



Nutrition Information Sheet for Swimmers and Parents

The constant energy demands within swimming can often lead to poor performance. However, with some careful planning this limitation can be minimised. The main source of energy during training is derived from carbohydrate, therefore, it is not surprising that high-carbohydrate meal and drinks are essential to provide energy and facilitate recovery, The timing of meals and snacks, however, is important.

30 Minute Rule: The muscles are most susceptible to restoration of carbohydrate stores within the first 30 minutes after exercise. Thereafter, the process becomes progressively more difficult The swimmer should eat 50 to 100 grams of carbohydrate", whilst keeping fat ingestion low, as soon as training finishes, and definitely within the first 30 minutes after training.

Food Examples: The following are examples of appropriate snack foods and their approximate carbohydrate content:

An apple, banana or orange: J 5~20g

Nutrigrain 25~30g

Muller Rice 20g

Fruit shake or Smoothie 25- 30g

Thick jam or honey sandwich 50g

Malt Loaf 18g per eighth of a loaf

Fig Rolls 13g per biscuit

***Energy/Protein Drinks:** After high intensity training it may be appropriate for older swimmers to ingest protein mixed with high carbohydrate. Excess protein is converted into fat by liver and stored in the adipose tissues. As a guideline protein 0.8g/kg body weight. Older swimmers in Performance Squad may be permitted to use energy drinks under the supervision & advice of the coach.

Morning Training: Have a snack item (examples above) with fruit juice 30mins before training with breakfast after training.

Pre-Event Guidelines: (Before) High Carbohydrate/Low Fat meal 2-4hrs before the race. Suitable types of food include: breakfast cereals, porridge, bread, rolls, toast, fruit juice, fruit, rice cakes, plain crackers, boiled rice, potatoes, boiled pasta, dried fruit, oatmeal biscuits, plain wholemeal biscuits and muffins. These examples of complex carbohydrates release energy slowly. Avoid simple carbohydrates (sugars) as these release energy quickly but trigger the release of insulin, which can have a negative impact on performance. A small snack may be eaten about 30mins prior to the race.

Inter-Event Food Guidelines: (During) If the interval between races is less than 30mins: The swimmer should drink fluids/juices or a sport drink. If the interval between races is up to 1hr: The swimmer should have a snack from the above list, with plenty of fluid, up to 30mins before the next race. If the race interval is 1-2hrs: The swimmer should have a small high carbohydrate/low fat meal.

Post-Event Food Guidelines: If the rest period between races is longer: then the swimmer should have a substantial meal no later than 2hrs before the next race.

Hydration: As water is stored with carbohydrate it is essential that substantial amounts of fluid is drunk with meals and snacks. Swimmers should bring their own water bottles with water or weak squash. The size of these should be sufficient enough to last the whole session. Energy drinks such as 'Lucozade' are not necessary. No fizzy drinks, drinks with high caffeine content or glass bottles should be brought poolside. Swimmers in Performance I may be permitted to use energy drinks under the supervision & advice of the coach. Swimmers should be well hydrated throughout the day.