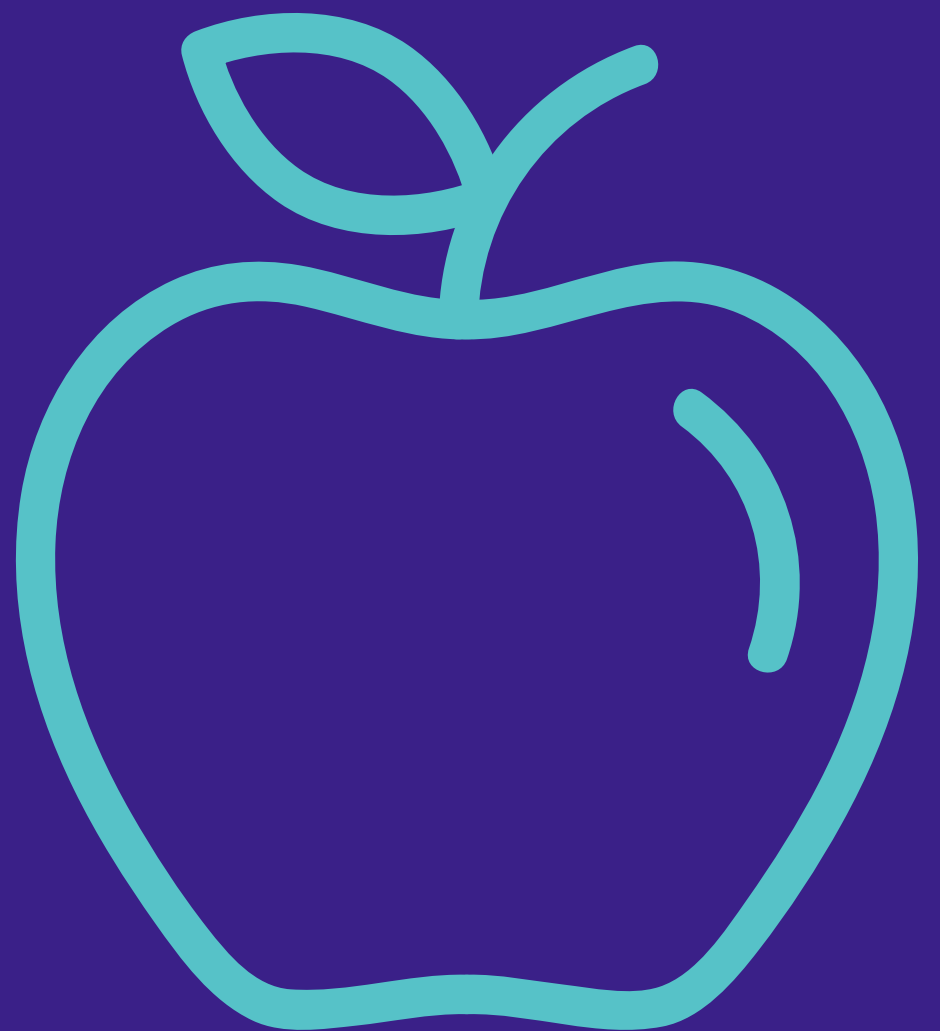




Your Guide To The Finish Line

Nutrition Tips
to fuel your race





Expert Nutrition Tips

Thank you for choosing to run for ACRF! By choosing to challenge yourself in your running event, you're helping to raise vital funds for pioneering cancer research. To get the best out of yourself on race day, it pays to focus on your nutrition and hydration in the lead up to your event. ACRF's expert nutritionist and run coach, Tamara Madden, has put together 8 top tips to help you get to the start line in your best shape ever.

About Australian Cancer Research Foundation

At Australian Cancer Research Foundation, we know that only brilliant ideas can tackle something as big as cancer. That is why we give scientists the technology, equipment and infrastructure they need for pioneering research. By funding research that seeks to progress and transform the way we prevent, detect and treat ALL cancers, we are committed to our vision of one day reaching a world without cancer.

**To stay motivated and connected
with other #TeamACRF runners,
join our [Facebook group here](#).**

Tip 1:

Just Eat Real Food

Following the “JERF” principle is a great way to guide your meal and snack choices - it is also referred to as a “whole foods” diet. This is food that comes out of the ground, off a tree or from an animal - and that has been processed minimally - if at all.

JERF - Just Eating Real Food - ensures you're eating a nutrient dense diet which will have a huge impact on your overall health and wellbeing. Packaged foods often contain refined vegetable oils, chemicals, flavour enhancers, preservatives and refined sugars – which all play havoc with your liver, metabolism and hormones.

The quality of your food is as important as the quality of your training and rest – these 3 combined is what influences your performance and recovery.

How?

The single biggest thing you can do to improve your nutrition is meal planning.

If you have good food ready and available in the fridge you are 90% there.

Being organised and planning ahead is critical - shopping, preparing and some cooking.

Allocate a couple of hours on the weekend or one evening to write down the next few days meals, and then shop accordingly – online and delivery services make this even easier.





Tip 2:

Managing the Macro's - Carbohydrates, Protein and Fats

Carbohydrates are your body's preferred source of energy.

They are the backbone of a balance diet for active people. Your body turns carbohydrates into glucose (energy). Your brain requires a significant amount of glucose (or energy) to operate efficiently, maintain concentration, avoid mood swings and avoid sugar cravings.

Your intake of carbohydrates needs to be adjusted depending on your expected energy output / activity level - as only a finite amount of carbohydrates can be used as fuel with any leftover carbohydrate potentially being stored as fat.

Excess carbohydrates can cause the body to make too much insulin leading to high blood sugar levels and then rapid decreases – or fluctuating energy levels (3pm slump anyone?).

This happens more often when simple, processed carbohydrates are being consumed instead of complex carbohydrates.

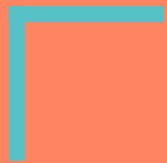
So what should you eat and how much is enough?

Most people following a running training program will need between 2-5gms of carbs per kilo of body weight per day. For example a 70kg person may have anywhere from 140gms carbs per day to 350gms per day - it is a large variation... as it depends on body type and exercise load.

The majority of your carbs should be whole unrefined complex carbohydrates i.e. vegetables, fruit and whole grains. However, not all are created equal – so it is important to understand the carbohydrate load of different fruit, vegetables and grains.

For example – starchy carbs are much higher in carbohydrate load – this includes vegetables that grow below the ground like potato and sweet potato, also grains such as oats, corn, rice, quinoa, and legumes, beans and peas.

If your goal is to reduce your weight then it is best to avoid too many of these starchy carbs – or only have them as part of your post training meal (recovery meal).



Protein – provides the building blocks for a healthy body

Along with healthy carbohydrates your meals and snacks should always include some protein.

Protein is important for a number of reasons:

- it helps to stabilise blood sugar levels
- it helps avoid energy slumps and the roller coaster of constant cravings
- it makes you feel satisfied after eating
- it provides you with the building blocks (amino acids) that make up muscles, hair, nails, brain cells and your immune system cells
- it is required to make essential hormones such as adrenaline.

When should you eat protein and how much is enough ?

Ideally every meal and snack should contain a small amount of protein. Most active people need to consume around 1.2 – 1.5gms of protein per kilo of body weight.

A 70kg active person needs between 85-105gms per day.

As a rough guideline, meat contains around 25-30% per gram - so a 100gm piece of cooked chicken is 25gms protein. A large egg contains about 8gms protein.

The key to protein consumption is to spread it out across all three meals and in snacks also – the body can only absorb a maximum of 40gms at one time, so eating a 300gm steak at dinner time to reach your 85gm target doesn't tick the box! Depending on your requirements you should aim for 20-30gms per meal, then the balance in snacks.

Healthy Fats – why are they important where do they come from?

Healthy fats are essential. Healthy fats will NOT make you fat, in fact they will help you to lose weight. Healthy fats help to make you feel full and satisfied, so that you don't over consume calories. Fat is essential for cell membranes, hormone production and also for transport and absorption of nutrients.

Each meal should contain a small amount of fat - this is pretty easy when you are following the "JERF" principle and hitting your protein requirement – as fat is often "packaged" with protein – as you will see from the list below.

So what are healthy fats?

Oils – coconut oil, olive oil, flaxseed oil, nut oils.

Animal fats – meats, lard, egg yolks.

Fatty fish – salmon, mackerel and sardines.

Full fat dairy foods – choose good quality butter, yoghurt, ricotta cheese, full fat milk, cheese, haloumi.

All nuts and seeds – examples are cashews, brazil, walnuts, sunflower, pepitas, linseeds, chia, hemp.

Fruits – avocado, coconut, olives.



Tip 3:

Fueling and Hydration

Fuel for training or event up to 90 minutes

If you are following a nutrient dense diet and nutrition has been adequate then you do not necessarily need to take in extra fuel for events up to 90 minutes.

For some people - a small amount of fuel prior may be of benefit. This would be a light carbohydrate snack such as toast, crumpet or banana. Listen to your body.

Fuel for training or event 90 minutes to 3 hours

For longer training sessions or races, you'll need to consume some extra fuel. As a general rule, athletes need to consume 30-45 grams of carbohydrate per hour (or 120-180 calories per hour), depending on body weight, experience, and pace. It is also vital that you take on board some water with the carbohydrates so that they absorb.

Energy gels are a good choice. They contain between 20-30 grams of carbs so you can have one of these with some water. Alternatively, you could choose to have a banana which is approximately 30 grams of carbs. Bars and sports drinks are also convenient, check the labels for amount of carbs per serve.

Daily hydration

Water is the most abundant constituent of the body representing approximately 60% of your body weight. Water is essential to virtually every body function including digestion, absorption and transport of nutrients, elimination of body waste and regulation of body temperature, and many other chemical processes.

Dehydration will impact your performance during exercise, and leave you with a headache, fatigue, and a foggy brain. Ensuring you are well hydrated also helps to maintain a healthy weight – sometimes when you think you are hungry, you're actually thirsty.

So how much is enough each day?

A good guide is to try and drink at least 6 glasses a day, (assume a glass = 450mls). If you have two coffees (or tea) per day, they are about 250mls each, so there's one glass done!

Do I need to be replacing electrolytes?

If you are exercising 3-4 times per week for up to an hour at a time, you are most likely to be getting enough electrolytes from your diet. If you are a heavy sweater or are training in particularly hot humid environment then an electrolyte replacement tablet will be of benefit (ie hydralyte).

Adding good quality salt to your food or water is also an easy way to replace some of the sodium lost through heavy sweating.

Tip 4:

Protecting your Immune System

When you start on a training program it's more important than ever to maintain a strong immune system – especially when you are in a peak training phase. You need to make sure you are providing your body with the correct nutrition and resources to protect yourself from colds, flu's and viruses.

Running can compromise the immune system as oxidative stress is increased; it is important to counter this with an increase in anti-oxidant foods to counter the free radicals and restore balance.

Antioxidant food sources

You need to be aiming for a minimum of 5 serves of vegetables and 1-2 serves of fruit per day.

Vegetables - Capsicum, broccoli, dark green leafy veg, tomatoes, sweet potato

Fruits - Berries and citrus fruits, papaya, kiwi

Organ meats – liver, heart

Oily fish – sardines, mackerel and salmon

Other - Green tea and matcha tea Nuts and seeds

How many of these foods do you include on a daily basis?

You need to be aiming for a minimum of 5 serves of vegetables and 1-2 serves of fruit per day. Not only do you need the carbohydrate that they offer, but also the nutrient density. If you are struggling to include enough - smoothies are a great way to boost your intake. You could use fruit, vegetables, add in some matcha tea (powder) plus a handful of nuts or seeds.

If you don't like the sound of organ meats, you can buy some mince meat that has it added, you won't even know the difference! Or include a good quality pate into your regular diet.

Getting adequate sleep is also an extremely important part of protecting your immune system. This is often overlooked when training for a specific event, especially when the training load increases – as extra training hours are often prioritised over sleep – this is NOT a good strategy and often ends up compromising the immune system or contributing to fatigue. Most active people need 7-8 hours sleep per night.



Tip 5:

Recovery Nutrition

Choosing a good post workout recovery meal is vital to ensure you get the most from your training. Ideally it should be consumed within 45 mins of the end of your training session.

The most important elements of your post training meal are carbohydrates and protein. The carbs refuel your glycogen stores and the protein helps repair the muscles and supports the immune system.

Choose good quality nutrient dense carbohydrates like fruit, starchy veg, wholegrains, legumes, nuts and seeds, and good quality protein such as eggs, fish, lean meat and dairy. This will ensure that your body is getting the nutrients it needs to have you in the best health possible on race day.

Post training breakfast might be:

Fruit with yoghurt, topped with nuts and seeds or muesli.

Eggs and toast – can add spinach or avo smoothie.

Frittata with potato/sweet potato, corn.

Porridge topped with fresh fruit & yoghurt.

Post training dinner might be:

Chicken stir-fry with rice.

Steak with sweet potato and greens.

Grilled fish with buckwheat, beetroot and spinach salad.

Homemade hamburgers with a large leafy green side salad.



Tip 6:

Increasing your calories to meet training demands, and avoiding weight gain

As your training load starts to increase so does your need for energy. It is critical that you make sure your body is receiving the nutrients and hydration that it needs to allow you to train effectively.

Following the JERF principle will ensure you are consuming a diet rich in nutrients that will fuel your training. Pay special attention to including protein at every meal, and aiming to hit your daily protein target.

As your energy demands increase, it is very easy to reach for packaged snacks and takeaway food, especially if you become “hangry” (hungry + angry!). Around this time of increased demand it is also very easy for some people to start putting on weight – even though you are training more.

80% of your weight is controlled by what you eat, only 20% is from exercise.

Now, more than ever, it is important to allocate time to food shopping, and preparation - **you can't out run a bad diet!**

If you are prone to weight gain, or trying to lose some weight before your event, then timing your carbohydrate intake will be key. Your post training meal (recovery meal) should still contain some starchy carbs but all other meals should focus on quality protein, a small amount of healthy fat, with a large portion of “above the ground vegetables”.

Eating with a fork is another good trick to help you decide on meals – this helps you to avoid things like burgers, pizza, sandwiches and sushi rolls.





Tip 7:

Managing your Taper

As you head towards race day your training load will decrease in volume. This can be a difficult time, and many people experience “taper tantrums”. Your metabolism will still be working well, and even though you are not burning as many calories in training, you will most likely find that you are still eating the same volume of food. It is vital that you stick with the “JERF” at this point as you do not want to compromise your immune system.

If you are prone to weight gain, this is a good week to watch your carb intake closely, and focus on mostly above the ground vegetables, lean protein and healthy fats.

As your training load has decreased, you might have extra time on your hands – a great way to utilize this extra time is to focus on stretching and relaxing in preparation for the big day.



Tip 8:

Race Day Tips

Do I need to carb load?

No. However, for running it is beneficial to ensure your glycogen stores (in your muscles) are full and ready to power you over your race distance.

This does not mean increasing meal size, or calories, but ensuring that the meal the night before the race contains some carbohydrates. Vegetables, fruit, legumes and whole grains are excellent sources of carbohydrates.

Should I drink extra water?

Yes. Hydration levels are critical for performance, and you should arrive at the race fully hydrated. You should be drinking 2 litres of water a day for 2 days prior to your race, adding a pinch of salt to help increase the uptake of water into the cells. You can also use electrolyte replacement tablets to help increase hydration levels.

What should I have for breakfast?

You may feel very nervous on race day morning. Now is NOT the time to consume anything new – (food or fluids) even if it's free or your friend highly recommends it!

A light breakfast 90 mins prior to the race is ideal - it should be mostly carbohydrates. Choose a breakfast that's low in fibre, low in fat and low in protein, to decrease the risk of gastric upset. Eg: Toast or crumpets with honey and a banana.

Fueling during the race

For events lasting more than 90 minutes, such as a half marathon, most runners will need between 30-40 grams of carbohydrates (120-160 calories) of fuel per hour. This can come from sports drinks, gels, chews, bars, or real food. Remembering you also need to consume water during the race in order for the carbohydrates to be absorbed, and to avoid de-hydration. If you are aiming for 2 - 2 ½ hours for your run – you should carry minimum 3 gels - or equivalent carbs in chews, energy bars, sports drinks. Consume one at 45 minutes, one at 90 minutes, then another at 2 hrs if you need!

Post race

You need to replenish glycogen stores (carbohydrates), plus some protein for muscle recovery. Perhaps a piece of fruit and a protein bar.

Alcohol is not a good source of hydration. Makes sure you hydrate and re-fuel properly before celebrations begin!



Thank you

Thank you so much for choosing to run as part of **#TeamACRF**, we are so grateful for your support. Your run is helping to raise vital funds for life-saving cancer research, backing brilliant scientists with the technology they need for pioneering projects.

We are here to support you, so please get in touch with the team via the details below if you need anything. We wish you the best of luck with your running and fundraising, and look forward to staying up to date with your amazing progress! You will smash it on race day!



#TeamACRF is here to help! Get in touch with us at fundraising@acrf.com.au or on 02 9223 7833.