

Week 4

Fuelling the body



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Hydration

Depending on your age, gender and body composition, water will make up 40-70% of body mass. It is recommended that adults should drink 1.5-2 litres of water per day but if exercising your body requires additional water to compensate the fluid lost.

Maintaining hydration as a runner is important for health and performance. Water regulates our body temperature, removes waste, helps bring energy to our cells and cushions our joints. Adequate hydration can improve recovery, maximise performance, minimize injury and cramping. When you first begin to exercise your body produces heat and around 75% of energy put into exercise is lost through heat.

Below are some guidelines for the quantity of water you should be consuming before, during and after exercise:

- **Pre Exercise** - 2 hours before exercise you are advised to drink approximately 5-7mls per kg body weight of fluid.
- **During Exercise** - you should aim to consume around 0.4-0.8l per hour. When exercising in warmer temperatures you should increase your fluid consumption.
- **Post Exercise** - replacing fluid lost after exercising is important. The volume is based on your body weight lost during exercise, 450-675ml of fluid for every 0.5kg. Therefore you will need to weigh yourself before and after each session.

Electrolytes

When someone sweats not only does the body lose water but also electrolytes as in sodium chloride, potassium and magnesium. Electrolytes are important to be replaced as they help regulate fluid balance and pH of the blood which are important for hydration, conduction of nerve impulses and muscle function. There are a wide variety of electrolytes on the market which include gels, tablets and drinks.

For the 5k distance it is not necessary to replace your electrolytes during exercise. However, if you start to experience headaches, cramping or nausea during your training it might indicate electrolyte deficiency.

Running Nutrition

What to eat and when to have it

Food Groups

When you take up running and start to gradually increase your training, there are many things you should begin to consider, and nutrition is definitely one of them. Thinking and learning more about your nutrition will help you to get the most out of your training, ensuring you stay energised whilst running, and you recover afterwards.

To begin it is important that you research and learn about what your diet should consist of and the value of each of the different food groups you are eating. The nutrients you should be eating include:

Fats: these are used to encourage the absorption of some vitamins and are also an essential fuel source for low-intensity exercise. 15-25% of your diet should be made up of fats .

Protein: a vital nutrient which plays a role in muscle repair, recovery and growth. 20-25% of your diet should be made up of protein.

Carbohydrates: provide your body with the main bulk of energy required for running. 50-60% of your diet should be made up of carbohydrates. You should tailor your intake relative to your training so on training days eat slightly more carbohydrate than on non-training days where you opt for low-carbohydrate meals and snacks.

Vitamins and Minerals: these help to fill you up at meal times, as well as giving your immune system the added boost it requires. Exercise can suppress your body's immune system, so it is important to eat plenty of vitamin-rich fruit and vegetables. Vegetables should fill at least half your plate at meal times. It is recommended that we should eat at least 5 portions of fruit or vegetables each day.

Do not use the excuse of taking up running to overindulge in loads of high-sugar and high-fat foods! That's not to say that you can't enjoy a treat every now and again, but just be mindful. If you use the excuse of training to have that extra slice of cake, you will likely overindulge on your calorie intake and negate any energy expenditure you achieved on the run. This can lead to weight gain, which will hinder your running performance. Always follow a healthy balanced diet.

Nutrient Timing

Before exercise- a meal should contain 1-2 grams carbohydrate per kg of body weight and as little fat and fibre as possible as these can slow digestion. Deciding what and when to eat before exercise will vary on the individual. It is advised that you keep a food and training diary recording what you have eaten, how long prior to exercise and the effect.

During exercise- moderate to high intense exercise lasting more than 60 minutes both physical and mental performance will improve if a person takes in carbohydrates. This will help to delay fatigue allowing the planned exercise to continue. It is recommended that 30-60g carbohydrates is ingested per hour of exercise. Taking anymore will not have any further benefits as muscles can only absorb a certain amount. Exercise lasting less than 45 minute will not need any at all.

After exercise- it is important to start the refuelling process as soon as possible to enable a quicker recovery. This should be done in the first 2 hours but ideally within 30 minutes. It is recommended 1-1.5g of carbohydrates per kg of body weight is consumed with the addition of protein in ratio of 4:1/3:1 (carbohydrates: protein)

Workouts

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Day 1 - Speed interval

Warm up: 5 minute brisk walk

Main session: 1:30 minute run

1 minute walk x6

Cool down: 5 minute walk

Day 2 - Rest

Day 3 – Aerobic interval

Warm up: 5 minute brisk walk

Main session: 6 minute run 2
minute walk x4

Cool down: 5 minute walk

Day 4 – Bodyweight circuit

40 seconds on 20 seconds off x4

- 1) Squats
- 2) Press ups
- 3) Lunges
- 4) Glute bridges
- 5) Back extension
- 6) Plank

Day 5 - Rest

Day 6 - Long run

Warm up: 5 minute brisk walk

Main Session: 4km run

Cool Down: 5 minute walk

Day 7 - Rest

Tip

Make sure you're eating a variety of different coloured fruit and vegetables throughout the day. Different colours mean different vitamins!