

Endurance Athlete Nutrition Checklist

Hannah Rose Nutrition

OVERVIEW & PURPOSE

Getting your nutrition strategy right for a big event can be the factor that makes or breaks your race. Without appropriate nutrition to fuel your body, you risk hitting the wall, sickness, diarrhoea, lethargy, dehydration, fainting, bloating... the list goes on!

And because of the complexity of endurance events, figuring out the right type, timing and quantity of fuel to suit your body is no easy task.

That's why I've created this checklist that you can work through to establish the best before and during training fueling routine, so you can not only get the best out of every training session, but put yourself in the strongest possible position on race day.

How to use this checklist

This checklist is split into three sections: pre-training, during training and race prep. Each section starts with questions for you to consider about the fueling strategy you already use, do you plan for all of the points raised, or does your strategy require more consideration?

The second part is where I provide my suggestions for how to execute, test and trial your new and improved nutrition strategy. What's written on paper doesn't always work in practice because every athlete and their needs are different... which makes the test and trial arguably the most important bit!

PRE-TRAINING

	Always	Sometimes	Rarely
I always make sure that I have a meal or snack before I train (1-3 hours before hand)			
I plan what fuel I'm going to have before training sessions			
I adapt the amount of pre-training fuel depending on the type of training session. Eg. before an easy session, high intensity session or long session?			
I aim to start every training session well hydrated			
I use my urine colour as a hydration indicator, and make changes to my hydration as per my results			
I add electrolytes to my drinks on hot days and/or long training sessions			

Carbohydrate and fuel requirements

You need a pre-training snack if you...

- Are doing a 90+ minute session of any intensity
- Are doing a 45+ minute high intensity training session
- Haven't eaten anything for the last 3+ hours

Opt for a small, low fat, low fibre snack 30-60 minutes before training. A good pre-training snack provides 0.5-1g carbohydrate per kgs of bodyweight (eg. 70kg athlete would benefit from a snack containing 35-70g of carbohydrates)

Trial different types of carbohydrates, timings and amounts pre-training to see what suits you best.

Signs you need a pre-training snack:

- You're starting exercise hungry
- You feel lethargic or have no energy
- It's first thing in the morning

Signs your pre-training snack isn't right for you and/or you need to change when you eat your pre-training snack:

- Gut upset
- Diarrhoea
- Sickness
- Nausea
- Stomach cramps
- Heartburn / Indigestion

Hydration, Fluid & Electrolyte Needs

Aim for 400-800ml fluid across the 3-4 hours before exercise. Fluid needs are highly individualised so pay attention to:

- The colour of your urine
- Your thirst levels
- Heat and humidity

Additional consideration: If you are a sweaty exerciser, have a 90+ minute session planned, or you're training in hot weather, it's useful to add electrolytes to your pre-training fluids to maintain an appropriate fluid:electrolyte balance.

Signs you're starting exercise over-hydrated:

- Your wee is the colour of water
- You need a wee mid-training
- You get cramp or a stitch as you start your session

Signs you're starting exercise dehydrated:

- You're feeling particularly tired / lethargic / sluggish
- Medium - dark yellow coloured wee
- You're thirsty

DURING TRAINING

	Always	Sometimes	Rarely
I take hydration and performance snacks with me for sessions lasting 60+ minutes			
I plan how much carbohydrate i'm going to consume per hour, for sessions lasting 90+ minutes			
I plan how often I'm going to take on carbohydrates during a long training session. Eg. I use a gel every 30 minutes			
I take on fuel regularly during long training sessions, even if I don't feel low on energy			
I experience muscle cramping, sickness and nausea in long training sessions			
I experience bonking / hitting the wall / decrease in energy levels during training sessions			
I experience problems with diarrhoea, bloating, constipation when exercising			
I plan how much fluid i'm going to drink during a training session			
I use electrolytes during my training sessions			

Carbohydrate Requirements

You do not need carbohydrates for sessions lasting less than 60 minutes

You need to take on carbohydrates during sessions...

1. Lasting up to 2 hours. Aim for 30-60g carb per hour
2. 2+ hours. Aim for 30-120g per hour

BIG BUT... What works in theory, doesn't suit everyone in practice. Due to the high sugar nature of these snacks and supplements, they can often cause gut upset so you need to work on a test and learn basis until you're happy with the amount of, and type of carbohydrates that you take on.

Start at the lower end and aim for 30g/hour, gradually build up your intake over time. This is important for two reasons:

1. Building up gradually better trains your gut to expect and tolerate high intakes of carbohydrate
2. Allows you to clearly see how much carbohydrate you can tolerate and helps you establish your optimal intake and your upper limit.

As well as how much food you are physically able to eat/comfortable eating across your event you need to plan your carbohydrate intake in a “little but often style” eg. 20g carb every 20 minutes to hit a 60g/hr intake. This also helps with gut training, but also allowing your body to best use the carbohydrates you’re consuming, without overwhelming your digestive system.

Hydration, Fluid & Electrolyte Needs

Sodium and fluid balance is vital for performance, not only does it help with brain function, alertness and decision-making, it’s important for avoiding fatigue and muscle cramps.

Factors affecting how much you sweat:

- Exercise intensity
- Exercise duration
- Heat and humidity
- Your body size
- The amount and type of clothing you’re wearing

Fluid needs are highly individualised so pay attention to:

- The colour of your urine
- Your thirst levels

Conducting sweat tests under different conditions will help you to establish your personal sweat rate.

Up to 60 minutes training sessions: It is unlikely that you will need to take on fluids for shorter sessions, but in hotter weather you may want to have some water to hand, just in case.

1 to 2 hours: This length of training session will have different requirements based on how much you sweat. I’d suggest having fluids with you and to drink to thirst.

2+ hours: A good starting point is to aim for 400 - 800ml fluid per hour of exercise. At this point it’s VERY important to add electrolytes too, otherwise you risk an imbalance of fluid in the body vs electrolytes.

It’s vitally important fluid losses in sweat are replaced in the “little and often” approach.

Once you've established your fluid sweat rate, you need to consider your sodium sweat rate as well. The easiest way to work out if you're a heavy sodium sweater is to consider these questions:

	Yes, I experience this	No, I don't experience this
Do you finish exercise with white marks on your skin and clothes?		
If you get sweat in your eyes does it sting?		
Does your pet lick your legs after you've gotten sweaty?		
Do you regularly get cramp when exercising?		
Do you feel faint or dizzy / head rush when you stand up quickly after exercise?		
Do you regularly crave salty foods during longer sessions, or after training?		

If you experience 4+ of the above then chances are, you're a high sodium sweater...

It's not the most accurate of analysis methods, but it can give you a rough idea and can help you to decide how much electrolytes to add to your in-training fueling plan.

As with carbohydrates, start by adding electrolytes to your training at a lower intake eg. 200-300mg sodium per hour, then if you're still experiencing any of the above symptoms, keep increasing your intake until you find a balance that suits you.

Products on the market can provide up to 1500mg in one tablet so there's something to suit every athlete.

RACE DAY PREP

So now you've nailed your strategy in training sessions, you need to transition this into race day, BUT it isn't always that simple. There can be a lot of other considerations when it comes to race day, and I've listed them below.

Firstly, DO NOT try anything new for the first time on race day! Tried and tested only!

Aid Stations

Use aid stations as supplementary to your prepped nutrition. Check in advance to see what products and brands will be available on race day, and consider these in your preparation plans. This is particularly if you have dietary requirements

Early start times

Have you practised eating early in the day? You want to eat a pre-race breakfast 2-3 hours before your start time and If you're not an early bird in your day-to-day, it can be hard to eat enough food when you're barely awake and battling a lack of appetite.

Race day nerves

Almost impossible to replicate in training, for some athletes these nerves can increase gut issues, which often present as diarrhoea, stomach cramps and loss of appetite.

Having confidence in your nutrition strategy can hugely help to relieve some of the nerves, but breathing exercises can be employed to settle your fight or flight response to the nerves, and aid digestion.

Hot weather requirements

Having practised your nutrition strategy in training, you should be well prepared for racing in all weather conditions. If it's unexpectedly hot weather on race day, make sure to adjust your plan appropriately.

Travel

If you are staying away for race day:

- Have you checked what food will be available the night before and morning of race day? Is it hotel food, event catering or self-catering?
- Do you need to take food with you so you eat tried and tested, safe options?

Practical considerations

Have you tested the practicality of your fueling strategy?

- Do your snacks transport well or end up as crumbs or a melted mess?
- How easy are your snacks to ingest while on the move?
- Does your event have a kit pack weight limit?
- Are you allowed support crew or do you need to be self-sufficient?
- Have you packed enough variety of snacks and supplements to stop you getting taste fatigue or nauseous at the repetition?

YOUR TEST AND LEARN CHECKLIST

Questions to consider	Use this space for your own notes
What types of carbohydrates, timing of consumption and amount, works well for me as a pre-training fuel?	
How many grams of carbohydrate can I tolerate per hour WITHOUT any adverse side effects? <i>There's no point aiming for 120g if you're just going to vomit it all back up 🤢</i>	
Which carbohydrate combinations work best for my energy levels while minimising unwanted side effects? <i>eg. glucose/maltodextrin, dextrose, sucrose, fructose, cluster dextrin: which work best for you vs side effects</i>	
Which energy products do I prefer eg. gels, drinks, gummies, real food. There is no right or wrong answer, it's personal preference. Important considerations when choosing your energy foods and supplements: - Do I like the taste? - How easy is this product to use when moving? <i>Eg. gels can be messy</i> - How practical is this product? <i>Eg. you prefer carb drinks but not practical for carrying the amount of fluid needed to hit your carb targets</i> - How transportable is it? <i>Once shoved in pockets or bags does it end up smushed to bits or melted and messy?</i>	

Have you done a sweat test? Do you know how much fluid you lose during exercise?	
How much electrolytes do you need to add to your nutrition plan? Are you a heavy sodium sweater?	
Are there any travel considerations that I need to plan for in my next race? <i>Eg. hotel food, cooking facility availability etc</i>	
Are there any race specific considerations that I need to plan for? <i>Eg. self-sufficient, kit-pack weight limits etc</i>	
Use this space for any additional planning or notes	

ABOUT ME

Hi! Let me introduce myself, I'm Hannah, a Registered Sports Performance Nutritionist with over 9 years experience working in nutrition. I'm a nutrition coach that works with athletes of all levels and abilities, providing a personalised roadmap to reaching your goals.

Across my career so far I have successfully worked with a diverse range of athletes, including: junior Team Wales swimmers, Ironman World finishers, marathon runners, Ultra runners and more. This extensive background has equipped me with the skills to tailor nutrition support to individual needs, promoting optimal performance and well-being.



On a personal level, my approach to food is one of balance and realism. I know how to fuel my body for exercise, but I also enjoy food for fun and socialising. This positive relationship with food is something I work hard to foster in every athlete I work with.

If you have questions or would like to know more about my nutrition coaching programme, don't hesitate to reach out to me at info@hannahrosenutrition.co.uk or take a nosey on my website hannahrosenutrition.co.uk and follow me on instagram [@hannahrose_nutrition](https://www.instagram.com/hannahrose_nutrition)

Best wishes
Hannah