

Sport Nutrition for Athletes and Coaches



DID YOU KNOW?

Dehydration negatively affects exercise ability, skill execution and decision-making, and can thus significantly affect soccer performance. A full hydration recovery takes 24-48 hours!



Fuel up for the Soccer Field!

Soccer players use both aerobic and anaerobic energy systems during a typical match because of the distances they run, interspersed with sprints and changing direction. This makes fueling up properly before games and practices critical for optimal performance.

Proper Nutrition for Soccer Provides:

- Sustained energy from foods and fluids high in carbohydrate, adequate protein, and lower in fat and fibre;
- Mental focus for technique and skill execution on the field;
- Adequate hydration and electrolytes;
- Adequate energy and nutrients to recover and prepare for the next training session or game.

Fueling Up Before Games

Studies show that soccer players can deplete up to 90% of their leg muscle glycogen stores during a single match, resulting in early fatigue and reduced running speeds.

- A high carbohydrate diet consumed 24 hours before a match will top-up energy stores.
- Consuming extra carbohydrates in the days before a match will ensure players perform at their best.
- Check out the chart on the following page for simple snacks to have on hand for half-time, and examples of healthy, high carbohydrate meals to consume before the game.

Fluids

Soccer players often have higher fluid needs because of the high intensity, 'stop and go' style of the game and limited opportunities to drink during a game. To ensure proper hydration, follow these guidelines:

- Optimize breaks in play and encourage the intake of fluids during formal and informal breaks in play (e.g. stoppage and injury time);
- Start practices and games hydrated to avoid decreases in performance due to excessive dehydration and to deliver carbohydrate and electrolytes during prolonged practices;
 - Try drinks containing carbohydrates (e.g. sports drinks) to assist with replacing energy stores, electrolytes, and fluids lost;
- Recommended daily fluid intake:
 - Fluid lost = weight before - weight after.
 - Aim to drink 1.5L of fluid for every kilogram of weight lost.*
- Be aware: thirst is usually not a good indicator of fluid status. A player may be significantly dehydrated before becoming thirsty;
- In hot conditions, extra fluids may be needed. Have cool, refreshing fluids on hand and drink during breaks and when coming off the field.

*Actual amount required will depend on individual player sweat rates.

Sport Nutrition for Athletes and Coaches



High Carbohydrate Foods before/after games

- 800 ml sports drink
- 3 medium pieces of fruit
- 1 medium bagel
- 2 pancakes with maple syrup
- 2 cereal/muesli bars (see recipe below)
- 1 cup yogurt with 1 cup fruit
- 1 cup low fat granola with 1 cup low fat milk
- 250 to 350 ml fruit smoothie
- 1 peanut butter and jam sandwich



Examples of High Carbohydrate Snacks at Break

- Fruit: fresh, frozen, canned, dried, and fruit bars
- 100% fruit/vegetable juices
- Sport drinks/gels
- Dry cereals (muesli, low fat granola, Shreddies)
- Cereal/sports/granola bars
- Pretzels
- Instant breakfast or meal replacement drinks (i.e. Boost/Ensure)

Easy Homemade Energy Bars

Ingredients:

- | | |
|---------------------------------------------------------------------|------------------------------------|
| 1 ¼ cups water | ⅓ cup sunflower seeds (or almonds) |
| 3 tbsp corn syrup | ½ cup unsweetened shredded coconut |
| 4 lb low fat oatmeal muffin mix | 1 tsp cinnamon |
| 1 cup raisins (or dried cranberries, chopped dates, apricots, etc.) | |

Method:

1. Preheat oven to 325F. In a large bowl, mix together water, corn syrup, and muffin mix until water is absorbed.
2. Stir in raisins, sunflower seeds and cinnamon.
3. Place parchment paper on a cookie sheet and spread mixture evenly over paper.
4. Add another piece of parchment paper on top of mixture and roll with rolling pin to 1" thick.
5. Remove top sheet of paper and bake for 20-25 minutes or until golden brown.
6. Cool in pan 45 minutes. Turn upside down and remove paper. Cut into 32 bars.

From: Dufour, A: PowerFUEL Food (October, 2012)

