PHYSICAL ACTIVITY AND NUTRITION FAQS

1. **What should I eat right before working out?**
   a. Since carbohydrates are the primary source of fuel for exercise, eating a meal with complex carbohydrates (whole grains, fruits) 3-6 hours before exercising is beneficial. If you only have 1-2 hours before exercising, eat "mini meal" with complex carbohydrates. Avoid fats since they take a long time to digest and can make you tired and feeling full while exercising. Also avoid sugary foods like soft drinks and candy—these will give you quick energy but it won't last long.

2. **What should I eat and when after working out?**
   a. You need food after a game/practice to replace the carbohydrate burned and the electrolytes lost. Electrolytes are found in nearly all foods, so you don't need a special drink to get those. Your body will replenish its energy stores (glycogen) the best if you eat a food with carbohydrates and some protein after working out like a half of a protein based sandwich or a yogurt.

3. **What should I do if I get a lot of cramps?**
   - Allow adequate recovery and rest for muscles after hard training sessions.
   - Increase strength and fitness. Stronger, fitter muscles are more resilient to fatigue and therefore cramp.
   - Be cautious when changing speed or intensity especially during the later stages of exercise. Fatigued muscles take longer to adapt to increased workloads.
   - Wear comfortable, unrestrictive clothing and footwear.
   - While there remains little strong evidence that dehydration is associated with EAMC, it's still important that athletes practice good hydration practices both before and during exercise to optimize training and competition performance.

5. **What should I drink, and how much?**
   a. Each kilogram (kg) of weight lost is equivalent to approximately one liter (L) of fluid. Adding on the weight of any fluid or food consumed during the exercise session will provide an estimate of total fluid loss for the session.
   b. Weigh yourself before and after exercise. Every kilogram (2.2 pounds) lost, is one liter of fluid you need to consume. As noted above, adding your weight loss and fluid consumed will tell you how much fluid you lose during exercise. For example, an athlete who finishes an exercise session 1 kg lighter and has consumed 1 liter of fluid during the session has a total fluid loss of 2 liters, and would need to consume another liter to make up for these losses

c. Begin each exercise session in fluid balance.

- This requires drinking regularly throughout the day leading up to training or competition. Have a drink with all meals and snacks.
- Immediately, before exercise commences, consume 200-600 ml of fluid.
- Develop a plan for fluid intake for all exercise sessions longer than 30 minutes. Aim to match previous fluid losses as closely as possible (within 1% of body mass). Take into account all the opportunities within the sport.
- Begin drinking early in the exercise session and continue to drink small amounts regularly. Sports drinks or water are the best options.
- Replace any residual fluid deficit after exercise. You will need to drink 150% of any fluid deficit in the 4-6 hours after exercise to account for ongoing sweat and urinary losses. When fluid losses are high and/or rapid rehydration is required, sodium replacement may be required. Sports drinks, oral rehydration solutions and salty foods can all contribute to sodium replacement.

5. Should I drink sports drinks when I exercise?

a. Water is usually the best fluid for your body. When you exercise for longer than an hour, though, you may need to replace the carbohydrates used to fuel exercise and the electrolytes lost in sweat. Drinking sports drinks (such as Gatorade® or Powerade®) that contain carbohydrates and electrolytes is a great way to hydrate during exercise that lasts longer than an hour. If you are working out for less than an hour, water and a well-balanced meal after your workout will replace the fluid and energy that your body used while exercising.

6. Is there such a thing as drinking too much water?

a. The term for drinking too much water is: “water intoxication”. This condition is rare, but can happen when a person drinks a huge amount of water in a short period of time (equivalent to drinking 5- 10 two liter bottles within a few hours). Having this much fluid can cause the sodium (salt) levels in the body to drop (a condition known as hyponatremia). When this happens, the cells in body begin to swell which can cause confusion, severe headaches, dizziness, nausea, vomiting, bloating, seizures, comas, and even death.

a. Consuming fluid in excess of requirements may cause some gastrointestinal discomfort. In extreme cases, a condition called hyponatraemia can occur. Hyponatraemia (low blood sodium levels) causes symptoms similar to dehydration and is potentially life threatening. It is not common but can occur in prolonged endurance events (> 2 hours) when large volumes of low sodium drinks (such as water) are consumed and sweat losses are small.

7. **Do athletes need to follow a strict diet to perform well?**
    a. No. An athlete's diet should be very similar to a regular well-balanced diet, except:
        i. Athletes need to drink more because of fluid loss during training and competition.
        ii. Athletes require more calories to meet the extra needs of physical activity.

8. **Should I eat energy bars?**
    a. It depends. There are many different energy bars you can buy. Some are high in carbohydrates and others are high in protein. They do not contain any magic ingredient that will help your athletic performance. Regular foods that have some carbohydrate and protein in them like yogurt, cheese and crackers, or cereal bars are just as good and usually cost less. However, energy bars are convenient and may taste good. If you are eating them for those reasons, then they are fine. Energy bars are usually pretty dense and low in moisture so make sure you drink plenty of fluids when you eat them.

9. **Should I eat extra protein?**
    a. Some studies have suggested that consuming protein with CHO during exercise improves endurance performance while other studies have reported no benefits… but it should be remembered that there is no established mechanism by which protein intake during exercise should improve performance
    a. Recent evidence indicates that when CHO is consumed in sufficient amounts during exercise, adding protein provides no performance benefit and does not enhance muscle glycogen synthesis following exercise.
    a. Although some extra protein is needed to build muscle, most people eat plenty of protein and eating extra will not have any benefit. For most people, 5 ounces of protein foods (such as meat, poultry, fish, beans, tofu, or eggs) every day and 3-4 ounces of dairy protein (such as milk, yogurt, or cheese) will provide enough protein.

10. **Should I carb-load before my games or competitions?**
    a. Carbohydrate loading is a technique used to increase the amount of glycogen in muscles and in the liver. It involves eating extra carbohydrates during the week before a competition while at the same time cutting back on training. Carb-loading is intended for marathon runners and is not necessary for most athletes.
    b. Fatigue during prolonged heavy exercise is often associated with low or depleted muscle glycogen stores. Muscle and liver glycogen stores can be increased in preparation for endurance

Competition by consuming a high-carbohydrate diet (e.g., 8-10 g/kg per d) for 1-3 Days in advance of the competition.

c. In men, a high-carbohydrate diet usually improves the length of time one can sustain exercise at a constant pace (endurance capacity) and somewhat less consistently enhances performance in time trials lasting 90 min or longer. However, although carbohydrate loading can increase muscle glycogen stores in women, it appears to offer no benefit to their endurance performance.