Your sport:

Multisport involves endurance based training and competitions which require a rapid switch from one athletic discipline to another in a continuous series. The main activities included in multisport are running, cycling, kayaking and cross country skiing. The aim of the event is to complete a given series of ‘stages’ back to back in the shortest time. One of the most well known multi-sport competitions in the world is based here in New Zealand. Coast to Coast is the name of this mammoth event where individuals or two person teams cycle, run and kayak 243kms from the Kumara Beach on the Tasman Sea to Sumner Beach on the Pacific Ocean. The course takes between 10 and 24 hours to complete depending on the level of the participants.

Adventure racing is a type of multisport which involve a more extensive range of sports and often requires an element of orienteering/navigation as the course may be unknown at the start of the race. Adventure racing events typically last from 1 to 10 days with the courses varying in distance, duration and terrain.

The events can include cross country running, mountain biking, climbing and paddling, such as: kayaking; canoeing; outriggers; rafting and tubing. Those involved in this sport need to be able to negotiate caves, cliffs, snow, ice and/or rivers and cope with all sorts of weather conditions both day and night. In some cases, participants will carry their own food, fluid, clothes and tents, but in others a support crew is available to carrying some of their items.

For both multisport and adventure racing the body relies predominately on the aerobic energy system and a lean physique is advantageous.

This Nutrition Advice Sheet is aimed for those who train and compete at a recreational level. Elite players require individualised nutrition advice and guidance about what to eat for training and competitions.
TRAINING DIET:
Participants in these sports should aim to include:
- Fruits and vegetables every day – aim for a variety of colours
- Breads and cereals – pasta, rice, bread, rolled oats, breakfast cereal, kumara, potatoes and noodles
- Low fat dairy products – including milk, yoghurt and cheese
- Lean protein - meat, poultry, fish, eggs and other protein rich foods like tofu and pulses
- Healthy fats - vegetable oils, nuts, seeds and avocado

Eating well is essential to maximise training, promote recovery and help achieve optimal body composition.
A good eating routine can be a challenge in multisport and adventure racing as participants often have to juggle work and family commitments with training.

It is essential to work out strategies to help maintain a consistent eating routine to meet the high needs for energy (total calories / kilojoules), carbohydrate, protein and fluid.

Eating carbohydrate in the hours before training and as soon as possible after training optimises energy levels and promotes recovery. For training sessions that are less than 60 minutes, provided you are well fuelled before you start, you should have enough carbohydrate on board to last you for the session and only require water to hydrate. If you are training for longer than 60 minutes you may benefit from additional carbohydrate rich drinks to supply energy for the remainder of your training session as your carbohydrate (glycogen) stores are likely to be low or even empty.

Aim to include 30-60g carbohydrate/hour**

CARBOHYDRATE
For multi-sport and adventure racing, a carbohydrate rich diet is ideal. This means including wholegrain bread and cereals, pasta, rice, noodles, potato or kumara at main meals. Additional carbohydrate from foods such as dried fruit, muesli bars, liquid breakfast drinks, fruit smoothies, creamed rice, and fruit bread can help meet needs particularly on high training days.

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For those who are doing very high intensity, long distance training or events, your carbohydrate needs may be higher. If this sounds like you, to make sure you are getting things right, it is important to seek individualised advice from a qualified Sports Nutritionist or Dietitian.

PROTEIN
Protein rich foods are essential for good health and sporting performance. Main meals should always include some source of protein. Examples include lean meat, chicken, fish, tofu, legumes (e.g. baked beans, chickpeas and lentils), eggs and low fat dairy products. It is also important to include some protein after training to promote recovery and muscle repair.

FAT
Whilst fat intake should be moderate for athletes who want to stay lean, some fat in the diet is important. It provides fat soluble vitamins, and essential fatty acids that the body cannot produce. Be sure to include some healthy oils such as sunflower, olive or canola oil, nuts, seeds as well as some oily fish and avocado.

FRUITS AND VEGETABLES
Fruits and vegetables are vital for good health as they provide essential vitamins and minerals as well as antioxidants. Aim to include fresh, frozen or dried fruits and fresh or frozen vegetables in most meals and snacks.

HYDRATION
Good hydration strategies are imperative for good health and performance. Maintaining an optimal level of hydration can be one of the major challenges in multisport and adventure racing, not only because the events are so long, but also because of the climate conditions. Estimating fluid losses and sweat rates can be helpful to be able to make a personalised hydration plan for an event, particularly as fluid requirements can vary so much from person to person and will also be influenced by the intensity of training as well as the temperature and humidity. For details of how to work this out, refer to the Hydration Nutrition Advice Sheet. Sports drinks can be helpful to supply additional carbohydrate and electrolytes. A Sports Dietitian/ Accredited Sports Nutritionist can help to estimate sweat loss, fluid and sodium needs during training and events.
A SAMPLE ONE DAY MEAL PLAN FOR MULTISPORT/ADVENTURE RACING

PRE MORNING TRAINING:
• Cereal bar or toast with peanut butter and glass of MILO with low fat milk or low fat yoghurt and banana

MORNING SWIM/CYCLE TRAINING SESSION:
Water and possibly a sports drink if training is over 90 minutes

BREAKFAST:
• Cereal with fresh fruit and low fat yoghurt/milk OR
• Wholegrain toast with poached eggs, tomato and spinach and a glass of fruit juice
If travelling, pack a combination of fresh fruit, milk drinks or fruit juice, low fat yoghurt, cereal bars or sandwiches

MORNING TEA:
• Dried fruit and nuts OR
• Wholegrain crackers with cottage cheese and avocado OR
• Low fat yoghurt and fresh fruit

LUNCH:
• Wholegrain bread rolls or wrap filled with hummus, lean meat/canned fish and salad ingredients OR
• Pasta/rice/noodles with tuna/chicken and vegetables
Add a piece of fruit and/or low fat yoghurt to each option

PRE AFTERNOON TRAINING:
• Good snacks prior to training can include sandwiches, fruit toast with peanut butter and jam, low fat dairy snacks, smoothies, muesli bars or fruit with low fat yoghurt

DURING TRAINING
Drink a bottle of water. May need a sports drink if over 90 minutes of training

DINNER: (within 30 minutes of finishing training)
• Lean meat and vegetable stir-fry with rice or noodles OR
• Spaghetti Bolognese with a side salad OR
• Fish and oven baked chips with salad

SUPPER:
• Hot MILO made with low fat milk

NUTRITIONIST’S NOTE

This meal plan is an example only and not intended for individual purposes. This 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 a day, pre training snacks and post training recovery food/drinks will be required. Contact a Sports Dietitian for Guidance.

KEY FOODS FOR AN ATHLETE’S FRIDGE/FREEZER
✓ Fresh fruits
✓ Low fat milk, flavoured milk
✓ Low fat yoghurt
✓ Eggs
✓ Margarine / low fat spread
✓ Edam cheese, cottage cheese
✓ Fresh and frozen vegetables
✓ Lean meat, fish, chicken

KEY FOODS FOR AN ATHLETE’S PANTRY
✓ Wholegrain bread, English muffins, crumpets, rolls and buns
✓ Wholegrain cereal
✓ Rolled oats, natural muesli, wholegrain cereals
✓ Rice, pasta, noodles, couscous
✓ Low fat pasta sauce
✓ Canned spaghetti, baked beans, lentils, chickpeas, bean mix
✓ Creamed rice
✓ Canned tuna, salmon
✓ CARNATION Light & Creamy Evaporated Milk
✓ Low fat biscuits, crackers & pretzels
✓ Dried fruit, nuts and seeds
✓ Vegetable oil
✓ Low fat salad dressing
✓ Herbs and spices
✓ MILO - Energy Food Drink

NATHAN FAAVAE

Why do you think nutrition is important for your sport?

Any performance machinery requires quality fuel; the human body is the same. Nutrition in sport is the fuel needed to propel one through a race. The better the nutrition, the better the outcome. I also believe that sport asks a lot from an athlete and their body, and in order to be healthy, perform highly plus have a working body after the competition days are over, nutrition is the critical component.

What are some healthy and tasty foods you recommend?

My favourite training nutrition food is a protein shake I make: 1-2 bananas, 500ml rice milk, 50 grams whey protein and 2-3 tablespoons of natural plain yoghurt, sometimes a drop of maple syrup. I start looking forward to it about half way through every session. I try to eat natural food, non-processed and fresh, the way nature intended it; lots of fresh water and fruit. I enjoy quality meats, cheeses and often fill meals out with pasta, breads and vegetables. Snacks for me are dried fruits, nuts and cereals. I do eat sports gels and bars, but in my view, it’s pretty hard to beat a banana.
**COMPETITION DAY EATING**

The amount of food and fluid required will vary depending on the length of the event and nature of the sporting components involved in the race. What is appropriate will also depend on whether participants need to carry their own food/fluids or if there is a support crew. Here we have focused on a multiday event with a support crew.

**SUGGESTIONS FOR PRE-COMPETITION:**

- Hot oats with low fat milk and brown sugar OR
- Eggs on toast OR
- Cereal with yoghurt and fruit

And water, fruit juice, or a sports drink

**During the event** - As the events will span meal and snack times, it is important to have a plan to ensure you meet your nutrition and hydration needs.

Carbohydrate rich snacks and drinks are important to include every hour. In single day multisport events, sports drinks, carbohydrate gels, sports bars, cereal bars, fruit and lollies maybe adequate provided 30-60g of carbohydrate is being included per hour. In longer events and in adventure racing more solid food is likely to be required. Dried fruit, sandwiches, wraps, crackers, pasta, potatoes, breakfast cereals, and meal replacement drinks/bars are some examples.

- Monitor the colour of urine as an indicator of your hydration status. Pale urine passed at regular intervals in reasonable volumes, together with the absence of thirst is a good indicator. Carry fluid in a camelbak or get support crew to carry it for you.
- Use transition phases, rest stops and equipment repair breaks to refuel and rehydrate. Setting an alarm on your watch can also be helpful to remind you to eat and/or drink.
- For long events where you may be stopping to sleep or rest, try foods that only require hot or cold water to be eaten; noodles, mashed potato and pasta ready meals for example. Canned fruit, creamed rice, long life milk and meal replacement formulas can be helpful.

**Eating for recovery** - It is likely that participants will be dehydrated and carbohydrate depleted by the end of these events. Some people also lose a significant amount of body fat over the course of an event. Immediately after the race, include carbohydrate and protein rich foods. Also replace lost fluid with sports drinks. Ensuring carbohydrate and protein rich meals for a few days after the event can assist with recovery.

**Practice nutrition and hydration strategies in training** – it is essential to try out different foods, drinks and pre race meal options before it gets to the day of the event. Find out what works for you.

- Keep things interesting – when events are long, you can very quickly get bored of food and drinks. Look at a variety of options of things you can eat practically and enjoy rather than relying on just one or two things.
- Be sure to check the quality of drinking water available before you go. In adventure racing when you might be camping and relying on local water supplies or water from local steams. Water may need to be boiled or treated with iodine tablets, chlorine drips or filtered using a portable water filter.
- See a Sports Dietitian or Nutritionist. They will be able to help you collate a plan for what to eat in training, what you need to take with you for the event and how to manage your specific needs and requirements.


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**SPAGHETTI AND MEATBALLS WITH SIMPLE TOMATO SAUCE**

Serves 4

400g lean lamb mince
1 small onion, peeled and diced
1 pkt MAGGI Favourites Mediterranean Meatballs recipe Mix
1 egg, beaten
300g dried spaghetti
1 qty Simple Tomato Sauce

- Preheat oven to 250°C.
- In a large mixing bowl combine the lamb mince, onion, MAGGI Favourites Mediterranean Meatballs Recipe Mix and egg.
- Shape mixture into balls and place on a baking tray lined with baking paper. Bake for 10-15 minutes until browned, turning regularly.
- While meatballs are cooking, cook pasta following packet directions and make Simple Tomato Sauce. Pour over meatballs before serving.
- Serve with a green salad or vegetables.

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**SIMPLE TOMATO SAUCE**

400g chopped tomatoes
1 tsp MAGGI Green Herb Stock Powder
1 tsp soft brown sugar
1 tsp balsamic or red wine vinegar

Combine all ingredients in a saucepan and bring to the boil. Simmer for 5 minutes then serve.

**ANALYSIS**

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This recipe is from the *Fit Food Fast* cookbook. For more recipes visit [www.tastyrecipes.co.nz](http://www.tastyrecipes.co.nz).

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**By Nutritionist Claire Turnbull - [www.claireturnbull.co.nz](http://www.claireturnbull.co.nz)**

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For more information and to obtain further copies of any of the *Eating for Your Sport* Nutrition Advice sheets, visit [www.nutrition.nestle.co.nz](http://www.nutrition.nestle.co.nz) or [www.mish.org.nz](http://www.mish.org.nz)

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