

Nutrition Training Guide

Completing an ultramarathon takes hours upon hours of training, if you want to make it to the start line it is vital to get your nutrition right. Here we will talk about how to eat well to ensure you are optimising your training and recovery in preparation for the big day.

Get the Basics Right First

It's important to get the basics right first. Eating enough of the right foods is important for overall health and wellness.

Key points:

- Aim to have 5 serves of vegetables (1/2 cup cooked or 1 cup of salad is one serve) and 2 servings of fruit per day.
- We don't get enough fibre in our diets and as athletes as we eat more, the more important this is. Fibre targets are 38g/d for men and 28g/d for ladies
- Aim for 1.2 – 2.4g/kg¹ of bodyweight of protein per day. Have a source of protein in each snack and meal. Optimal targets are 0.2-0.5g/kg of protein in our snacks and meals spread evenly over the day.
- Stay hydrated – morning is the best time to check to see if you have hydrated adequately the day before.
- Aim to keep caffeine limited to the morning to minimise the impact it has on sleep.
- Get at least 7 hours of sleep a night.

Sports nutrition recommendations focus on optimal performance. This often involves food high in refined carbohydrates and low in fat, fibre and protein. This would compromise our body's ability to recover and adapt if we ate like this every day. During training, it is about finding the balance between having adequate fuel overall and fuelling with nutrient dense foods. We are not focusing on performance during training; it is about recovery, adaptation and overall health.

To build your nutrition plan, start by determining when you are training. Then use the tools below to start by optimising pre, during and post nutrition. You can then fill the gaps with the key points above to support your recovery and wellbeing for the rest of your day.

Pre-Training Nutrition – What and When

Your pre-run nutrition is going to be dependent on what time of day you run and what your stomach can tolerate.

- Aim to have your last main meal ~2 hours before your run.
- Balance your meal with carbohydrates, protein, fruit and vegetables. Simple changes such as increasing carbohydrates may help give you the energy you need for your training.

If you struggle with GI discomfort on your runs, make sure you stick with it. Start small; eat further away from training and build up your tolerance over time. This will train your gut to handle more during competition.

TARAUERA ULTRA MARATHON

BY **UTMB**



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If you are feeling like you need a little bit more energy, get a carby snack in 30 minutes before your run. Some simple suggestions include:

- A Banana
- Small bowl of cereal with fruit
- Toast with sliced banana and honey
- Small bowl of pasta with tomato-based sauce
- Banana and berry smoothie
- Fruit toast with jam

Nutrition on the run

It is essential you know how to fuel correctly if you want to complete an ultra-marathon. Practicing this in training and learning what works for you is vital. For trainings less than an hour just focus on what you are eating before and immediately after. Runs between 1 and 2 hours aim for 30-60g of carbohydrates per hour. When out for over 2 hours, then 60-90g of carbohydrate per hour is good practice^{2,3}.

There is an art to consuming food during training. Planning and practicing is crucial to get it right. It is not about just having energy for that training; it is about teaching your body to maximise carbs as a fuel source during competition, i.e. training your gut. Trialling a combination of foods and supplements (gels and sports drink) is key to figuring out what will work for you on race day.

Carbohydrate ideas:

- Gel ~25g
- Banana ~20g
- Muesli Bar ~20-30g
- 3 Jet Planes ~20g
- 15 Jellybeans ~30g
- 4 Snakes ~40g
- Jam Sandwich ~35g

For any runs over 1h, hydration is something to consider. Trial different sport drinks/water combinations to see what works for you. More detail about hydration strategies coming in our next article on race day nutrition.

Post Run Recovery

Optimising your post run nutrition will aid training adaptation, maintain training quality and facilitate a healthy immune system. The three key goals after a hard run are refuel, repair and rehydrate.

Refuel with carbohydrates - the glucose stored in our muscles is what we use to provide us with energy needed to run, but also function as a human. After exercise, we need to replenish these stores by eating good quality carbohydrates. Aim for 0.8 - 1.2g/kg of carbohydrates in that meal⁴. Aim for the higher end of that range if we have another training that day.

Repair with protein - this is essential for promoting muscle repair (both muscle fibres and mitochondria). Aim to get a meal or a snack in 30 minutes to 1 hour post exercise. Regardless if you are opting for a meal or snack make sure you get ~20 of protein⁴.



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Rehydration is critical to support the body in moving nutrients around. If you are a heavy sweater, electrolytes may be warranted. Simple recommendations encourage us to consume (through fluid and food) ~150% of body weight loss over 2 to 4 hours⁵ post-run. For example, if you lost 1kg then you need to drink 1.5L. More detail around this in the next article when we discuss sweat rates.

Are You Eating Enough?

You can't take a car on a road trip without any fuel, well the same goes for you. Most new athletes we see at CGN often don't get enough in. Under eating can be detrimental, resulting in reduction in performance, loss of period, fatigue, muscle loss, sleep disturbances, illness as well as injury, such as stress fractures. These all fall under a syndrome called Relative energy deficiency in sport (RED-S) and is something we as sport nutritionists continue to change.

Takeaway Messages:

1. Get your diet right first, aim for wholegrain carbohydrates, plenty of fruit and vegetables and a serve of lean protein at each meal.
2. Pre training snack should be high in simple carbs, limit fat, protein and fibre to make the most of this energy and avoid gut upset.
3. Use simple carbs to fuel runs longer than 1 hour.
4. Recover properly; refuel with carbs, repair with protein and rehydrate with water and electrolytes.

Most of us know what some basics we can do to improve our nutrition, a simple approach such as recording what you eat and how you are feeling can help you become more self aware [Click here to download our diet history worksheet](#) From here focus on what you can add in rather than take out.

An ultra-marathon is a big job, If you are still feeling a little bit lost, get in touch with the team at [Conrad Goodhew Nutrition](#). We can support you in habit changing for day-to-day training, as well as optimising your nutrition for your upcoming race.

References:

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