

# Sport Nutrition for Athletes and Coaches



## Quick and simple tips to fuel your athlete in the pool

### Proper nutrition during multiple training days and meets provides:

- Sustained energy from foods and fluids high in carbohydrate, adequate in protein, and lower in fat and fibre;
- Mental focus for best technique and skill execution in the pool;
- Adequate hydration and electrolyte balance;
- Adequate energy and nutrients to recover and prepare for the next training session or meet.

### How much fluid do swimmers need?

Training and competing in hot humid pool environments can increase sweat loss which is difficult to determine since athletes are wet from the pool and varies from athlete to athlete. Here are some general guidelines to follow:

- Athletes should weigh themselves pre- and post-training: For every 1 kg lost, replace with 1.5 litres of fluid;
- Athletes should check their urine! If they have not produced any urine, or if it is bright yellow, they should drink 3 to 5 ml of fluid per kg body weight (about 150 to 350 ml fluid) about 2 hours before exercise;
- Drink 0.4 to 0.8 litres per hour during exercise or according to sweat rate.

### What to eat after training and meets:

- Refuel with carbohydrate-rich foods (including 1 to 1.5g carbohydrate per kg body weight) to replenish muscle glycogen stores in preparation for subsequent meets/competitions;
- Include a lean protein source with 10 to 25g (or 0.3g per kg body weight) of protein for muscle tissue repair and growth;
- Consume recovery foods/fluids within 30 minutes for optimal recovery;
- Consume a meal containing high carbohydrate and adequate protein within 2 to 4 hours.

### What to eat, when to eat?

Develop a practical plan and identify times to eat and drink before training and between heats. Do not rely on swimming venues to provide appropriate food between heats! Keep a cooler packed with drinks and snacks/sandwiches by the pool.



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## Examples of Portable Pool Snacks

- Fruit: Fresh, frozen, canned, dried fruit bars, raisins
- Trail mix
- Sport drinks/gels
- 100% fruit/Vegetable juices
- Low fat muffins/cookies
- Sandwiches (ex. nut butter, egg, tuna)
- Bagel/pita/tortilla with hummus\*
- Fruity yogurt and granola parfaits
- Pretzels
- Dry cereal (muesli, low fat granola, Shreddies)
- Fruit smoothies
- Nuts, seeds and nut butters\*\*
- Cereal/sport/granola bars
- Veggie sticks (carrots, peppers, etc.)
- Low fat crackers and cheese
- Low fat milk and chocolate milk (including rice and soy alternatives)
- Greek/North American low fat yogurt
- Instant breakfast or meal replacement drinks (ex. Boost, Ensure)



\*May be gas producing  
\*\*Higher in fat and may cause discomfort

Athletes should experiment with fluids and foods **during training** to find out what and how much is comfortable. Never try unfamiliar foods or drinks before or during competition. Include foods that contain some salt to promote thirst and to help retain fluids.

## Snack Suggestions for Race Day

Time between races	Food choices: Focus on portable, familiar, nutrient dense foods and fluids
Over 2 hours	1.5 cup pasta or rice with 1 cup tomato/vegetable sauce 1 cup chocolate milk
1-2 hours	Sandwiches with jam or honey and lean proteins Or 1 cup cereal/oatmeal with 1 cup fruit juice
30-60 minutes	1 cup smoothie or meal replacement drink such as Ensure, Instant Breakfast or Boost, or cereal/sport bars
Less than 30 minutes	Sport gels, juices, sport drinks, fresh fruit