

DID YOU KNOW...?

Brought to you by the CSI Education Committee

Eat Colorful Foods

Here is some information from Charlene Boudreau, a nutritionist on the USA Swimming staff, regarding how to utilize the best nutrition for your athlete.

Fueling for Performance is: 1) Always having a full tank of gas, 2) Getting the most economical fuel, 3) Fueling at the right times and places. Include the basic nutrients in your athlete's diet: Carbohydrates, Protein, Fats, Vitamins, Minerals, and Water.

The Aerobic Athlete's Diet: In terms of calories, 60%* should come from Carbohydrates, 15%* should come from Protein, and 25%* should come from Fat.

**Note: +/- 6% depending on seasonal variations in training and intensity. The aerobic athlete's carbohydrate intake should never drop below 50%, protein should not go above 25%, and fat should not go above 30%.*

Nutritional Foundations:

- **Eat a variety of foods** from all Food Groups
 - There are no magic foods
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 - Include Vitamins and Minerals
 - Remember – servings grow as YOU grow
- **Eat Colorful Foods** for vitamins, minerals, antioxidants, carbohydrates, recovery, and general health
- **Eat early and eat often**
 - The first 2 hours post-workout are the most critical
 - Glycogen repletion can occur 2-3 times faster than normal with the right eating pattern
- **Drink early and drink often**

According to ACSM, ADA, and Dieticians of Canada Joint Position Statement on Nutrition and Athletic Performance, 2000, p. 2131, "After exercise, the dietary goal is to provide adequate energy and carbohydrates to replace muscle glycogen and to ensure rapid recovery. Protein consumed after exercise will provide amino acids for the building and repair of muscle tissue. Therefore, athletes should consume a mixed meal providing carbohydrates, protein, and fat soon after a strenuous competition or training session."

Recovery Nutrition – Tips and Reminders:

- Start the replenishment process IMMEDIATELY! The "window of opportunity" for maximizing glycogen repletion starts to close as soon as exercise stops; it lasts for about 2 hours.
- Pulse the system. Try to eat something substantial every hour versus waiting for the large meal or eating only every 3-4 hours.

- Adjust post-exercise fuel intakes accordingly. Focus on maximizing glycogen repletion when practices are exhaustive. You might not need to replenish as long when workouts are not as intense.
- Most replenishment periods should continue for at least 2 hours, but may last as long as 5 hours if the workout was completely exhaustive.
- Something is better than nothing. If you just can't meet the recommendation of 1.0g/kg/hr for at least 2 hours, consuming some carbohydrate fuel immediately after workout will do more to help prevent chronic or long-term glycogen depletion than consuming nothing at all.

Show Time!

- Focus on fueling for the day, not the race
- Maintain energy/blood sugar levels
- Maintain hydration
- Timing is everything!

Timing is Critical:

One Hour or Less to Go	2-3 Hours to Go	3-4 Hours to Go
Fruit and vegetable juice such as orange, tomato or V-8	Fresh fruit and vegetable juices	Fresh fruit and juices – fruit and/or vegetable
AND/OR	AND	AND
Fresh fruit such as apples, watermelon, peaches, grapes, or oranges	Breads, bagels, English muffins with limited amounts of butter, margarine, cream cheese, or peanut butter	Breads, bagels, baked potatoes, cereal with low-fat or skim milk, low-fat yogurt, sandwiches with a small amount of peanut butter or lean meats and cheese
AND/OR	AND/OR	AND/OR
1 1/2 cups of a sport drink like Gatorade	4 cups of a sport drink like Gatorade	7 1/2 cups of a sport drink like Gatorade

Packing for Competitions: Packing for the day of competition is always a challenge. For fueling the athlete, some good ideas are: Dry cereal like Frosted Mini Wheats or Honey Nut Shredded Wheat; PBJ sandwich halves; Granola bars; Power bars; 100% Juice boxes; whole fruits like oranges, peaches, or nectarines; containers of berries like strawberries, raspberries, or blackberries; yogurt with a side of Grape Nuts cereal for mixing; individual packets of oatmeal; trail mix (nuts, raisins, dried cranberries, mini pretzels, chocolate chips of M&Ms); water; an electrolyte drink such as Gatorade.

For more details on fueling for performance, please see the nutrition section of the USA Swimming *Successful Sports Parenting* DVD that your team may already have. If your team does not have a copy, the DVD can be ordered by going to the usaswimming.org website. Colorado Swimming is dedicated to serving all its members and their families. The CSI Education Committee hopes you found this information helpful for preparing your athlete to perform at his/her best.