NUTRITION TIPS FOR SWIMMERS

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MEAT, FISH, EGGS AND PULSES
Aim for at least two portions of fish a week, including a portion of oily fish. Pick lean cuts of meat or remove excess fat and avoid frying where possible.
WHY? As well as being great sources of protein, these types of food are rich in vitamins and/or minerals.

HIGH FAT/HIGH SUGAR
You don’t need to stop eating these foods altogether, but eating too much of these can make it easy to have more than the recommended maximum amount of saturated fat. Lots of the sugars we have come from sugary fizzy drinks, chocolate and sweets, so it’s a good idea to cut down on these too.

WHY? Our bodies need protein to work properly and to grow or repair themselves. Calcium helps to keep our bones strong.

CARBOHYDRATE
Foods such as potatoes, bread, cereals, rice, pasta should make up about a third of the food you eat. Where you can, choose wholegrain varieties.
WHY? Good source of energy and the main source of a range of nutrients in our diet. As well as starch, they contain fibre, calcium, iron and B vitamins.

FRUIT AND VEGETABLES
The World Health Organisation recommends that we should all be aiming to eat at least five (80g) portions (400g in total) of a wide variety fruit and vegetables a day - about a third of your total daily food consumption.
WHY? Incredibly versatile, packed with essential vitamins and minerals and a variety of phytochemicals (naturally occurring plant substances) that are vital for good health.

DAIRY
Milk and dairy products such as cheese and yoghurt are great sources of protein and calcium. To make healthier choices, go for lower-fat milk and dairy foods.
WHY? Our bodies need protein to work properly and to grow or repair themselves. Calcium helps to keep our bones strong.
WHY IS NUTRITION IMPORTANT IN SPORT?

When asked to describe his daily regime, Michael Phelps, the American swimmer who won eight gold medals in Beijing 2008, said: "Eat, sleep and swim, that’s all I can do"

Poor nutrition can derail training and hinder performance. The correct food choices can improve concentration, immune function & prevent illness. Good nutrition assists with body composition and reduces the potential risk for injury.

PRE-TRAINING
Ideally swimmers eat 2-3 hours before training so you have time to digest it. Meals should contain plenty of complex carbohydrates and be low in fat. Having sufficient carbohydrates before exercise prevents our bodies breaking down our muscles for energy.

WHAT’S PRACTICAL:
Following the above isn’t always possible. Just remember, food eaten before exercise should be easy to digest so, if you can only eat an hour before training think about lighter, meals that are low in fibre and fat to avoid stomach upset.

ALWAYS HAVE SOMETHING TO EAT BEFORE TRAINING: Even if you can only eat within half an hour of training, make sure you have a light snack e.g. slice of white toast with jam or vegemite; banana; yoghurt etc. All contain protein and carbohydrate and can also be a fantastic source of micronutrients ... a great running late, pre training choice!
DURING TRAINING

- It is important to start each training session and competition well hydrated - stay hydrated throughout the day.

- Exercise performance is impaired if there is only a 2% decrease in body weight (due to fluid loss) and losses in excess of 5% can decrease the capacity to exercise by 30%.

- Swimmers can assess how much fluid they lose during a training session by weighing themselves pre and post training. For every 1 kilogram lost: 1.5 liters of fluid needs to be replaced.

- Two key ingredients in a good sports drink: Carbohydrate, which provides fuel for working muscles, and sodium, which helps to maintain fluid balance.

- An isotonic drink (e.g. Lucozade Sport) is absorbed into the body more rapidly than water, as well as providing energy.

**FAST FACT!**

Isotonic sports drinks contain sugar. Limit consumption of these drinks to hard training sessions and competition.

**SAVE MONEY AND MAKE YOUR OWN ISOTONIC DRINKS**

**RECIPE 1**

- 500ml fruit juice
- 500ml water
- 1g salt (pinch)

**RECIPE 2**

- 200ml fruit squash or cordial
- 800ml water
- 1g salt (pinch)

For the above recipes, use previously boiled and cooled water and mix all of the ingredients together until they have dissolved.
POST-TRAINING

Most swimmers will also train twice a day, so high-energy, nutritious snacks need to be included for daily recovery in between swims and for performance in the pool, as well as other commitments, e.g. school.

Aim to consume a recovery snack or your post-training meal within 30-60 minutes of finishing a training session or competition.

THE GOALS OF NUTRITION RECOVERY

1. Replenish fuel (glycogen) stores used during the training session or competition;
2. Deliver protein to assist with muscle repair and synthesis; and
3. Restore fluid and electrolytes lost in sweat.

MORNING TRAINING IDEAS:

Pre-training: Cereal bar, breakfast biscuits, white toast and jam, banana, yogurt and fluid.
Post-training: Porridge with fruit, muesli, cereal with yogurt or milk, glass of milk, fruit juice.

Breakfast smoothie

Ingredients
- 4 very ripe peaches or nectarines, sliced and stoned
- 50g/2oz frozen blueberries
- 50g/2oz strawberries
- 4 baby bananas or 1 large banana, cut into chunks and frozen
- 6 tbsp live organic Greek yoghurt
- 6 Brazil nuts
- 1 tsp guarana powder (optional)
- maple syrup to taste

Preparation method
1. Place the peaches or nectarines into a juicer and extract the juice. Pour the juice into a blender with the remaining ingredients except the maple syrup and blend.
2. Taste the smoothie for sweetness, adding a little maple syrup if necessary.
3. Serve immediately in tall glasses.
RACE DAY

Prepare for race day throughout the year by eating well before AND after sessions to ensure adequate recovery.

Practice makes perfect for nutrition and hydration; find out what post training snacks work for you and get into the habit of staying hydrated.

Taper your energy intake as your coach tapers your training before a race. This will ensure all your hard work doesn’t go to waste.

PLAN AHEAD

Think about the race program and what time of day your races are and how long in-between races you have to recover, then plan your snacks and meals around this.

If less than **30 minutes** between races: fluids, sports drinks, juices, and fruit are the best options (as they are rapidly digested from the gut).

If **30-60 minutes** between races: sandwiches with honey/jam/banana, sports bars, cereal bars or low fat muesli bars are good choices.

If **1-2 hours** between races: pasta, rice or noodle-based dishes with low fat sauce/toppings or sandwiches or rolls are good choices.

If **more than 2 hours** between races: a more substantial meal can be eaten (with plenty of fluids, of course!).

**Do not rely on the venues to provide the appropriate food!**

**TIP:** Try freezing a spare drinks bottle and keeping it in your bag to keep snacks, sandwiches etc cool and safe to eat!
Sports supplements
Come in many forms - drinks, protein powders and bars, liquid meal replacements, creatine, caffeine, herbal preparations, and more.

Do you need them?
NO. They won’t make you faster, stronger or more skillful. Also, sports supplements have not been tested in teenagers or children so there is no evidence they are safe for a growing body.

Iron levels
Athletes involved in regular intensive training programs can quickly deplete iron stores and are at risk of developing iron deficiency anaemia, a condition where there are not enough red blood cells. These athletes, and in particular, female and adolescent athletes, have higher iron requirements than non-athletes.

How do I know if I really have iron depletion?
If feelings of fatigue (tiredness) persist and training capacity is reduced, see your doctor to see if you are at risk and for a blood test.

How is iron depletion treated?
Treatment involves dietary intervention to increase the intake and absorption of iron from food. You might need iron supplements if your iron levels are very low.

What are the best sources of iron?
A large amount of iron in food is unavailable for absorption. The most readily absorbed form of iron in food called haem iron comes from animal protein. The iron from plant foods is poorly absorbed.

What if I’m vegetarian?
Ensure food choices are iron-rich (e.g. eat baked beans, lentils and breakfast cereals regularly) and combine with Vitamin C-rich foods which help your body absorb iron (Good sources of vitamin C include citrus fruit, fruit juice, strawberries, kiwifruit, broccoli, cabbage, cauliflower and capsicum).

Consult a Dietitian before taking multi-vitamins or iron supplements as a well-balanced diet can be more than adequate.
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