

Nutrition for Swimmers

After heredity and training, nutrition plays the largest role in the quality of a swimmer's performance. Most every person involved in competitive swimming knows that nutrition is important. Following are some keys terms and helpful guidelines that will aide in better performance in the pool.

Fast Facts to Remember

Consuming excess protein will not build muscle faster. A normal diet gives you plenty of protein.
Energy for specific events is provided by foods eaten several days before competition, not in the minutes just before the race
Drinking adequate water is vital to nutrition and performance. This is especially so in hot, humid environments.
Pre-competition meals should be low in fat and high in carbohydrates.

Most fast-food menus provide the exact opposite of the above. Foods that are mainly carbohydrates take the least time to digest and leave the stomach, making them ideal pre-competition choices

Suggestions for Eating to Win

LOTS OF CARBOHYDRATES

A swimmer gets most of their energy from their body breaking down food that is rich in this. A carbohydrate is like a wick on a candle. It burns slowly for long lasting energy to give you the power to perform at long meets or practices. You should eat as much as possible daily, but always eat a lot more a week before a meet. Don't wait until the night or day before the meet.

Examples: potatoes, pizza, spaghetti or pasta, pancakes, bread and cereal.

HAVE PROTEIN EVERY DAY

Protein is important to a swimmer's body to build all the cells. As you grow you build new cells and having protein in your meal make those cells stronger.

Examples: chicken, turkey, milk

FATS ARE IMPORTANT, BUT DON'T OVER DO THEM!

Fats are used by the body for energy. The difference between them and carbohydrates is that they take a whole lot longer to be broken down for us to use, so they sit there and end up making swimmers get fat. Remember, fat gets in fast when you're hungry, but takes its time leaving!!! Fat is also very heavy. If you feel heavy you swim slower and it makes it harder to sprint.

Examples: Fast food hamburgers, french fries and potatoe chips

DRINK LOTS OF WATER

Just remember that you need water to swim and your body needs water too. Make sure and drink at least 8 glasses of water a day! It is also very important to keep your body full of fluids while you work out. So drink a big glass before practice, during practice, and after practice. You do sweat while you swim! Sports drinks are also good at any time, but don't stop drinking water.

VITAMINS AND MINERALS ARE IMPORTANT

If you eat a good balanced diet, it should always include lots of fruits and vegetables. They are loaded with the power of vitamins and minerals that add extra energy the body need to perform to its best. Milk also has lots of vitamins and minerals the body uses to build strength so you can last through that 100 butterfly.

EAT LIGHT SNACKS AT SWIM MEETS

When you have long waits before you swim or just FEEL hungry, its good to have nutritious snacks on hand. Things like a 1/2 of a bagel, a small box of dry cereal, fruit (apples or oranges are great), granola or power bar are good choices. It is not a good idea to eat too close to your race, so give yourself time to digest the food. Sports drinks (watered down) or water are great if you are thirsty.

AVOID SODA!

It is a quick sugar high that only makes you feel tired when it wears off. The same goes for candy. It is the sugar that gives you all the energy, but it doesn't last too long.

YOU ARE ALWAYS A WINNER WHEN YOU EAT TO WIN

Some Tips on Good Food to Eat

Fluids: water, sports drinks, fruit juices
bagel and bread
Turkey sandwiches – no mayo
rice cakes
fresh & dried fruits
Low/non fat yogurt
vegetables
part-skim string cheese
Nutritional bars
low-fat ready to eat cereal

Nutrition...

1. The week leading up to the event
2. The pre-event Meal
3. After the warm up-recover for the heats
4. Drinking and eating between event
5. Recovery after a hard day's competition
6. Top-Up Snakes between events
7. Longer break
8. Day in the life of World Class Swimmer

Nutrition for Meets

One thing that all of us coaches noticed at these meets was that many of the swimmers were . . . how should I put this . . . not eating in a manner which would benefit their swimming optimally. Or in other words: EATING JUNK!

When at a meet, keep in mind that the more food in your stomach, the more blood that has to go there to digest it. If blood and oxygen are going there, then there's less going to the muscles to make them work.

But if you are at a meet for most of the day, you have to eat something, right? So what to eat . . . Here's a little plan of things to eat and when to eat them. Notice that there is NO ROOM for hot dogs, fries, hamburgers, or any other chow from McDonald's in this outline.

The biggest generalization is to avoid things with fat, and go with things that have carbohydrates and are easily digested.

Nutrition Guidelines Preparation and Recovery for Competition

THE WEEK LEADING UP TO THE EVENT

Ensure a high-carbohydrate eating plan.
Include more rice and pasta: they have more carbohydrate than potato.
Include nutritious carbohydrate-based between-meal snacks (see list below).
As your training will be tapered pre-event, you won't need to eat more!
Eating the right balance of increased carbohydrate and less fat is the key.

THE PRE-EVENT MEAL

Eat this meal about 2-3 hours before competition (approximately 2-3 hours before warm-up).
This meal should top-up your blood sugar levels after the night's rest.
The meal does not have to be large, but should fill you up for the next few hours.

High-carbohydrate foods are the best options: e.g., bread, cereals, fruit, pasta, rice, etc.

Ensure that the meal is low fat, this speeds up digestion. Eat breakfast before you get to the pool, this leaves time for the carbo fuel to get in!

Have a drink to optimize hydration: try sports drink, juice, or best of all, WATER!

Avoid the caffeine in cola drinks, coffee, chocolate, and tea – it is dehydrating.

If you feel too nervous to eat, try a liquid meal (see later in this article).

Practice with your pre-event meal prior to THE BIG MEET to fine tune this eating strategy

AFTER THE WARM-UP - RECOVER FOR THE HEATS

After the warm-up, replace fluids immediately (have your drink bottle at pool side, and drain it).

Sports drinks have their benefits as they replace fluids and carbohydrate simultaneously, but make sure they're not sweet like Kool-Aid if you're mixing your own.

If there is less than 1 hour between races, just keep to fluid replacement.

If there is more than 1 hour between the warm-up and your first heat, try to eat a little.

The best approach is to eat a little and often during the day. Eating too much at once can make you feel heavy and lethargic.

DRINKING AND EATING

In longer breaks of at least 90 minutes, have something to eat.

In shorter breaks, use a sports drink or water to replace fluids. The indoor pool environment is humid and dehydrating, so DRINK, DRINK, DRINK!

Adequate fluids are essential all day to keep your blood and energy pumping.

If there is a longer break (a few hours) through the day, use it to eat a bit more.

Take your own high performance foods and drinks with you (don't rely on the canteen).

A cold pack and thermos helps to keep foods and drinks cold, which aids in absorption.

Record your food and fluid intake to keep count of when you last ate and drank.
To monitor hydration check that your urine output is regular and "looks clear."
Monitoring body-weight change over the day is another way to check hydration.
In general, crackers are bad! – they tend to be high in fat and salt, which makes you retain water

RECOVERY AFTER A HARD DAY'S COMPETITION

Have something to drink and eat immediately after your last swim.
Avoid the "fast food" chains on the way home – their high fat foods will delay recovery.
Have some high-carbo food prepared so you can eat as soon as you arrive home.
If possible take a thermos with a meal inside so you can eat even earlier.
Check your body weight to ensure you are rehydrated.

The worst thing you can do is wait a couple of hours, then stop at McDonald's or KFC or the like, and fill up on whatever they're serving – very low in carbohydrates, and much too high in fat and salt!

TOP-UP SNACKS BETWEEN EVENTS (1-2 HOUR BREAKS)

Snack fruits (small cans of fruit) or canned baby fruits.
Bananas.
Fruit that is peeled and cut up (easier to eat this way).
Plain bread rolls (white bread may be less heavy) – try pita bread!

Fruit buns (e.g., hot cross buns) or raisin bread.
Rice cakes (you can top them with honey, jam, or banana).
Rice pudding or bread pudding (use reduced-fat milk).
Instant noodles (varieties that do not contain oil or the flavor packet).

Jam or honey sandwiches (NOT with peanut butter)
Plain boiled pasta with a little tomato sauce.
Low-fat breakfast or plain (non-chocolate-covered granola bar)
Fruit fingers (see baby food selection at supermarket).
Plain crackers (not high-fat types).

Low-fat puddings or jello.
Small amount of reduced-fat yogurts.
PowerGel (or imitations)
PowerBars (or imitations)

Note 1: A quick way to tell if something really is "low fat" is to check the nutrition label. If there are more protein grams than fat grams in a serving, it's probably OK. If there's more fat, then it's probably better to go with something else.
Note 2: Choose smaller amounts if you only have just over 1 hour. In longer breaks you can afford to eat a little more, but don't eat constantly. Items in bold might be better for middle length breaks as they are smaller and perhaps easier to digest.

LONGER BREAKS OR AFTER THE COMPETITION

Sandwiches with low-fat fillings (avoid butter and tuna- or egg- "salad" as the "salad" is mostly high-fat mayonnaise).
Pasta or rice with tomato pasta sauce (a little chicken or very lean meat in sauce is okay).
Probably the most important thing to remember is that while you need to eat some food, you will swim better being a little hungry than a little full. So drink lots, eat a little, and you should be well on your way to swimming success.

DAY IN THE LIFE OF A WORLD CLASS SWIMMER

This is from a recent issue of Sports Illustrated for woman. It goes through typical day in the life of Jenny Thompson, arguably the best female sprinter in the world for the past five or six years. You think your life is centered around swimming? Well, this is what it takes to get to the top and stay there for the better part of a decade.

5:50 am: no matter how long an athlete has been in training, waking up early is never easy. Energy bars get Thompson through practice, but what she really wants is coffee.

6:07 am: Before the sun comes up, Thompson starts churning out 7100m in Stanford University's 50m pool.

8:49 am: She hits the gym for an hour of strength training.

10:00 am: Driving back to her apartment, Thompson sports ice packs on both shoulders to stave off screaming joints. En route, she makes a pit stop for that long-overdue cup of java.

10:15 am: At home, she answers e-mails and returns phone calls. Then, a mandatory one-hour nap. No problem, even after the caffeine fix. "If I sit or lie down anywhere, I'm asleep in five seconds", she says.

12:42 pm: Lunch with some friends.

1:20 pm: Thompson researches medical schools at the undergraduate advising centre, then joins the Stanford swim teams daily yoga session. After Zenning out, she cranks out another 7000+ metres in the pool.

5:58 pm: A quick change and then gets dressed up for dinner out with a friend.

10:00 pm: The 26-year-old is in bed – "asleep in five seconds" – as next practice is only eight hours away. And she's been following a schedule much like this since before she first broke on to the world swimming scene back in 1990.

Take note that this sprinter – already the best in the world – regularly puts in close to 15,000 metres in a day. The distance groups regularly goes over 20,000m in a day.