

## Spirited Women Nutrition

Regardless of whether you're in it for the competition, the fitness benefits or the companionship of likeminded people, our training for events such as Spirited Women is as important for someone who is a solid mid-packer as it is for someone hoping for a podium slot. For some people, following a nutrition plan is merely the cherry on



top, or the 'nice to have' part of training – it might be important, but it's not as important as the bike session or the run in order to fully prepare for April. Others are more familiar with how important it is to eat well, yet there is so much information out there (and often contradictory information) it makes it difficult to navigate what is healthy and what is not. Others still are quite up to date with emerging concepts in nutrition for health and performance, yet don't have the structures in place to put that knowledge into

practice. All three scenarios have the potential to leave athletes in the same place: less able to recover from sessions, therefore not as able to get as fit as they would like, more open to illness and injury and (if you make it to the start line in an uninjured state) less able to perform come race day. Hmm. That's not ideal, is it? The old adage 'you can't outrun a good diet' is an old adage for a reason. It's not about your body composition and fitting into your favourite jeans, it ultimately comes down to health. Without your health none of your other fitness-related goals can be achieved.

Let's strip it right back to basics. The fundamental elements of the diet are the three macronutrients, protein, fat and carbohydrate, the components that provide calories along with vitamins, mineral and fibre (depending on the nutrient). That's probably basic stuff you know. Of these, the essential nutrients required for growth, development, cognitive function, gut health (way more important that we ever imagined), musculoskeletal and cardiovascular system and our immune system are protein and fat. Carbohydrate, (while not 'essential' in nutrition terms as the body can produce it and therefore doesn't need to be provided by the diet) provides fibre and helps power muscles under certain training conditions. Within each group there are definitely better choices, and the amounts of each macronutrient varies according to the health, training history and preference.

You will likely be aware that there is much debate over the amount of carbohydrate we should be basing our diet on. Indeed the landscape is changing with regards to its place on our dinner plate. Historically, we've relied a base of bread, pasta, rice, cereals and crackers to provide necessary fuel for our tank, often to the detriment of the protein and fat that is required for optimal recovery, immune support and long-term health. Some would argue (and I agree) that this type of fuel is like adding twigs to a fire – sure, they provide a flame, however it is short lived and unsustainable. Further, most of these products I've mentioned above are fairly devoid of nutrients when compared to your minimally processed carbohydrate foods – kumara, potato, parsnip, fruit, legumes and dairy (for those who can tolerate them). Women though, are onto it – many of us have diets that may reflect the lower carbohydrate approach

and have done so well before a heated public health debate. The issue I see time and time again in my clinic is an under fuelling from the other two macronutrients: protein and fat. Tell a woman to drop her carbs and it's done. Heck, she did that back in the 90s. Tell her to up the fat and/or protein....a different story entirely. However, the importance of protein and fat in a diet cannot be understated: both are essential for the tangible health issues that women struggle with on a day to day basis: hormone health, menstrual health, mood, our ability to sleep and our overall wellbeing. Restricting calories and food in general has never done anyone any favours in the long term, even if part of entering events like this provides incentive to lose body fat and make dietary change. Weight loss goals can easily be met under this model for most, however this can also result in muscle loss and subsequent health problems, resulting in unwanted fat gain. It's about balance to ensure hunger, cravings and energy remain 'in check.'

To avoid blood sugar swings and energy crashes, we need to balance the amount of minimally processed carbohydrates in our diet with foods that contribute substantial amounts of fat and protein, and this is all on a base of non-starchy carbohydrate vegetables that are necessary for vitamins, fibre and phytochemicals to support antioxidant pathways in the body. This will help recover from training sessions, provide energy and prevent accelerated cell breakdown.... (in other words, ageing).



So what are some guiding principles for ensuring a balanced approach to the diet? I love these ones. Simple.

1. Enjoy nutritious foods everyday including plenty of fresh vegetables and fruit.
2. Buy and prepare food from whole unprocessed sources of dairy, nuts, seeds, eggs, meat, fish and poultry.
3. Keep sugar, added sugars, and processed foods to a minimum in all foods and drinks.
4. If you drink alcohol, keep your intake low. Don't drink if you are pregnant or planning to become pregnant.
5. Prepare, cook, and eat minimally processed traditional foods with family, friends, and your community.
6. Discretionary calories (energy foods) should:
  - a) Favour minimally refined grains and legumes, properly prepared, over refined or processed versions, and boiled or baked potatoes, kumara or taro over deep fried or processed potato fries and chips.

- b) Favour traditional oils, fats and spreads over refined and processed versions.

## Training nutrition

Regardless of your goal, practicing your nutrition practices in training sessions before the event is key to a successful event nutrition strategy. However, while you may be familiar with endurance-sports practices that recommend gels every 15-30 minutes and sucking down a bottle of sports drink every hour, as the nutrition landscape has changed for your daily diet, the same applies for your racing nutrition. The actual recommendations haven't changed too much if you open the latest textbook, but more and more practitioners are recommending their athletes lighten the overall



race nutrition load with the benefit of reduced gastrointestinal problems in the short term, and improved overall health in the long term. Too much sugar loaded into your system weekend after weekend due to gels, bars and sports drink will increase the overall oxidative stress (cell breakdown) and inflammation that is an inevitable part of training for an endurance event anyway. Your real food approach to the diet should extend into your training approach too, to allow for optimal recovery between each training session.

The key things to consider with training nutrition is fuel and hydration.

If you're competing in the 3h event, then chances are a lot of your training sessions will be relatively short in comparison to the longer event. This is not to discount the importance of ensuring adequate training requirements are met, however for the most part your nutrition needs are actually met through your daily diet.

If you plan to undertake the event with participation as your main goal and less emphasis on competing, then hunger might be the only issue that you need to contend with. The intensity of your training and the event day itself will likely be low enough to allow you to consume a snack or two (see below) and with regular sipping on a fluid that contains some electrolytes (predominantly sodium), becoming familiar with consuming food whilst you are on the move and having something in your stomach and exercising is your main priority.

For those who are focusing on this as their goal race for the shorter (3h) event, consuming actual food might be too challenging and relying on a liquid source of fuel will allow for quick absorption and digestion without the worry of gastrointestinal distress that occurs when you take on board solid fuel. In this instance, an electrolyte drink that might contain additional carbohydrate (CHO) along with sodium is a good choice. A chia seed-based drink is also palatable and many of my endurance clients use this as a fuel alternative (see below). If you choose to use a commercial electrolyte drink, adding additional sodium (salt such as Himalayan or sea salt) is prudent given that many are too low for optimal absorption.



For people who are taking on the 6h challenge, then regardless of whether you are completing or competing, putting some thought around the types of foods you can tolerate while training and ensuring you have enough fluid on board will be key to a successful event. Items which are easy to chew, have structural integrity (so they don't fall apart and make them difficult to eat) and are palatable are key to minimise problems with nutrition. Do also note the more fatigued you are, the more your body works to keep you going at the same intensity. This diverts blood flow from the gut to the muscles and reduces your ability to absorb fuel. Many athletes start with solid food choices and move to more liquid based nearer the latter part of the event to lessen the stress on the gastrointestinal system.

Dehydration also increases fatigue and makes a lower intensity session feel like hard work. While hydration levels are often linked to cramping, in fact it can occur through increased muscle fatigue or interrupted signalling pathways in the body between the neuromuscular system and the muscles. The current understanding is that it's less about having enough fluid or electrolytes during the training session and related more often to beginning your training (or race) in a dehydrated state or with a low electrolyte status. For women in particular we can't rely on our thirst mechanism to ensure we are hydrated as this is affected by our hormonal status across the course of our menstrual cycle. Therefore if you have problems remembering to drink or never feel thirsty, you need to make a plan around drinking enough fluid to replenish after a training session, and incorporate enough sodium in your food and fluid to avoid being low in electrolytes.

## Top tips

### FOOD

Depending on hunger, aim to consume little and often. Everyone is individual so it's finding out what works best. People are often good on every 30-40 minutes.

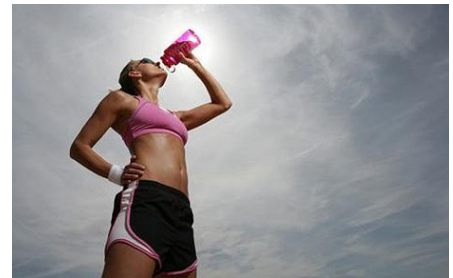
- Sports bars with minimal ingredients make the most convenient choices. Brands such as RAW energy bars, Blue Dinosaur or a Balance Natural Whey bar cut into quarters and glad-wrapped can be grabbed out every 30-40 minutes to snack on. Some other ideas to play around with include

- Potato or kumara, roasted in coconut oil and chopped into bite sized snacks
- Sports gel (1/2 at a time, decant into a larger fuel bottle so you don't need to waste it)
- ½ banana
- Small handful of cashews or almonds
- Squares of dark chocolate or cheese (for early on in race when it is easier to tolerate fat)

## FLUID

Drink 150-300 ml before training (within an hour of starting, actual tolerance for fluid varies)

Work on a sip-often approach to fluid consumption during training. It's ideal to incorporate some sodium within your fluid of choice and if you are using a commercial sports drink, you're best to dilute it by half as they are generally too high in carbohydrate to allow for effective absorption into the small intestine. You will also want to add ¼ tsp of salt to your bottle (for every litre) to aid absorption. While individual requirements differ, the maximum amount to be consuming is generally considered to be 600ml-800ml per hour. Too much more than this (particularly if not consuming electrolytes) can lead to dilution of electrolytes in the body and a condition known as hyponatraemia. Women are particularly susceptible to this.



### **Chia-based sports drink:**

¼ cup chia seeds + ¼ cup unsweetened blackcurrant drink or lemon juice + ¼ tsp salt in 750 ml water bottle.



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