

Nutrition

Bulldog Aquatic Club



During exercise the body gets its energy primarily from carbohydrates and fat. Protein is for building and repairing muscle tissue, hormones and red blood cells.

Carbohydrates, what foods come to mind first?

1. Pasta
2. rice all white foods
3. bread

Colorful carbs have more nutrients

1. fruit – fresh, canned, frozen, dried, or juices
2. bright colors(I am not talking dyes)- vitamins and minerals

Adapt to training only if you give yourself the right kind of foods during rest.

Free radicals are molecules that can cause damage to muscle after exercise. Anti oxidants absorb "free radicals"

A diet consistently rich in fruit and vegetable is apt to keep the body consistently supplied with anti oxidants.

Colorful foods during recovery between workouts help keep "free radicals" formation to a minimum. For example: Apple, strawberries, blueberries, bananas, oranges, kiwi, watermelon, raspberries, grapes, mango, papaya, apricots, red peppers, broccoli, corn, squash, carrots, peas, green beans, and tomatoes.

Colorful foods do not include: Skittles, Jelly Beans, M&M, Mike and Ikes, and Fruit Loops.

Carbs, protein, fat: How much is enough?

Requirements vary:

- Age
- Gender
- Body Weight
- Level of training

Carbohydrates – 6-10 g/kg body weight per day

60% calorie intake

Protein - 1.2-1.4 g/kg body weight per day

12-15% of total calories

Fat – example: for a 2000 calorie diet 44-56 grams per day

20-25% of calories from fat. The body uses fat as

energy. (If you are not swimming daily these consumptions are not suitable and should be adjusted)

When should you be getting these nutrient?

Spread carbs over the course of the day (smaller meals, frequent snacks)

- Some before AM practice in the form of juice.
- In the form of carb-electrolyte drink (Gatorade, or powerade) during work out if it is longer than 90 minutes. (sips only)

Carbs and protein within 30 minutes after practice to restore glycogen and repair muscle tissue. (Most important time to eat)

Eat again, a substantial meal (before 2 hours post- practice)

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Cereal: high- carb- 25 grams per serving
Moderate- protein 5-10 grams
Low – fat 5 grams
Moderate- fiber 2-4 grams
Quaker Toasted oatmeal, Raisin Bran, Smart Start, Blueberry Morning, Basic Four, Wheaties Energy Crunch, raisin Nut Bran, Honey nut Shredded Wheat (also make s a great snack, 1 cup in a baggy)

During Workout – all swimmers need fluids

- Water, a couple of sips every 15-20 minutes
- Over 90 minute practice Gatorade or Powerade other drinks are too strong. A couple of sips every 15-20 minutes keeps the body fueled

Remember:

1. Carbohydrate is the primary fuel source during tough workouts. Protein is used as a fuel source during exercise only when carbohydrates and fat are not present in sufficient quantities. This can happen during long tough workouts when body uses much of its stored carbohydrate, and it must find an additional source. If an additional carbohydrate source (Gatorade, Powerade) is not supplied, the body taps into stored protein, aka your muscles. This is why we drink carbohydrate-electrolyte solutions during workout, so you start the next workout with a full tank of gas!

2. Following exercise, the body is very sensitive to the hormone insulin. Insulin is the hormone that rises every time blood sugar rises. In other words, every time a swimmer eats carbohydrate, which causes blood sugar to rise, insulin goes up. Well, it's insulin's job to remove sugar from the bloodstream, and it does so by facilitating its storage as glycogen. Glycogen, the storage form for carbohydrate, is what the body taps into for fuel when exercise is very intense. This can happen quite a bit during a tough workout, which is why it's important to see the glycogen replenished within 30 minutes of practice ending, a piece of fruit or a cereal bar will do.

3. During the Day – Staying hydrated during the day is just as critical as hydrating during and after workouts. Most swimmers can do this by incorporating a variety of fluids into their daily diet. Water, fruit juice, milk, soups, etc. Water is always an excellent choice, but other drinks, including sports drinks (defined 6-8% carbohydrate by weight) are okay too. Just remember that variety is the key to a healthy diet. If you use a sports drink during and after practice, it may be better to drink water and juice during the day to stay hydrated. Juices are often healthier than sports drinks in that their sugars are natural. Always keep in mind that juices and sports drinks contribute to total caloric intake.

Do not drink "energy drinks" such as Red Bull, 180o, Sobe, etc.
For risk of testing positive