



Laser Swimming Club Food for Sport

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Good Nutrition is essential to perform at your best. It can help delay fatigue, improve skill and concentration, and prevent injury and illness. A good diet will not turn an average athlete into a superstar, but a poor diet will prevent you from achieving your full potential.

Both athletes and non athletes need the same nutrients...carbohydrate, protein, fat, vitamins, mineral and water, but they need to consume them in different quantities and proportions.

Carbohydrate, protein and fat provide energy.

1g of carbohydrate = 4 kcal (calories)

1g of protein = 4 kcal

1g of fat = 9 kcal

Vitamins and minerals do not provide energy, but *are* needed to enable the body to perform efficiently and effectively.

It is essential that the food you eat provides sufficient energy to fuel your sport. It is also important that you obtain this energy from the correct food choices, to avoid gaining excess body fat, and to ensure you meet daily requirements for vitamins and minerals.

Carbohydrates – The Mainstay of an Athletes Diet

Carbohydrates are chains of glucose/sugar units.

Carbohydrate is stored in the body as glycogen in both the liver and muscles.

During exercise glycogen is broken down into glucose to supply the working muscles with energy. An inadequate intake of carbohydrate-rich foods leads to incomplete muscle glycogen stores. This will cause early fatigue, and will affect your daily training and performance.

Topping up low or empty glycogen stores after prolonged or high intensity exercise is essential to guarantee adequate stores for your next session.

Carbohydrate and fat are the 2 main fuels for exercising muscles. The proportion of carbohydrate to fat used during exercise depends on the type, duration and intensity of your exercise, as well as your fitness level and nutritional status. Even the leanest athletes have ample stores of fat, however, carbohydrate stores are limited.



How to Increase Your Carbohydrate Intake...

- Base every meal around a carbohydrate rich food, such as: bread, breakfast cereal, potatoes, rice, and pasta.
- Consume a high carbohydrate snack between meals, such as: fruit, wholemeal scone, low-fat yoghurt, dried fruit, cereal bar, fruit bread, fruit smoothie.
- Use thicker slices of bread.
- Choose deep pan rather than thin based pizzas.
- Add potato to soups and salads.
- Eat boiled/ mashed/ baked potatoes instead of chipped or roasted.
- Try boiled rice/pasta with stews and curries for variety.
- Pasta and rice mixed with beans/peas/sweetcorn or raisins make tasty salads.
- Add fresh or dried fruit to breakfast cereals and desserts.
- Make your own "high carbohydrate" smoothie with fresh or tinned fruit, low-fat yoghurt and honey or sugar.

EAT LARGE AMOUNTS OF NUTRITIOUS CARBOHYDRATE RICH FOODS

Breakfast cereals, porridge,

Bread – all types, wholemeal scones,

Potatoes, pasta, rice, cous cous, noodles

Pizza bases, pitta bread, oatcakes

Sweet potato, root vegetables, sweetcorn,

Beans (e.g. kidney, butter), peas, lentils

Fruit – fresh, dried, stewed, tinned,

Fruit juice, low fat smoothies,

Low fat yoghurt, cereal bars, popcorn

Protein

Protein is necessary for growth, maintenance, and repair of body tissue. Athletes taking part in strength and endurance sports have *higher* protein requirements than non-athletes. However, most athletes can meet this increased requirement through a varied balanced diet, which meets their energy needs.

Good Sources of Protein

- Lean meat
- Chicken/turkey Pulses (peas, beans, lentils)
- Fish
- Cheese (choose lower fat varieties)
- Eggs
- Nuts
- Low fat/skimmed milk
- Low fat yoghurt

Current research suggests that after a heavy / strenuous training session most athletes will benefit from taking a small amount of extra protein along with their post training Fluid and



Carbohydrate snack.

Fat

Small amounts of fat in your diet are necessary. However, for athletes a high fat intake is generally not recommended as it increases the risk of excessive gains in body fat, and results in lower carbohydrate intakes.

Include small amounts of unsaturated or "good fats" in your diet e.g. oily fish (salmon, tuna, sardines and mackerel), vegetable oils (e.g. olive, sunflower, canola), nuts and avocado.

How to Cut Down on Fat

- Limit your intake of high fat foods
- Grill, boil, steam, braise or microwave food instead of frying.
- Eat chicken, turkey and fish regularly.
- Lean red meat is a good source of iron and can be included 2-3 times a week.
- Trim visible fat from meats and skim fat from casseroles and stews.
- Use low fat, monounsaturated/polyunsaturated spread
- Use low-fat, vitamin enriched, or skimmed milk instead of full-fat.
- Choose low-fat cheeses such as "light" cheddar, Edam, Gouda, Feta, Camembert, Cottage cheese
- Substitute low-fat yoghurt/fromage frais for cream
- Use fat-free or vinegar based dressings, mustard, or chutney instead of mayonnaise, on salads and sandwiches.

Foods high on fat include butter, margarine, cream, full fat dairy, mayonnaise, fat on meat, processed meats, fried food, pastries, crisps, cakes, and chocolate.

Fluids – Keep your cool

During exercise fluid loss from sweating can be very high. This can lead to progressive dehydration, which will impair performance and is a potential health risk.

How Much Fluid Do I Need?

BEFORE EXERCISE: Drink 300-600ml in the 15 minutes prior to exercise.

DURING EXERCISE: The general recommendation to athletes is to drink 150-200ml every 10-15 minutes but it is better to individually assess

AFTER EXERCISE: Replace all fluid lost during exercise.

What Should I Drink?

BEFORE AND DURING EXERCISE:

- Water.
- Isotonic sports drinks, e.g. Club Energise Sport, Gatorade, Lucozade Sport, Powerade.
- Homemade carbohydrate-salt solutions (see below)



AFTER EXERCISE

- Isotonic sports drinks and homemade carbohydrate salt solutions.
- Hypertonic sports drinks, e.g. BPM, Club Energise, Lucozade Original, Lucozade Energy.
- Soft drinks.
- Water.

REMEMBER!

The fitter you are, the more you sweat and the more fluid you need. Thirst is a poor indicator of dehydration.

Homemade Sports Drinks

You can make your own sports drinks using any of these three recipes:

1. Recipe 1
 - 1.1. 40-80g sugar or glucose powder
 - 1.2. 1 litre water (previously boiled and cooled)
 - 1.3. 1 g salt
2. Recipe 2
 - 2.1. 500ml fruit juice.
 - 2.2. 500ml of water (previously boiled and cooled)
 - 2.3. 1g salt
3. Recipe 3
 - 3.1. 200ml fruit squash/cordial.
 - 3.2. 800ml of water (previously boiled and cooled)
 - 3.3. 1g of salt

For 1 to 3 above mix all ingredients together until dissolved.

Kit Bag Essentials

It is very important to take a high carbohydrate/protein snack immediately after exercise to refill your glycogen stores in preparation for your next training session.

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