned. Dehydration, considered a 2-3% loss in body weight, can reduce strength and endurance. That is the equivalent of a 180-pound player losing 3.6 pounds. At this level of fluid loss you could expect to notice both strength and speed declines. To avoid dehydration, drink fluids before, during and after training and events.

To Hydrate Properly

-start hydrating about 4 hours before practice or competitions so that you are able to excrete any excess fluid as urine before you compete.

-carry a water bottle with you during the day to help achieve your fluid goals. One sip of water is equal to about one ounce. -aim for 4-6 ounces fluid per 15 minutes during activity. -have a sports drink instead of water if your activity lasts more than 60 minutes.

-for every pound lost during an event, drink 24 ounces fluid to avoid dehydration. Increased fluid intake increases gastric emptying to aid in hydration.(3)

Additional suggestions for football players

-Ensure shopping can be done regularly so the pantry and refrigerator are always well stocked with easy meal and snack options. For a complete shopping list see the ICYF "Shopping List for Athletes" guide.

-Make extra meals on the weekends to reheat during the week when training or competitions finish late.

-Make sure meals or snack before training and games are familiar to the athlete, high in carbohydrate and low in fiber and fat. This blend of macronutrients will facilitate gastric emptying and fuel utilization.

References

1. Australian Government. Australian Sports Commission. <u>www.ausport.gov.au</u> August 2013.

3. Position of the American Dietetic Association, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and Athletic Performance. Journal of the American Dietetic Association, March 2009, Volume 109 Number 3 p. 509-522.

^{2.} Dunford, Marie. Sports Nutrition. A Practical Manual for Professionals. 4th Edition. American Dietetic Association, 2006.