



Nutrition Considerations to Prepare for your Open Water Swimming Race

Given the nature of open water swimming, your nutrition preparation for race day is equally as important as the night of sleep beforehand and the fitting of your goggles, suit and cap before the gun goes off. Open water swimming (10K and 5 K) is a unique discipline as it pushes the limits of your body's energy stores while, at the same time, providing limited chances for refueling to occur during the race. You can help to top off those energy stores (glycogen loading) by starting to prepare nutritionally days before the race starts.

Carbohydrate “Loading” Days Prior to Race Day

- Less extreme diet-exercise regimens have proven to be equally as effective as the old-school thoughts behind carbohydrate loading (depleting glycogen, then reintroducing it back)
- A short taper or resting phase, coupled with a moderate carbohydrate loading protocol can increase glycogen levels to very high levels
- All that is required is ~10g CHO/kg body weight, 3-5 days out, depending on training load
- Also evidence that well-trained athletes can top off liver glycogen stores within the last 24 hours by ingesting 10-12 g CHO/kg body weight.
- Maintain protein intake to support daily endurance turnover (1.2-1.4 g PRO/kg body mass)
- Intake of heart healthy fats should be consumed at a level to maintain body weight, without replacing the intake of carbohydrates.

Carbohydrates 3-4 hours before Race Time

- After an overnight fast (8-10 hours), liver glycogen stores can easily become depleted. On race morning, waking up for a high carbohydrate breakfast is the key to taking advantage of the time left to refuel.
- Carbohydrate Recommendations: 200-350 g CHO/kg of body weight 3-4 hours prior to exercise has been shown to increase muscle glycogen levels and enhance exercise performance
- The combination of pre-competition meal and CHO ingestion during activity may further enhance performance, especially if access to fueling is limited during race time
- Small amounts of Protein (20-25 grams), with limited fat intake should balance out this pre-race meal

On the Way to and At the Race Venue:

Following a high carbohydrate breakfast, it's important to maintain blood glucose levels leading up to race time. Sipping on a sports drink is an easy way to hydrate and maintain blood sugar levels up until go time! Simple CHO such as bars and gels are also convenient, but don't forget to wash those down with adequate water too.