

Our young players not only need optimal nutrition for fuelling and recovery from training, but they also must meet energy demands of growth and maturation. Help your kids refuel with the nutrients they need by focusing on family mealtimes before and after practice or game day.

- Focus on carbs for energy. Choose whole-grain bread, crackers, cereals and potatoes for lasting energy.
- Spread out protein foods. Active bodies need protein to support growth and build and repair hardworking muscles. Young players should spread protein foods throughout the day, having some at each meal and with most snacks, such as eggs and whole-grain toast with fruit for breakfast or a sandwich of whole-grain bread with veggies for lunch. Plant-based protein foods like tofu and beans also are great choices.
- Use caution with fatty foods. Fatty foods slow digestion, which is not ideal for a player facing a competition. Greasy, fried foods and fatty desserts are filling and may leave your player feeling tired and sluggish. Skip the fries or pizza and keep fat content on the light side.
- Eat with food safety in mind. Nothing will slow down your player more than food poisoning having stomach cramps, nausea, vomiting or diarrhoea after eating. Make sure you store snacks at proper temperatures to prevent spoilage. Keep cheese, yogurt, meat, eggs and salads in a refrigerator or cooler. Shelf-stable items such as nuts, granola bars and whole fruit can be tossed into a sports bag without a problem.
- Flow with fluids. Good hydration should begin early in the day before kids even set foot on the playing field. Stay hydrated by drinking plenty of water during the day leading up to a game, especially in the two to three hours before game time. Continue to drink during the game (about 1/2 cup every 15 minutes) and afterward to rehydrate after sweat loss. Water should still be kids' go-to drink for exercise that's under 60 minutes. Training sessions over an hour may require a good drink to replace electrolytes lost through heavy sweating.
- Timing is everything. When you eat is just as important as what you eat. Your body needs two to three hours to digest a regular meal such as breakfast or lunch before an event, while a small snack such as a granola bar can be eaten 30 minutes to an hour in advance. Load up at meals but don't overeat, and keep snacks light as you get closer to game time.
- Topping it off with milk. In addition to water, fat-free and low-fat milk also are smart ways to help young player meet their fluid needs. But that's not all. Just one cup of milk packs 15 to 24 percent of the protein most school-aged kids need in a day. Italso delivers important nutrients of which most young athletes don't get enough, such as calcium, which is critical for building strong bones, transmitting nerve impulses, and helping muscles contract, as well as potassium for fluid balance.

Eating right on gameday is your player's secret weapon for top-notch performance. Here's a sample game day nutrition plan:

Pre-game breakfast. Gather together the family for a pre-game breakfast about three hours before the event. Serve sliced and lightly grilled potatoes paired with scrambled eggs and fruit such as berries along with calcium-fortified orange juice or fat-free milk for a nutritious pre-game meal.

- Don't light-load or skip lunch. Many student athletes compete after school making lunch an essential fuel source. Lunch should be hearty and represent as many food groups as possible, including whole grains, protein, fruit, vegetables and low-fat dairy.
- During the game/practice. Make sure your child keeps hydrated before, during and after practices and competitions. Dehydration results when your child player fails to adequately replace fluid lost through sweating. Dehydration that exceeds 2 percent body weight loss harms exercise performance, so make sure your child is well hydrated throughout the game with small amounts of water. Remind your child to replace fluid losses after exercise with lots of water. Also look to foods such as bananas, potatoes and fat-free or low-fat yogurt or milk. They contain potassium and carbohydrates which are important to replenish after exercise.
- Post-practice or afternoon game snack. The hours after practice or a weekday competition may necessitate snacking before your family dinner. Make sure to have pre-prepared snacks ready when your kids arrive home hungry from a tough afterschool practice or game. This can include sliced fresh fruit, low-fat yogurt and smoothies.
- Post-game family dinner. For a tasty and filling post-game family dinner, include all five food groups protein, grains, vegetables, fruit and dairy. Serve baked or broiled lean cuts of meat such as chicken breast, salmon or tuna. Include whole grains, for example, whole-wheat pasta with a low-fat tomato or cheese sauce. Toss in vegetables or include a side green salad. Then, complete your meal with fruit for dessert, such as baked apples or pears accompanied by a glass of low-fat or fat-free milk. Or create an instant yogurt parfait with layers of low-fat vanilla yogurt, fresh, frozen or canned fruit, and crunchy whole-grain cereal.

Diet & Nutrition In Sportsmen

INTRODUCTION

Balanced diet

It is a diet that contains an adequate quantity of the nutrients that we require in a day.

Nutrient

It is a source of nourishment, a component of food, for instance, carbohydrates, proteins, fats, vitamins, minerals, fibers, and water.

- Macronutrients are nutrients we need in relatively large quantities.
- Micronutrients are nutrients we need in relatively small quantities.

Consequences of Poor Eating

- Fatigue/sub-optimal performance
- Poor growth
- Loss of muscle mass/bone density
- Increased risk of illness and injury

Carbohydrate and Exercise

High-carbohydrate diets

- Increase glycogen stores (carbs stored in muscles as energy source). When you exercise, your body changes glycogen into energy.
- Extend endurance

Carbohydrate loading

- 60-70% of calories as carbohydrate(including breads, cereals, chapatis, fruits etc, to achieve maximum carbohydrate storage)
- Decrease exercise intensity prior to competition

Go Easy on Fat

- Major fuel source for endurance activities. For long events, your body use fat for energy when carbohydrate sources run low.
- High-fat diet not needed : Mostly we get all the needed fat eating unsaturated fat from foods such as nuts, avocados, olive oils, and fatty fish like salmon and tuna.

Recommendations

- Moderate fat intake.
- Limit saturated fat intake
- Avoid trans fat as much as possible.
- Avoid any fatty food on the day of an event, since they can upset your stomach.

Drink Fluids Early and Often

- Intense exercise, especially in hot weather, can quickly leave you dehydrated. Dehydration, in turn, can hurt your performance and, in extreme cases, threaten your life.
- "All high-intensity athletes should drink fluids early and often,". "And don't wait until you're thirsty. By the time you feel parched, you may be seriously dehydrated."
- "One way to monitor hydration is to keep an eye on the color of your urine," A pale yellow color means you're getting enough fluid. Bright yellow or dark urine means you're falling short.
- Because intense exercise makes you lose fluid quickly, it's a good idea to drink fluids before as well as during an event.
- During a heavy event, one should drink 150 ml of fluid every 10 or 15 minutes



Nutrition for sportsmen

Physical fitness

- Cardiorespiratory fitness
- Muscular endurance
- Flexibility

When you exercise hard for 90 minutes or more, especially if you're doing something at high intensity that takes a lot of endurance, you need a diet that can help you perform at your peak and recover quickly afterward.

Muscular strength

Body composition

Optimal Nutrition Goals for Good Performance

- Consume adequate energy and nutrients
- Maintain appropriate body composition
- Promote optimal recovery from training
- Maintain hydration status

Carbohydrate and Exercise

- On the day of a big event, eat your last meal 3 to 4 hours before exercising, to give your stomach time to empty.
- Avoid eating sugary or starchy foods within 30 minutes of starting an activity; they can speed up dehydration.
- When you need quick energy during long exercise sessions, replenish carbs, minerals, and water. Many athletes prefer sports bars, sports drinks, or gels, since they're so convenient. But fruits and fruit juices are the excellent choices.
- Reload on carbohydrates after intensive exercise, too. "Since you don't need quick energy, it's best to choose less refined carbohydrates" such as a whole-grain cereals with veggies, which provide both carbohydrates and a rich array of nutrients.

Get Enough Protein, But Not Too Much

- Protein doesn't provide a lot of fuel for energy. But you need it to maintain your muscles, promotes growth and help in maintaining healthy immune system.
- Know what you need A sportsman may need up to 1.4 to 1.7 per kilogram of body weight.
- Favor foods Getting too much protein can put a strain on your kidneys. Instead of protein supplements, eat high-quality protein, such as lean meats, fish, poultry, nuts, beans, eggs, pulses/sprouts or milk.
- Drink up "Milk is one of the best foods for recovery after an event, because it provides a good balance of protein and carbohydrates,". Milk also has both casein and whey protein. The combination may be particularly helpful for sportsman. Research shows that whey protein is absorbed quickly, which can help speed recovery immediately after an event. Casein is digested more slowly, helping to ensure long-term recovery of muscle after a gruelling event. Milk also has calcium, which is important for maintaining strong bones.

Vitamins, Minerals and Performance

Vitamin B

- Needed for energy metabolism
- Choose variety of whole grains,
- fruits, and vegetables Vitamin D
- · Help absorb calcium
- Calcium
- Needed for normal muscle function and strong bones
- Low-fat dairy products
- Iron Needed for oxygen delivery and energy
- - Lean red meats, vegetables, and enriched grains

Sweating removes both fluids and electrolytes. Electrolytes help transmit nerve signals in your body. To replenish them, reach for sports drinks. If you're also losing a lot of fluid as you sweat, dilute sports drinks with equal amounts of water to get the best balance of fluid and electrolytes.

Dt. Asmita has done M.Sc in Dietetics and Food Science Management, Certificate Course in Nutrition and Child Care from IGNOU, Delhi and Post Graduate Certificate Course in Diabetes Education from International Diabetes Federation (USA).

She has expertise in Weight Loss, Weight Gain, Diabetes Diet Management, Therapeutic Programs, Cholesterol Management and Healthy Heart Diet. She provides diet plans for Overweight and Underweight Kids and Teenagers, for Anaemia, Hypertension and Kidney Care and for Boosting Immunity. Her holistic view of nutrition and personalized sessions with DCA trainees give her an edge as a health and weight management professional.

Asmita works with our players and their parents to provide guidance and helps them achieve their fitness goals with the help of a balanced diet. She has also been creating awareness about healthy diet, customized meal plans to DCA trainees.

She helps each and every player with customized diet charts as per individual's requirement. Asmita give importance to nutritional diet that not only helps players stay fit, but keeps them healthy considering their specific requirements which vary from person to person. Dronacharya Cricket Academy is proud to be associated with Dt. Asmita

production Athletes have higher losses

Other trace minerals

- Copper and zinc
- Avoid high-dose supplements