

FUELLED TO WIN

ATHLETES FACING SEVERAL ROUNDS OR HEATS IN ONE DAY FACE CHALLENGES WHEN IT COMES TO NUTRITION. ANDY HAMILTON OFFERS SOME TIPS

WHEN it comes to nutritional advice for sprinters, jumpers and throwers, most tends to focus on day-to-day nutrition in order to maximise muscle strength, power and post-training recovery.

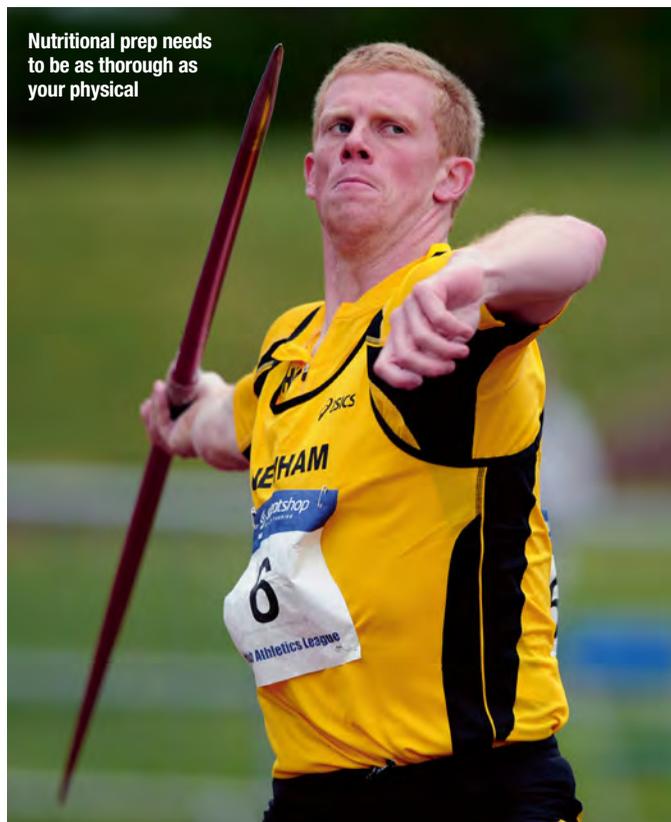
However, while this aspect of nutrition is critically important, relatively little has been written about competition-day nutrition – particularly when it comes to athletics meetings, which can involve heats and rounds. In this scenario, athletes need to not only start the day properly fuelled, hydrated and mentally focused, but also need to remain that way throughout the day in order to maximise performance across every heat, round and final.

Day-long requirements

Before we look at how to best structure your nutrition for multi-round meetings, let's take a look at the foundations – that's to say what you should be aiming to achieve nutritionally to maximise your performance during the day:

■ **Muscle-fuelling:** in order to perform at maximum efficiency, your muscles need to be adequately topped up with your body's 'five-star fuel'

Nutritional prep needs to be as thorough as your physical



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– glycogen, which is stored carbohydrate. Any shortfall can leave you feeling tired with 'leadon' limbs.

■ **Consistent energy levels:** one of the biggest challenges facing athletes is to ensure they remain primed and ready to compete whenever the time arises. This means ensuring that blood sugar levels are kept on an even keel to avoid energy peaks and troughs. To achieve this, the type and timing of carbohydrate meals and snacks is important.

“IT'S IMPORTANT TO APPRECIATE WHAT NOT TO EAT AS CAREFULLY AS WHAT TO EAT”

■ **Hydration:** sub-optimum levels of hydration can result in tiredness and fatigue – both mental and physical. Keeping properly hydrated, especially through a long meeting in hot weather, is therefore important.

■ **Happy tummy:** any fuelling or hydration strategy needs to be easy on the stomach to ensure there is no gastric distress, which can wreak havoc even in the best prepared athlete.

■ **Performance boosters:** certain supplements can boost performance, but for maximum benefits, the timing and dose needs to be correct.

To fulfil the above requirements, it's important to appreciate what *not* to eat as carefully as what to eat. Individual tastes and preferences also mean that no universal formula can be applied

to every athlete. Experimenting in training is therefore essential to develop a good routine for your competition.

Let's now take a look at what these requirements mean in terms of nutritional choices.

Fuelling and energy

Let's assume that in the run-up to your meeting, you've tapered, taken adequate rest and consumed a wholesome diet containing plenty of high-quality carbs such as wholegrain breads and cereals, rice, pasta, beans, peas and lentils, and starch fruits such as apples, pears and bananas.

Pat yourself on the back because that means you'll be starting your event with muscles that are glycogen-replenished and ready for action.

Breakfast

Your first priority should be to consume a decent breakfast, rich in slow-releasing carbohydrate such as wholegrain bread or cereals and containing some high-quality protein. There are two reasons for this:

1. Numerous studies have shown that consuming a high-quality breakfast helps to stabilise blood sugar levels during the early part of the day, leading to improved energy levels and mental focus later on, which is exactly what you need.

2. Research also shows that eating breakfast leads to healthier food choices and fewer food cravings later in the day – a real benefit as the day progresses to combat any growing temptation to consume junk snacks.

In terms of food choices, this leaves plenty of options, such as a wholegrain sugar-free cereal with skimmed or semi-skimmed milk, wholemeal toast with scrambled egg or a small bowl of porridge followed by yoghurt with chopped fruit. Note these golden rules, however:

- Avoid foods that are very high in fibre which might aggravate your tummy at the wrong time, such as bran cereals, large amounts of nuts and seeds, or large quantities of dried fruits such as apricots and raisins.
- Avoid sugary cereals and other foods high in sugar, which can leave you with an energy dip once the initial sugar rush has passed.
- Avoid too much fat, which slows down gastric emptying. This is especially true if you expect your first effort to be early in the day.
- Always stick to foods that you have tried and tested in training. Don't be tempted to try an

HYDRATION

MAINTAINING adequate hydration is critical as even relatively mild dehydration has been shown to impair strength, motor skills and coordination. If you're adequately hydrated, your urine will be no darker than a pale straw colour. If it isn't, drink more, but by the same token, avoid drinking to excess as you will be spending half the day attending the loo! Without doubt, water or low-carbohydrate electrolyte drinks are best to hydrate with, but there's no need to exclude tea and coffee if you love a cuppa. Drink little but often to lessen the load on your stomach. If you're hanging around in very hot conditions and are sweating, pop an electrolyte tablet into your water bottles, which will help replace minerals lost in sweat. Sugar-containing beverages should not be used for hydration as they often take longer to leave the stomach and may cause blood sugar spikes and dips in those who are sensitive.

exotic superfood dish such as a chia seed smoothie on the day of your event.

During the day

Your No.1 goal during the meet is to keep your mental and physical energy levels topped up without any dips and without placing high demands on your digestive system. This means your food intake should be in small, snack-size portions taken every 60-90 minutes. You should not wait until you are ravenous and then eat hearty meals.

The best snack choices are slow-releasing carbohydrates to keep your blood sugar levels optimised and which are low in fat and not too high in fibre, which could cause gastric distress. Sugary sweet snacks are not recommended; while they can provide a quick lift, this may be followed by an energy dip later.

Good food choices include low-fat oat flapjacks, oat biscuits, and low-fat, low-sugar energy bars. A simple banana sandwich, spread thinly with butter is also a good option and it can see you through the mid-morning period. Another good idea is to take a big Tupperware container of ready-cooked pasta, which is very slow energy releasing, combined with something low-fat and tasty such as tuna. But rather than consuming it in one meal at lunchtime, try having a few mouthfuls each hour.

Another alternative is to take along with you a recovery drink formulation. Not only can you use this immediately after each heat or round, you can also sip this at regular intervals, using it as 'liquid food' rather than for recovery. Go for a two or three parts carbohydrate to one part of protein formula. However, try to choose one formulated

PERFORMANCE-BOOSTING SUPPLEMENTS

Caffeine

Caffeine taken pre-exercise is proven to enhance performance. For sprint or power events, the consensus of scientific opinion on caffeine dosing to produce a performance effect is 6mgs per kilo of bodyweight taken 15-30 minutes before exercise.

Caffeine is best taken in a gel or in caffeine chewing gum – you should not rely on tea and coffee as a reliable source of caffeine because content varies wildly and there's no way of being sure how much caffeine you're ingesting. Six mgs per kilo is a high dose and it's not recommended to use it repeatedly in one day.

Therefore, if you intend to use caffeine, you might be better holding back until later in the day, once you've progressed through the rounds, and use it when you really need it.

Citrulline

Although it's a less familiar supplement, some recent research has suggested that 6-8g of the amino acid (in the form of malate) taken prior to exercise can increase the duration of very high intensity exercise before fatigue sets in. Available as a powder, citrulline malate can easily be taken to an event, either pre-mixed or dissolved in your water bottle. It has a very acidic taste, so you might need to add some cordial to disguise it.

Beta-alanine, HMB and creatine

The benefits of these three supplements for power and sprint athletes are well documented. To produce performance gain, however, they need to be taken for a continuous period of one to four weeks and should not therefore be included in your kit bag on the big day.

with slower-releasing ('low glycaemic') carbohydrates, such as oat or barley starch.

Key points

- **Fuelling and hydration:** never feel hungry or thirsty, but also never feel full-up or bloated.
- **Plan ahead:** try out your snacks, drinks and foods prior to your event during a training day. Never experiment on competition day.
- **Take plenty:** always take more

drinks and foods than you think you'll need. It's better to have a surplus at the end of the day than to run out halfway through.

- Don't forget the run-up period. Eating well and using any supplementation if desired in the days and weeks before a meeting is half the battle in performing well.

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Tuna and pasta: take this in a container to graze on throughout the meeting