[Swim Swam Nutrition Article](http://swimswam.com/3-nutrition-tips-for-peak-swimming-performance/)

**Your Assignment- Eat like a CHAMPION!!**

I think it is amazing how much work, time, and effort you put into your daily workouts for swimming. Here at Streamline Aquatic Club , we coaches always want to maximize the time that you spend in the pool to “train” your body and mind to be the best athlete that you can. However sometimes the owner of your body (that’s YOU) doesn’t always treat or even fuel that body as well as you should. If we want to be a World-class swimmer, why don’t we eat like one?

In your workouts you burn one pile of a lot of energy(calories), usually in the form of carbohydrates and fat, then you repair your body by using protein. This is a very simple explanation, but think about this: where do you get all the energy and body fixing building blocks that YOU require? It would be great if we were all plants and we could get ALL the energy we need from the sun (winter would be interesting?!) We can only get ALL the material that we need through one place and that is our mouth! And even more interesting is that you are the one that puts all those important nutrients into your mouth to be incorporated into your body!!!!! This is an amazing amount of control that you have over the development of you as a swimmer and as a person. It is what you put in your mouth that will make you as successful as any workout that you swim.

Keep in mind that in order for nutrition to have an appreciable impact on your performance, you have to eat the right way on a year-round basis. Not that you can't occasionally indulge in some fast food, or sweets; just make sure that your daily diet follows the 80% rule, meaning that you make the right choices at least 80% of the time and reserve the other 20% percent for some of your favorite "cheat" or “I really need some food NOW” foods. This way, you'll know you're supplying your body with the nutrients it needs to feel and perform at your best.

The following recommendations will help you stay on the right path:

**The Right Kinds of Carbs**

What are the first three foods that come to mind when we say “carbohydrate?”

1. Pasta
2. Rice
3. Bread

Each if these are excellent. But what do they have in common? They’re all white!

One of the most overlooked sources of carbohydrate is fruit. Yes, FRUIT. Fresh, canned, frozen, dried or juiced. No matter how you look at it, fruit is an excellent source of carbohydrate. Not only does fruit provide carbohydrate in the form of natural sugars (versus refined sugar), the bright colors of fruits indicate that they are also excellent sources of vitamins and minerals, including a sub-group called anti-oxidants.

You might recall that exercise is the stimulus that leads to training adaptations. And that adaptations to training occur ONLY if you give the body the right kinds of fuels during periods of rest. Make sure that the bulk of your diet comes from complex carbohydrate sources (approximately 50-60% of your total caloric intake). It's important that these carbs are predominantly in the form of whole grain breads and cereals, whole-wheat pasta, brown rice, yams (or sweet potatoes) and beans. Try to stay away from white pasta, rice, breads and bagels as much as possible. They have an unfavorable effect on blood sugar levels and can really hamper your performance in the long run.

**Protein Intake**
Try to opt for quality, low-fat protein sources like skinless, white meat chicken and turkey, lean beef, eggs, tuna, flounder, sole and cod, beans, skim and low fat milks, low-fat yogurt (not the "fruit on the bottom kind") and tofu. Limit your intake of high-fat cuts of beef and pork, hot dogs, chicken nuggets, fried chicken and pretty much all fast food, as much as possible. Proteins should make up anywhere between 20-25% of your total caloric intake.

**Watch the Fat**
Keep an eye on your fat intake. As a general rule, try to limit your intake of saturated fats, or any type of "hydrogenated oils" and "trans" fats. These fats and oils tend to be “solids” at room temperature. You can do this by cutting down on higher-fat cuts of beef and pork and all types of fast food. Also try to read as many nutrition labels as possible, as most clearly list the breakdown of both total fat, and saturated fats. Make sure that any food you choose has no more than 3 grams of fat per every 100 calories (i.e. in a 200 calorie food, 6 grams of fat is the limit), and that no more than about 1/3 of the total fat comes from saturated fat. So, that same 200 calorie food with 6 grams of total fat should have no more than 2 grams of saturated fat. Overall, fats should comprise anywhere from 15-20% of your total caloric intake.

**Don't Forget Fruits and Vegetables**
Eat as many fresh vegetables and fruits as you possibly can. Most kids fall way short of the recommended 5-9 daily servings of fruits and vegetables. They provide tons of vitamins and minerals, as well as much needed fiber.

**Hydrate!**
Proper hydration is absolutely key! You can't drink next to nothing for several days and think that jumbo Powerade you're swigging in the car on the way to the pool is going to do anything. Here's a breakdown of how much you should be drinking and when:

Overall water consumption for kids age 9 to 13 should be 2.0 to 2.5 liters per day, whereas 14-18 year-olds should strive for 2.5 to 3.5 liters, with girls falling near the lower end of the range, and boys at the higher end. Keep in mind; we're talking about water here, not juices, sports drinks, or soda. This should be your target for each and every day, with your fluid requirements increasing with athletic activity. Every day you walk by water fountains in the hallways at school. STOP AND DRINK!!!

Sports drinks are really only necessary for activities lasting at least one hour in duration, but can otherwise be consumed in moderation if they encourage young athletes to drink. Watch the sugar content, though. When choosing a sports drink, look for one with a 6-8% carbohydrate concentration, or 50-80 calories per 8 ounces, with 120-170 milligrams of sodium.

**Are you taking a Multimineral/ Multivitamin?**

Every chemical reaction in your body (from burning the fuels you but in your mouth to repairing your muscles after a workout) requires a “key “ of sorts that turns on the chemical reaction. Those keys are in very small amounts but, like a car, if you have no key then the car doesn’t work. The keys in your body are the vitamins and minerals (iron, calcium, magnesium, zinc etc) that you have a hard time getting enough in our daily diet. Supplementing with a daily multimineral/multivitamin is almost a requirement for keeping enough “keys” around to get ALL your chemical reactions working correctly.

Provided that you've adhered to the guidelines listed above, there are a couple of steps you can take the day of the meet to help make sure that you perform at your best.

**Eat Breakfast!**

Start out with a proper breakfast. This does not entail grabbing a bagel with cream cheese and eating it in the car with a large orange juice on the way there. The bagel, especially if it's made with white flour can really jack up your blood sugar levels. Granted, the fat in the cream cheese will blunt this affect somewhat, but add in the OJ and you'll be all fired up for warm-ups and likely crash shortly thereafter.

The best-case scenario is to sit down and eat some slow cooked oatmeal (prepared the night before) with fruit, or some eggs and whole grain toast, or whole grain cereal with skim, or low fat milk. If it's an early meet and you must eat on the run, at least make it a whole grain bagel with peanut butter, as the these two foods together make up what is known as a complete protein by providing your body with all the essential amino acids it needs. Trade in the OJ for a lower sugar sports drink and you're good to go. Some more foods to stay away from include bacon, sausage, croissants, doughnuts and sugary breakfast cereals.

As far as what you should have in your bag for snacking, I think the best way to address this is with a list of what you should bring, vs. what you should not bring.

**What to Bring on Meet Day:**

1. At least 32 oz. of water to drink during and after the meet.

2. No more than 16-20 oz. of sports drinks that meet the above criteria.

3. Energy bars: Try to stick with bars that have less than 10 grams of fat, and less than 35% of their calories from sugar (the lower the better). To calculate this: multiply the number of grams of sugar by 4 and then divide that number into the total calories.  Some recommended brands include: Kashi TLC Bars, and Odwalla Bars.

4. Whole grain pretzels, crackers and cereals.

5. Nuts, seeds and dried fruit (in limited quantity due to the relatively high sugar content).

6. Lower Sugar Fruits: Strawberries, Apples, Cantaloupe, Blueberries, Raspberries and peaches.

**What not to bring, or bring less of:**

1. Chips of any type. Most are loaded with fat and calories.

2. Goldfish, Cheese Nips, or any other types of crackers made with white, enriched flower.

3. White Bagels and Breads.

4. High Sugar Fruits: Bananas, Raisins, Pineapple and Grapes.

5. High Sugar Energy Bars: Many types of Power Bars fall into this category.

6. Fruit Juices of any type: Too high in sugar and don't clear the gut as rapidly as sports drinks, possibly leading to stomach cramping.

7. Soda. This one's an absolute no-no!

8. Cookies, candy, gummy bears, or anything else along those lines.

Now that you are schooled on the eating habits of champions we want you to sit down, with your parents and think about what you will eat for your 4 meals a day on any regular day that you have practice. That may not sound right, but if fact you are fueling yourself every time you put something in your mouth!!! You eat a good **breakfast**, you eat **lunch at school**, something **before practice** and finally an **after practice** meal. Think of all the information from above and with the help of the parents, come up with items that you enjoy. Remember, you already workout like a Champion- you need to eat like one too!

**BY MIKE MEJIA, M.S., C.S.C.S//Special Correspondent to USA Swimming**

**Coach Scott Birklid, M.S., Nutritional Biochemistry and Exercise Physiology**