Proper nutrition is critical to meeting the challenging demands of swim training. Falling behind nutritionally, even for a few days, can seriously undermine swimmers' ability to train at peak levels. It is not uncommon to blame a disappointing training session on fatigue, when in fact, it was caused by poor swimming nutrition.

Swim meets present another challenge for swimmers. Although most events are relatively brief, swimming multiple events over multiple days can seriously deplete hydration and glucose levels, inhibiting performance. What to Eat At a Swim Meet

To address these challenges, swimmers must have a nutritional gameplay for training and competing. The gameplay focuses on three vital areas of sports nutrition including hydration, fueling, and recovery.

Hydration
Fluid loss is one of the greatest threats to swimmers' ability to perform. High-intensity training sessions, heated pools, exposure to hot temperatures, and high humidity lead to significant losses of fluid and sodium via sweat. Many swimmers gauge fluid loss based on how thirsty they feel at the moment, but the sensation of thirst does not take effect until after a significant loss of fluid has occurred. Fortunately, dehydration can be avoided through a disciplined hydration plan followed before, during, and after training and competition.

Fueling
High-volume swim training relies heavily on carbohydrates to fuel working muscles. Even a few hours of training can seriously deplete swimmers' glycogen levels, the major source of energy derived from consuming carbohydrates. When glycogen levels plummet, performance suffers. Fortunately, an acute reduction of glycogen can be avoided through a disciplined fueling plan followed before, during, and after training or competition.

Recovery
Contrary to popular belief, the physical benefits derived from training are not fully realized until after training has ended. It is during this period that repair to damaged muscle fibers occurs, leading to greater muscle strength and endurance. Swimmers who actively promote recovery, via sound nutritional habits, reap the rewards; while those who ignore this all-important process suffer. Recovery Nutrition Guidelines

Start The Training Session Fully Hydrated
To ensure ideal hydration levels, swimmers should consume 14-20 ounces of water or a sports drink prior to the start of training. Swimmers can determine their own hydration level by observing the color of their urine. Urine, light in color, indicates good hydration; while urine, the color of apple juice, indicates poor hydration. To prevent this from occurring, swimmers should rehydrate periodically throughout the training session. Consuming energy gels at the same time can help to refuel glycogen levels. Most gels are designed to be consumed every 20-45 minutes.

Start The Training Session Fully Fueled
Many swimmers show up to morning training on an empty stomach, with glycogen levels low due to overnight fasting. The following high-carb options are an excellent way to start the day:

- Toast, jam, and fruit juice
- Fruit smoothie with mango, banana, berries, and low-fat yogurt
- Meal replacement drinks
- High-carb bars, energy gels, or energy chews
- Cold or hot cereal with fruit, and low-fat or skim milk
- French toast or pancakes with maple or fruit syrup
- Breakfast burrito (scrambled eggs, salsa, and low-fat cheese in a whole wheat tortilla)
- Bagel or English muffin with jelly or peanut butter
- Small roll or sandwich made with banana and honey

Timing The Recovery Process
Eating healthy sources of protein and carbohydrates immediately following the training session enables sore muscles to recover quicker. The sooner swimmers consume these nutrients, the sooner the healing process begins. The following recovery snack and meal options greatly improve the recovery process:

Recovery Snack Options

- Rolls or bagels
- Peanut butter and jelly sandwiches
- Salted pretzels
- Fresh fruit
- Fruit smoothie
- Low-fat cheese and crackers
- Low-fat chocolate milk
- Protein bars
- High-carb bars, energy gels, and energy chews

Recovery Meal Options

- Eggs
- Milk
- Meat
- Fish
- Soy products
- Whole grains
- Nuts
- Fruit
- Vegetables
- Beans

Swim Meets On race day, a high-carb meal should be consumed at least two hours prior to competing. Swimmers should avoid slow-to-digest high fat foods such as bacon, sausage, cheese omelets, and fried potatoes.

To ensure adequate hydration 14-20 oz of water or a sports drink should be consumed at least two hours prior to competing. Swimmers should also monitor their urine color throughout the day to ensure ideal hydration levels. Energy levels should be maintained via water or sports

drinks, fresh fruit, sandwiches, cereal, granola bars, high-carb bars, energy gels, or energy chews. Swimmers should also remember to jump-start the recovery process once competition is over for the day by consuming additional protein for muscle repair, carbs to reload glycogen levels, and fluids for rehydration.

Nutrition Made Simple