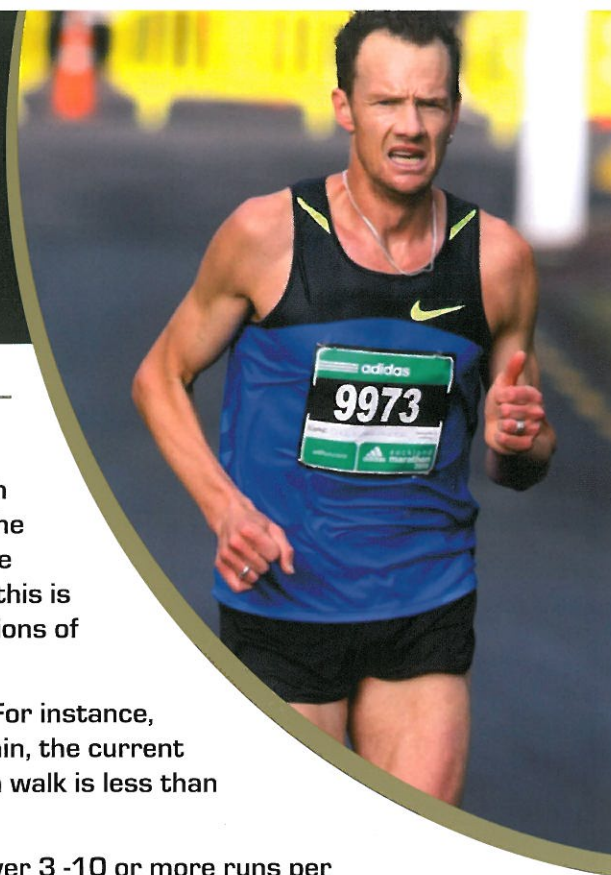


# DISTANCE RUNNING AND WALKING

## EATING FOR YOUR SPORT



### YOUR SPORT:

Distance running and walking encompass events that range in length from 10km to 50km and over. As these endurance events require the athlete to carry their own bodyweight over a long distance, most elite distance athletes tend to be lean with low body fat levels. However, this is not a prerequisite to participate, as these events are enjoyed by millions of people worldwide for both fitness and competition.

The time it takes to complete endurance events varies enormously. For instance, whilst the average time for a marathon (42.2km) is around 4hr 30min, the current world record is around 2hr 4min, and the world record for the 50km walk is less than 3hr 40min.

Training for a distance event usually involves covering 40–160km over 3–10 or more runs per week, depending on whether the athlete is involved at the recreational or elite level. Core strength training is also often included a few times a week.

In distance running, the body relies predominately on glycogen as a source of fuel. Glycogen is carbohydrate which is stored in the muscles and liver. Distance walkers tend to use a combination of carbohydrate and fat as fuels given that it is lower intensity than running.

### TRAINING DIET:

Endurance athletes, distance runners and walkers benefit from basing their meals and snacks around carbohydrate rich foods. Carbohydrate provides fuel for training and helps replenish carbohydrate stores which are likely to have been depleted during training.

Protein rich foods and healthy fats are also essential as they play an important role in muscle repair, maintaining energy requirements, maintaining blood sugar, and boosting immune function.

### CARBOHYDRATE

Carbohydrate rich foods provide fuel for training. The longer the training session the more carbohydrate will be required. Basing meals and snacks on healthy carbohydrate rich foods is ideal. This includes oats, grainy breads and crackers, pasta, rice, noodles and starchy vegetables like potato and kumara. Including plenty of fruit and

vegetables in meals and snacks is also important. Not only because they are great sources of carbohydrate, but also because they are rich in vitamins, minerals and antioxidants.

Distance athletes will require additional carbohydrate such as sports drinks and carbohydrate gels to provide extra fuel during intense training sessions over 60 minutes or moderate intensity sessions



over 90 minutes of duration, aiming for 30-60g carbohydrate/hour.

Distance walkers are more likely to be able to eat carbohydrate containing foods during training and events due to the lower intensity of exercise. Suitable foods for walkers may include low fat cereal bars, dried fruit, jelly and lollies.

For optimal muscle recovery from training sessions it is ideal to include a carbohydrate and protein rich snack if the next meal is not for a while. Liquid breakfast drinks, fruit and yoghurt smoothies and creamed rice are a few ideas.

## PROTEIN

Protein based foods such as low fat dairy products, lean cuts of red meat and poultry, fish, eggs, nuts and soy-based products like tofu, are also important components of an athlete's diet. Ideally a serving of protein should be included at every meal.

Including a small amount of protein is also important for recovery purposes.

Yoghurt and fresh fruit, sandwiches with a lean meat filling or making low fat milk smoothies or MILO and low fat milk are popular recovery choices after a training session.



## FAT

While endurance athletes should aim to follow a low fat diet, it is recommended that nuts, seeds, avocado, vegetable oils or oily fish such as salmon or mackerel are included in small amounts on most days. These are healthy fats and can be a useful source of extra kilojoules when energy needs are high, as well as providing essential vitamins, minerals and fatty acids.

## HYDRATION

It is important for athletes to be adequately hydrated during and after training sessions.

Water is adequate for sessions lasting up to 90 minutes, and sports drinks can be useful to meet both carbohydrate and fluid requirements for longer or more intense workouts.

As endurance athletes often struggle to meet the high energy demands of their sport, juice, low fat milk and sports drink can be used for recovery after workouts or to accompany meals to boost energy intake.

## SAMPLE 1-DAY MEAL PLAN FOR A DISTANCE ATHLETE

### PRE TRAINING SNACK:

- Slice of bread with jam/honey OR
- Banana and a glass of fruit juice

### DURING/AFTER TRAINING

- Water; include carbohydrate gel or sports drink if longer than 90 minutes

### POST-TRAINING RECOVERY:

- Carbohydrate and electrolyte fluid i.e. sports drink may be required

### BREAKFAST:

- Natural muesli with fresh fruit and yoghurt/low fat milk OR
- Wholegrain toast with marmite/peanut butter and a low-fat yoghurt

### MORNING TEA:

- Dried fruit and raw nuts OR
- Wholegrain crackers with cottage cheese and avocado OR
- Yoghurt and fresh fruit

### LUNCH:

- Wholegrain bread rolls or wrap filled with hummus, lean meat/canned fish and salad ingredients OR
  - Sushi
- Add a piece of fruit and/or yoghurt

### AFTERNOON TEA:

- Fruit toast OR
- Low-fat smoothie or MILO OR
- Cereal bar

### DINNER:

- Lean meat/fish/vegetarian sausages with salad or steamed veges served with rice/pasta OR
- Baked kumara topped with cottage cheese and bean salad with salad vegetables OR
- Wood-fired pizza with vegetable toppings and salad

### NUTRITIONIST'S NOTE

This meal is a general example only. It should be altered to suit individual energy requirements depending on age, gender and training load. For those who train at an elite level and/or twice or more a day additional pre training snacks and post training recovery food/drinks will be required. Contact a Sports Dietitian for guidance.

## NUTRITION PROFILE: NINA RILLSTONE

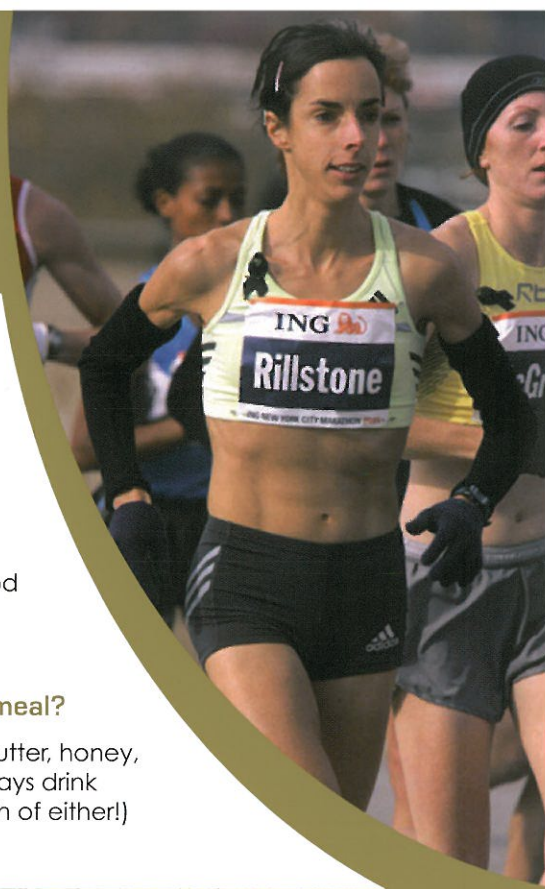
### What is your nutrition tip for travelling overseas?

It goes without saying that you should try to find foods as similar as possible to what you are used to and always include your favourite snacks to travel with you.

On long flights try to maintain a good fluid intake to decrease the risk of dehydration.

### What is your favourite pre-race meal?

Fruit toast or a bagel with peanut butter, honey, cottage cheese and banana. I always drink coffee and water (but not too much of either!)



### KEY FOODS FOR A DISTANCE ATHLETE'S FRIDGE

- ✓ Fresh and frozen fruit and vegetables
- ✓ Low fat yoghurt
- ✓ Low fat milk (green and yellow top)
- ✓ Low fat hard and soft cheeses
- ✓ Hummus
- ✓ Lean meat/sandwich meat

### KEY FOODS FOR A DISTANCE ATHLETE'S PANTRY

- ✓ Grain based cereals, muesli, rolled oats
- ✓ Rice, pasta and noodles (such as udon, hokkien or MAGGI)
- ✓ Wholegrain bread, pita bread
- ✓ Pizza bases
- ✓ Wholegrain crackers
- ✓ Dried, frozen and tinned fruit
- ✓ Canned salmon and tuna
- ✓ Canned vegetables (e.g. tomatoes)
- ✓ Canned beans (chickpeas, four bean mix, kidney beans)
- ✓ Creamed rice
- ✓ CARNATION Light & Creamy Evaporated Milk
- ✓ MILO Energy Food Drink
- ✓ Cereal or low fat muesli bars
- ✓ Nuts
- ✓ Peanut butter, jam or honey

### COACHES NUTRITION TIP

#### John Bowden – national athletics selector and coach

I always advise my athletes to seek guidance from a Sports Dietitian or Nutritionist to get the basics right.

Runners need to make sure they are eating nutritious meals and snacks at the right times, especially after training, and also keeping hydrated to get the most from their training regime.



## COMPETITION DAY EATING

Many long distance running and walking events take place in the morning, so a breakfast high in carbohydrate is essential to top up carbohydrate stores prior to the start.

Many runners set their alarm clock early to eat cereal with canned fruit and yoghurt, toast or crumpets with jam or honey, and fruit juice 2-3 hours before the race. For those who like a hot breakfast, hot oats with banana and honey, spaghetti or baked beans on toast, or pancakes with maple syrup are good carbohydrate rich options.

If you prefer lighter options, jam or honey sandwiches, high carbohydrate sports bars, liquid meals and fruit cereal bars are all good choices.

These suggestions also make good snack options which can be helpful to top up carbohydrate stores after breakfast, if an event is closer to midday.

Aim to include at least 600ml of fruit juice or sports drink with breakfast to maximise carbohydrate intake and ensure you are fully hydrated. If the event is starting later in the day include a drink with all meals and snacks, and carry a drink bottle around with you so you can remain hydrated. Aim to consume 200-600ml of either water or sports drink up to 15 minutes prior to the event.

If you are susceptible to gastrointestinal problems (stomach pains) due to nerves or other factors, sticking to low fibre foods (such as white bread) or liquid meals before a race can help alleviate symptoms. Practising your pre-race food during training is essential to make sure you get it right on race day.

## SPECIAL ISSUES AND REQUIREMENTS FOR DISTANCE RUNNING AND WALKING

- **Low iron** – Endurance athletes are at an increased risk of depleted iron stores which may result in additional fatigue and impaired performance. Include iron rich foods such as lean red meat and fortified cereals daily to optimise iron levels. If you are vegetarian, foods that are high in vitamin C (such as orange juice, kiwifruit, broccoli, berries) will enhance absorption of iron.

- **Weight management** – The risk of illness and injury is increased when athletes overly restrict their energy intake in an effort to reduce body fat levels.

- **Overhydration** – Athletes are at risk of overhydrating when they drink too much fluid but have inadequate sodium. Using sports drinks which contain sodium can be helpful.

### RICOTTA & BLUEBERRY HOTCAKES

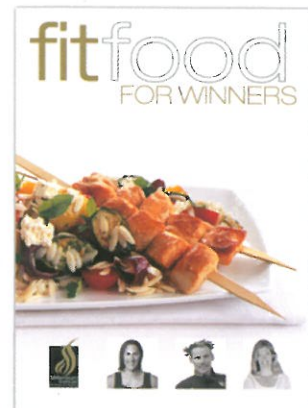
Serves 4

200g ricotta cheese  
375mL can CARNATION Light & Creamy Evaporated Milk  
4 eggs, separated  
2 cups self raising flour  
2 tbsp caster sugar  
½ tsp cinnamon  
1 ½ cups blueberries, fresh or frozen  
olive or canola oil spray  
¼ cup maple syrup  
fresh blueberries to serve, extra

- Place ricotta cheese, evaporated milk and egg yolks in a large bowl whisk to combine.
- Add flour, caster sugar and cinnamon to wet ingredients. Fold until just combined. Beat egg whites until stiff peaks form. Fold into batter. Gently stir through blueberries.
- Spray a large non-stick frying pan with oil and heat. Add spoonfuls of mixture to pan, cook over moderate heat for 2-3 minutes each side or until golden.

- Stack hotcakes on serving plates, drizzle with maple syrup and serve garnished with extra blueberries.

ANALYSIS	per serve
Energy (kJ)	2465
Carbohydrate (g)	90
Protein (g)	25
Fat (g)	15



This recipe is from the *Fit Food for Winners* cookbook. To order your copy, visit [www.nestle.co.nz](http://www.nestle.co.nz).