Meet Day Nutrition

Proper nutrition has been shown to improve sports performance by as much as 15%! Therefore, it is important to know how to properly fuel yourself or your athlete not only during training but also during meets.

We as coaches often get asked by athletes and parents about advice on what to eat before and during a meet. While there is no one size fits all approach for everyone, there are a few important points of advice that are universal among sports dieticians. Below is a summary of these recommendations:

- **You don’t want to compete on a full stomach** – There is only a finite amount of blood that circulates around your body. When we initiate exercise or in this case start swimming, blood is directed to active, working muscles (which deliver oxygen and other fuel to the muscles to do their job!) and the skin to release heat (sweat)\(^1\). This means that blood is directed away from places that aren’t in need of large amounts of blood, like the stomach and small intestines. If an athlete is trying to exercise or compete after a meal, much needed blood needed for exercise will stay concentrated near the stomach and small intestines! This means either digestion is slowed or athletic performance is slowed. The athlete is either left unable to give their all or with a cramped up, full stomach, or more likely both. It’s best to have an almost empty stomach to compete with. A pre-competition meal is generally consumed 2-4 hours before the competition\(^2\).

- **Fuel with easily digestible foods** – Depending on the length of the competition (some meets last 4+ hours or two sessions in one day) the amount of fuel that an athlete needs varies. While it’s not advantageous to have a full meal right before arriving at a meet, all athletes need to realize the importance of staying fueled during a long day of competition. Racing uses up glycogen in the muscles, which is a form of carbohydrate. Low glycogen stores are one source of fatigue\(^3\), but the good news is that it is one that can be avoided. The key here is ingesting easily digestible foods with a quick digesting, carbohydrate source. Ideas include: fruit, pretzels, crackers, sports drinks, granola bars, graham crackers, yogurt, etc. The key is to get a carbohydrate rich snack which will get right to your muscles but not just momentarily spike blood sugar and then crash. Also of note, while protein is an important fuel source throughout the day and may be present in the foods above, it should not be the primary component of a meet day snack. Foods such as beef jerky, deli meats or eggs fall into this category. While these are great foods to fuel the body after competition, but should be avoided during a competition as they may take time to digest and therefore cause stomach and intestinal cramping mentioned above.

- **Hydration, all the time!** – Swimmers often forget that just because they can’t feel themselves sweating in the pool doesn’t mean they aren’t sweating. Proper hydration has been proven to aid in muscle rebuilding, fat burning, strength, speed, power and resisting muscle fatigue\(^1\). Bring a refillable water bottle to the meet and keep sipping on it every 15 minutes or so. The key here is moderation and never having to chug down a full water bottle of water or sports drink. Nobody wants to swim with a “slosh-y” stomach full of liquid.
• **Avoid “empty calories”** – Foods that are good for not only performance but also health are nutrient dense. This means that there are many nutrients for the calories that it provides. Empty calorie foods may give an athlete a temporary energy boost as they usually spike blood sugar levels. However, that energy boost is very short lived. Think of a small child at a birthday party that eat lots of cake and ice cream, plays really hard, and then crashes really hard (temper tantrums or even falling asleep in the corner of the party). This is what we want to avoid. Athletes need sustained energy to perform at their very best. Foods that fall into the “empty calorie” category include: chips, candy, soda, sweets (cookies, cake, ice cream), fast food, fried food, sugary cereals and bars, and highly processed foods. Avoid these in competition at all costs.

Treat your body like an expensive sports car: only premium fuel for a high performance “machine.” What an athlete consumes directly affects his or her performance so fuel with the right ingredients for the greatest chance of success. For more specific recommendations, please explore the resources listed below or contact a registered sports dietician.

**Sources:**

1. [http://www.ohio.edu/people/hoffmar1/every%20day%20nutrition%20vs%20game%20day%20nutrition.pdf](http://www.ohio.edu/people/hoffmar1/every%20day%20nutrition%20vs%20game%20day%20nutrition.pdf)

**Additional Resources:**