

New to this site: Nutrition for Sports & Skaters. Below is an essential guide for those who would like to take their training and performance to the ultimate level by sustaining the appropriate diet.

For more information be sure to visit [Personal Training On The Net](#) or see your speak to someone at your local Gym or even a nutritionist. You will certainly notice the difference and reap the benefit..

We also strongly recommend the 'Survival Of The Fittest' Cook Book by the [Aust. Institute of Sport](#)

# Nutrition for Sport-The Nuts and Bolts

by **Diana Leslie**

[ courtesy [ptonthenet.com](#) ]

When our clients ask how to improve their performance, whether it is endurance, speed or strength, one of the numerous factors to consider is diet. The most common question we hear is "What should I eat before I compete?"

However, the meal prior to the event has little impact if the daily intake during training is not adequate. Therefore, the top nutrition priority for improved performance is establishing a consistent energy state everyday. The next nutrition priority is to stay adequately hydrated. When you are 2% dehydrated, you work at 90% of your capacity. The timing of your pre-event meal and its composition is another nutrition priority to consider. The forth nutrition priority is fuel and hydration needs during the event. And last but not least — recovery! Like many competitors, what happens after the event is the last thing on their mind. However, unless this is their last event or training session of the week, recovery is one of the most important nutrition priorities. Take advantage of the 15 minute "window of opportunity" immediately following exercise when the enzyme involved in glycogen synthesis (glycogen synthase) is at its peak. Refuel! And maximize glycogen resynthesis.

The following is a summary of the key steps in meeting your 5 Nutrition Priorities for fueling your body better for exercise.

*Feel free to print off copies of these 5 Nutrition Priorities as a handout for your clients, free of charge, courtesy of Eating For Energy.*

## 5 Nutrition Priorities

### **1. Establishing A Consistent Energy State Everyday**

- Eat breakfast within 2 hour of waking up and include foods from at least 3 of the 4 Food Groups to get adequate protein and carbohydrate (more fruit/vegetables than grain products in a meal)
- Eat a snack a maximum of 3 hours later (include 2 food groups for a more substantial snack)
- Eat a lunch including at least 3 Food Groups
- Eat another snack a maximum of 3 hours later
- Eat a dinner including at least 3 of the 4 Food Groups
- Eat another snack, high in carbohydrate, before bed if you have an early morning workout and cannot tolerate a large breakfast. This will help top up your muscle and liver glycogen stores.

## **2. Staying Adequately Hydrated**

- Drink water with all meals and snacks
- Carry a water bottle everywhere
- If you consume caffeine, alcohol, pop, sweet or salty foods, drink extra water to prevent dehydration, headaches, low energy, blurred vision, etc.
- 2 - 3 hours before training, drink 2-3 cups of water
- Aim to drink a big sip of water (1/4 — 1/2 cups) every 15-20 minutes
- Afterwards, drink at least another 1-2 cups of water
- If you re into sports drinks, drink it at least 30 minutes before exercise (to prevent a reactive low blood sugar) OR after the first hour, drink 1 2 cup every 10-15 minutes.

Clear or pale coloured urine indicates adequate hydration!

## **3. Pre-Exercise Eating**

- Avoid caffeine, alcohol, pop or any foods that are really salty or sugary (chips, licorice, etc) as this can promote dehydration, fatigue, headaches, etc.
- Allow at least 3 hours digestion time for a large meal (1000-1500 kcal), 2-3 hours for smaller meals (600 kcal) and 30-60 minutes for a liquid meal, light breakfast or snack (300 kcal) (e.g. fruit and yogurt shake or cereal, blueberries and milk or 1 2 bagel with peanut butter and banana and orange slices or energy bar and juice.)
- Emphasize carbohydrates. 65-75% of calories should be from carbohydrates. This is the best fuel source for topping up muscle and liver glycogen stores. (i.e. fruits, vegetables, bread, pasta, rice, pancakes, cereal etc.) However, still include 3 Food Groups so you have some protein (maximum 15% of calories) to "anchor" the carbohydrate energy in your body.
- Low in simple sugars (candy and chocolate). Fructose (sugar in fruit) will not cause a reactive low blood sugar, but for some it may cause stomach cramping.
- Low in fiber
- Low in fat. Try to avoid high fat, low grade fuel like fast food, gravy, fries, greasy burgers, etc. — they take longer to digest and can cause low energy or stomach upset.
- Avoid spicy or unfamiliar foods. Know which foods are best tolerated as pre-event meals.

## **4. Fueling during the Event**

- Hydration: 1 4-1/2 cups water every 15-20 minutes

- 25-50 grams carbohydrate/hour after the 1st hour of exercise.
- Practice high volume drinking and fueling during training, not just at the event.
- Replace electrolytes only after >90 minutes exercise. Electrolytes in sports drinks will assist in the absorption of carbohydrates.

## 5. Recovery

- Drink at least 2 cups of water after training
- Replace 1 kg body weight lost after training with 2 litres water.
- Aim to eat a carbohydrate food within the first 15-30 minutes of finishing — e.g. fruit, vegetable, yogurt, bagel, peanut butter and banana sandwich, cereal and milk.
- Replace 1-1.2g CHO/kg body weight immediately after exercise and again every hour until your next meal.
- Aim for a 3:1 carbohydrate to protein ratio. This is the best ratio for replenishing glycogen stores. (Boost Sport, fruit and yogurt shake, tofu and fruit shake)
- Replace electrolytes if needed. With excessive sweating in heat for longer than 90 minutes: replace 500mg sodium, 300mg potassium (tomato juice, potato, orange juice, banana)
- Get back to your pattern of 3:3 Food Group meals and eating every 3 hours

*Courtesy of **Eating for Energy**.* For more information visit our website at [www.eatingforenergy.com](http://www.eatingforenergy.com) OR order Patricia Chuey's new book "the 101 Most Asked Nutrition Questions" by e-mail at the same address. Tell us you heard about the book from "Personal Trainers on the Net" for a special discount