

## What Should My Child Be Eating Before And During His Competition”

Answered by: Keith B. Wheeler, Ph.D.

The pre-competition meal is really a “mini nutrition period” that occurs in the 4 or 5 hours before the start of the meet. Unfortunately, many swimmers don’t understand the exact role of the pre-competition meal. It has little effect on increasing muscle glycogen levels. It is foods eaten 3 to 4 days before a meet that help establish glycogen levels in the muscles. By Meet days, glycogen levels are mostly “set” and there is little that one can do to increase them in the hours before competition.

The pre-event meal is important for maintaining the blood glucose and liver glycogen stores, key energy sources used in the early stages of competition. By maintaining blood glucose levels at the start of the meet, the dependency on muscle glycogen will be delayed, and that helps prolong endurance. To avoid stomach upset, nausea or that “stuffed” feeling, consume the meal 3 to 4 hours before the start of the meet. Avoid spicy, fatty, and high fiber foods, too. These are difficult to digest and may cause intestinal distress or nausea later during the meet. You’re child will swim more comfortably when he’s eaten easy-to-digest foods, and his stomach is relatively empty. Nutrition conscious athletes now avoid traditional food such as the steak dinner, as well as other high fat, high protein foods like hamburgers, French fries, chips and mayonnaise. These foods remain in the stomach too long and slow down the digestion process. Foods that are rich in complex carbohydrates are generally easier to digest and empty from the stomach faster than high-fat, high protein foods. That’s important, because not only do you want to swim on a relatively empty stomach, you also want the foods you eat to be efficiently converted to energy. Cereals, pasta, baked potatoes and muffins are good carbohydrate sources that are easily digested and converted into glucose.

Vegetables and fruit juices are also good pre-vent meal items, as well as some dairy items like low fat yogurt, ice milk and low fat milk.

Swimmers, who prefer a light, non-filling pre-competition meal often, substitute a sport nutrition beverage. EXCEED nutritional beverage is an ideal choice for your pre-competition meal: it’s nutritionally complete and well balanced, so you won’t sacrifice essential nutrients if you use it in place of solid food.

Once your child’s competition is under way, his body still needs fluids and nutrients to sustain physical effort and fight fatigue. Although many coaches and swimmers don’t realize it, dehydration can be a problem in swimming, especially if the air and water temperatures are warm. Remember, sweating is the body’s main mechanism for cooling itself; even though his practice and competition takes place in the water, he can still lose a great deal of body water in the form of sweat.

Additionally, water is also needed to aid digestion and energy production. Dehydration robs his body of the primary means to cool itself and generate energy. Your swimmer should observe good nutritional and hydration

habits in the time before he competes. If there are several hours before your child's event, then he can enjoy a light snack or refreshment if he wishes. But if he's going to swim right away or his event is an hour or less away, he should be very cautious about what he eats and drinks. In the hour preceding competition, he should drink fruit juices, and beverages or snacks that contain sugar in any form aren't appropriate this close to competition. They can trigger a sudden drop in blood glucose (hypoglycemia) with the onset of intense activity. Additionally; drinks that contain high concentrations of sucrose (table sugar) tend to empty from the stomach more slowly than water. You don't want to start swimming with a stomach full of anything, including liquids.

Once his event is underway, his fluid requirements change. His body loses water in the form of sweat, particularly in the distance events, and it should be replaced. Good nutrition is something that you apply everyday throughout the season...not just the day before the meet.