

NUTRITION TIPS FOR SWIMMERS

BY JILL CASTLE MS, RDN

Swimmers want to do their best. Not only that, they want to win. Many young swimmers work hard to get to the next level. They log endless hours in the pool, work on their stroke technique, and even tweak their eating to get the most out of their bodies and their performance.

Many champion swimmers know that nutrition is an essential part of their success. In other words, they understand how important food is to their performance results.

Here are a few things that all champion swimmers understand about nutrition:

Food is fuel. Premium fuel is the food swimmers eat. The recipe for success includes healthy, wholesome foods and beverages. Fried foods, sweets, and sugary beverages, although tasty, aren't the ideal food components of a champion.

Carbs count...a lot. The good carbs found in whole grains, fruit, vegetables and dairy are prime sources of fuel for exercising muscles. Refined carbs, such as those found in sweets, sugary beverages, and snack foods may add too much sugar and fat to the diet and work against performance and health. Champions know to maximize the good fuel, and trim down unhealthy foods.

Protein is essential but can be abused. Too much protein can contribute to dehydration as well as other problems for the young athlete. Eating large amounts of protein at the end of the day, or not eating enough protein at breakfast isn't the most efficient way to fuel muscles. Ideally, wholesome protein sources like meat, eggs or beans evenly spaced throughout the day is optimal for the young athlete.

Dehydrated muscles don't work well. Drinking plenty of fluids is a constant effort, as thirst isn't always easy to identify among young swimmers. If dehydration occurs, it may impair performance, contribute to muscle cramping, and slow down performance.

Recovery is a key to progress. The harder you train the more important nutrition is to your recovery and development as an athlete. For example, eating a snack that contains protein and carbohydrate after an extended training session helps the body heal afterward. When swimmers add recovery nutrition to their training they are able to repair muscle damage, promote muscle gain, and re-load muscles with fuel for training and competition.

You can't out-exercise a bad diet. No matter how hard you work, the habits of overeating, skipping meals, or under-eating, as well as unhealthy food itself, work against optimal performance. Just like a racing car relies on premium fuel, your body performs its best when it's given premium fuel (healthy food). In the same vein, when a racing car uses low octane fuel, its performance may fall off.

Eating habits are key to lifelong health. Swimmers may not swim forever, but their eating habits can last a lifetime. Making healthy choices now means a better chance at being healthy later in life.

It's all about timing. *When* swimmers eat is just as important as *what* and *how much* they eat. If a swimmer skips out on breakfast and lunch, how will her body have the stamina and strength to train hard after school? Or, if he eats large amounts of food at the end of the day, staying at an optimal weight for performance may be harder.

If swimmers want to take swimming to the next level, they need to eat like champions.

Jill Castle, MS, RDN is a childhood nutrition expert and author

TOP TIPS FOR CHOOSING QUALITY CARBOHYDRATES

BY CHRIS ROSENBLOOM, PHD, RDN, CSSD

Carbohydrate is the primary fuel for active muscles. Without adequate carbohydrate in your daily diet, you will find it hard to sustain hard training, and the outcome can be poor performance during a meet. To be sure, there are some carbohydrate-rich foods that are healthier than others and some foods we classify as carbohydrates are higher in fat than carbs (pastries, doughnuts, and biscuits to name a few).

Sports nutritionists try to educate swimmers to have enough carbohydrate availability to support daily training. The amount of carbohydrate you need changes as your training and competition schedule changes. During moderate- to high-intensity training for 1 to 3 hours/day, aim for 2.7-4.5 grams of carbohydrate per pound of body weight. On low volume training days or rest days, decrease carb intake to 2.3-3.1 grams per pound. Spread your carbohydrate intake over the entire day to make sure carbohydrate is available for training sessions.

Try these quality carbs to fuel your muscles and your brain (your brain's preferred fuel is the carbohydrate, glucose).



- Fresh fruit of any kind is mostly simple sugar, but that sugar is diluted with water and also contains vitamins and minerals. Choose in-season fruits for the best taste and price. Winter fruits include citrus (oranges, tangerines, mandarins, and grapefruit) and pears, kiwifruit and dates. When drinking juice, look for 100% fruit juice versus fruit drinks that are higher in added sugars.



- Veggies of all kinds. Salad greens to starchy white and sweet potatoes are healthy carbohydrates. A baked white or sweet potato will be healthier than fries or chips (yes, sweet potato fries may sound healthier, but are comparable to fried white potatoes). And, if your broccoli contains more cheese sauce than vegetable, you might reconsider the sauce.



- Whole grains like brown or wild rice, whole wheat bread and pasta, and hot and cold cereals can help you meet your carbohydrate needs. While we encourage whole grains, you only need to make half of your grains whole, so if you don't like brown rice, white rice is OK and is better than fried rice.



- Dairy foods may be thought of as a high protein food, but milk and yogurt also contain a less sweet carbohydrate, lactose, so a glass of milk or a carton of yogurt provides quality carbs along with protein, vitamins and minerals.



- Other quality carbs include dried and frozen fruits, frozen fruit bars, fruit or yogurt smoothies, vegetable juices, canned fruits in juice, flatbreads, graham crackers, beans (kidney beans, black beans, baked beans etc.), peas (black-eyed peas, green peas, etc.), and popcorn.

10 NUTRITION STRATEGIES FOR THE BIG RACE DAY

BY JILL CASTLE, MS, RDN

At the end of the season when you're laying everything on the line, don't let a misstep in nutrition or poor planning sabotage your goals. Here are a few things to keep in mind as you prepare for the biggest meet of the season:



1. Eat breakfast. Start races on the right foot by eating something first thing in the morning. Muscles and metabolism will get the carbohydrate and energy boost they need.

2. Eat at the meet. I'm not hungry, or I'm too nervous to eat. These are just two excuses for not eating at competition. Going for long time periods without food (namely carbohydrate) is a bad idea and will chip away at performance.

3. Be structured with eating. No skipping, delaying or erratic times for eating (ahem, midnight munchies). Even at the pool, space eating around events, keeping the pre-load/recovery eating cycle going. The body will perform at its best when it is fueled.

4. Don't experiment with food. Stay with tried and true foods your body can digest and tolerate while swimming.



5. Focus on carbohydrates. These are the body's first food resources for energy. Go for slow digesting carbs like oats, whole grain bread or bagels or starchy vegetables. When opting for pasta, hold the fatty sauces like Alfredo. Instead, go for marinara or a low-fat option.

6. Forget the fatty foods. These are best eaten later, not during competition weekends, as they will just drag the swimmer down, leaving him feeling full and sluggish.

7. Be prepared for hunger. Unexpected hunger can get the best of any athlete. Bring more food than you need. That's better than running to the concession stand for something less-than-ideal. Remember the adage: If you fail to prepare, you prepare to fail.

8. Keep it clean. Important races and meets are not the time for fast food, junky snacks, sugary desserts or candy. Stick with wholesome, real food like fruit, whole grain breads and crackers, and nut butter.



9. Quench the muscles. Drink plenty of water to avoid dehydration and muscle cramping. Swimmers don't need to get fancy with sports drinks or other sugary beverages during competition, as most races are brief.

10. Sleep. Although not a nutrition recommendation, sleep is tightly tied to allowing nutrition to do its thing. Sleep is energizing and restorative, and the time of day when muscles are in major renovation mode, healing, building, strengthening and using all that good nutrition it received during the day. Don't sacrifice sleep!

6 BREAKFAST OPTIONS FOR YOUTH ATHLETES

Breakfast is a vital component in establishing a long-lasting energy level throughout your child's day. Think of it as setting the mood for their metabolism, brain activity and muscle function. It's important for young athletes to have a balance between protein, fat and carbohydrates at every meal for *peak performance*.

Generally, athletes should consume 20 to 30 percent of their calories from fat, at least 50%, but ideally 60-70% of their total calories from carbohydrates and protein intake depend on their training.

KICK OFF YOUR ATHLETE'S DAY WITH ONE OF THESE SIX BREAKFAST OPTIONS. THEY'LL FEEL FUELED AND READY FOR EXAMS, PRACTICE, MEETS - WHATEVER THEIR DAY MAY THROW THEIR WAY!

1. NUT BUTTER BANANA SHAKE:

Shakes are quick, easy and allow you to mix multiple nutrients into one 'meal'. We urge for finding natural protein sources for your shakes, avoiding supplements and protein powders. Nut butters, such as peanut butter, almond butter and cashew butter, contain approximately 4g of protein for every tablespoon.

Our favorite combination is that rich nut butter with a banana (which aids in digestion, sustain blood sugar and reduce swelling), and 1% milk – another protein packed option with approximately 8g per cup. Psst... sneak in some spinach or kale for some vegetable benefits.

Ingredients:

- 1 peeled banana
- 1 cup of skim milk (or nut milk alternative)
- 1 tablespoon of nut butter
- ½ cup of ice
- 1 teaspoon of cinnamon
- Bonus: ¼ cup uncooked spinach

Instructions:

Mix together in blender until smooth and serve.

2. GREEK YOGURT WITH FRUIT & SEEDS

Greek yogurt has really become a buzz-word in the nutrition world, but it's not a fad! It's worth incorporating into your family's diet because of the protein value.

Plain Greek yogurt, on average, contains 30% of the daily value for calcium (aka strong bones) and contains less carbohydrates than regular yogurt. We suggest plain Greek yogurt to avoid the sugar in some of the flavored kinds and be weary of the saturated fat content. Look for fat-free or low-fat options and just remember to *check nutrition labels*.

For the proper carb balance, we suggest adding berries or bananas to the yogurt to sweeten it up, instead of sugar, as well as seeds like flax or pumpkin for a healthy dose of unsaturated fat (better brain function).

Ingredients:

- 1 cup plain, non-fat Greek yogurt
- ½ cup of fruit of choice
- 2 tablespoons of seeds of choice
- Bonus: ½ teaspoon of cinnamon or 1 tablespoon of granola to add more flavor & texture

Instructions:

Mix all together into a bowl and serve.

3. 2 EGG POWER OMELET

Omelets are a great way to incorporate vegetables into breakfast, and we all know it can be difficult for kids to get enough vegetables into their daily diet. Peppers, onion, spinach, mushrooms, even broccoli and asparagus have been known to make their way into omelets.

What's great about this dish is that you can let your kids customize their own breakfast. Pick an option for additional protein like soy-chorizo, turkey bacon, Canadian bacon or even salmon if they have a taste for it. Stay light with the cheese, if even at all. Choose Swiss or low-fat cheddar cheese to keep with the high-protein theme.

Ingredients:

- 2 eggs (3 eggs if they are extra hungry)
- 1 tablespoon 1% milk
- 1 oz. cheese
- ½ cup of chopped vegetables and meat (¾ cup for 3 eggs)
- Bonus: Top with slices of avocado or side of cottage cheese
- 1 tablespoon cooking oil (recommended: olive oil)

Directions:

Heat skillet to medium and add cooking oil to the pan. Beat eggs and milk with a whisk in a bowl until it's completely mixed. Sauté vegetables until they are no longer firm and add meat to warm. Remove from pan and set to the side. Add more cooking oil if necessary. Pour egg mixture into the pan. Once the bottom of the egg is firm, add in sautéed vegetables/meat mixture and cheese on ½ of the egg and fold the other half over. Cook for an additional 2-3 minutes and flip the omelet. Check middle to ensure the egg is completely cooked and then serve.

4. TURKEY BREAKFAST SANDWICH

Nothing says on the go breakfast like a breakfast sandwich, but as we know the typical sausage or ham English muffin can have hidden calories, sodium, saturated fats and excessive carbs. For a healthier take, choose meats that are lean meats and not processed.

While oven roasted turkey may not be traditional breakfast meat, warming it up on the grill and pairing it with cheese, egg and toast can disguise the breakfast culprit. You can also look at options like turkey or Canadian bacon, but again pay attention to nutrition labels for sodium and saturated fat content. Choose whole wheat or multigrain toast and opt for Swiss cheese, which contains about 8g for one slice.

Ingredients:

- Two slices of whole wheat or multigrain toast
- 1 egg
- 1-2 oz. of oven roasted turkey (avoid deli-style)
- 1 slice of Swiss cheese
- 1 teaspoon of cooking oil (recommended: olive oil)
- 1 tablespoon of milk
- Bonus: slices of avocado
- Substitute: Turn it into a wrap with a whole wheat tortilla instead of toast

Directions:

Heat a skillet on medium and add olive oil to cover the bottom of the pan. Crack the egg into a bowl and add milk. Whisk together and cook on skillet, trying to contain the egg to the size of the bread. Toast your bread in the toaster halfway. Once the egg is cooked, remove from the pan and set aside. Add turkey to the pan to warm up. Remove the turkey then add more olive oil to the pan if necessary. Lay down 1 piece of toast into the pan, add the egg, turkey then the cheese and finally the piece of toast. Flip on the skillet back and forth until the cheese is melted. Remove from pan and serve.

5. HOT OATMEAL & NUTS

Oatmeal has been proven to curb hunger cravings longer, which for growing athletes is helpful in getting them to their next meal. Plain steel cut rolled and instant oats generally have the same nutritional value but watch out for flavored oats as they may contain hidden sugars, which could cause them to crash. Adding a banana, raisins, apples, cinnamon or a drizzle of raw honey will help sweeten.

By adding nuts, such as almonds (highest in fiber), pecans (heart health), cashews (zinc for brain power) or walnuts (fights inflammation), you're providing your athlete with necessary fiber, protein, and monounsaturated fats.

Ingredients:

- ½ – 1 cup steel cut, rolled, or instant oats
- 2 parts water (or 1% milk) for every cup of oats
- 2 tablespoons of nuts
- Bonus: ½ teaspoon of light Agave Nectar and/or ½ teaspoon of cinnamon
- Double Bonus: ¼ cup of fruit

Directions:

Prepare oats according to package (preparation differs depending on the type of oats). Add in nuts, fruit, agave nectar and/or cinnamon and serve.

6. EGGS OVER EASY IN AN AVOCADO

We may have saved the best for last. Your kids won't even realize how good it is for them. One egg contains about 6g of protein and while avocados aren't protein packed, with only ~ 2.9 grams per cup, the benefits lie in the heart-health monounsaturated fatty acids, antioxidants and fiber.

They are a powerful food, despite their higher calorie count, but with an active athlete, calories should be less of a concern. You may have heard of eggs in a basket, but this is a healthier take by substituting toast with an avocado.

Ingredients:

- 1 avocado halved with seed removed
- 1 medium egg
- 1 pinch of salt & pepper (or desired seasonings)
- Bonus: Serve with 1 cup of fruit

Directions:

Heat oven to 425 degrees Fahrenheit. Take the halved avocado and place on baking sheet, scooping out additional avocado from the seed pit if needed. Crack egg directly over avocado and position yolk over pit. Place into oven for 15-20 minutes. Remove from oven, top with seasoning and chives, and then serve.

Do you know what the very best supplement is for swimmers?

Sleep! 10 hours of sleep is optimal for muscle recover and performance.

In a study completed by the American Academy of Sleep Medicine, researchers found that extending average sleep to 10 hours per day assisted Stanford swimmers in improving their 15-meter sprint times, reaction times, turn times and kick strokes. Athletes also reported qualitative improvements in alertness and mood.

The athletic performance of swimmers was assessed regularly after each scheduled swim practice. Following periods of sleep, the average athlete reacted 0.15 seconds quicker off the blocks, swam a 15-meter meter sprint 0.51 seconds faster, improved turn time by 0.10 seconds, and increased total kick cadence by 5.0 kicks.

Stress can also hinder performance. Stay on top of schoolwork! You don't want that project that is due on Monday, (that you have yet to start), in the back of your mind on race day.

Keep swimming in perspective. You have done everything you can to prepare for race day, but sometimes it just doesn't go your way. It's ok. If you made a mistake, you have learned something and not likely you will make that mistake again. Don't dwell on what you can't change – move on and shift your focus to the next race.

Stretching, relaxation activities, such as deep breathing for just 5 minutes, visualization skills practice, reading, creative activities, walking outside and enjoying nature, are all great stress relievers. Avoid excessive screen time and video games, both known to increase anxiety and stress.

Prepare – nothing worse than broken goggles or a torn cap right before your race. Always check to make sure you have packed an extra cap, goggles and swimsuit. You should also pack plenty of water, snacks, and a few extra towels. Arrive early so you aren't rushed. Visualize your race 10 minutes before you go up to the blocks. It may be hard to find a quiet spot on a pool deck filled with swimmers but just close your eyes and focus.

Now get out there and swim your best!!!