



## Nutritional strategies to cycle Mt. Taranaki

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Whether you are intending to cycle the entire distance around Mt Taranaki or just finish one leg of the race, sports nutrition is vitally important to your performance. Apart from your genetics (which you obviously can't change!) and the training you have put in, nutrition is going to play the next biggest role in your performance. If you are going to put a huge amount of time and effort into training why not look after your body by providing it with the right fuel to perform at its best?

**A fluid loss of up to 2% of your body mass may mean that your performance could be decreased by up to a whopping 20%!**

### Why is nutrition so important?

Just as a performance car needs water and fuel to perform, so does your body. It has been shown that every litre of water lost can cause your heart rate to increase by 8 beats per minute, cardiac output to decline by 1L/min and core body temperature to increase by 0.3°C. These are all factors which may decrease your performance. It is also known that with a fluid loss of just 2% of your body mass, your performance may be decreased by up to a whopping 20%! This is a big impact on a long ride. Dehydration is not just detrimental to your health; it can in serious situations be life-threatening. Fuel is also an important consideration in your nutrition plan. Carbohydrates are stored in the muscles, the liver and the bloodstream and are used when exercising as a fuel source. A lack of carbohydrate can lead to early fatigue. Keeping your carbohydrate stores as topped up as possible means that you will have less chance of fatiguing early.

### Baseline (day-to-day) diets for cyclists

Your baseline diet is important in that it should provide you with all the macro- and micro-nutrients that you need for daily functioning and optimum health. This involves choosing a variety of food from the four main food groups; Breads & Cereals, Fruits & Vegetables, Milk and Dairy Products and Meat/Meat Alternatives.

**Fruits & Vegetables** – Aim for @ least five + a day to get vitamins and minerals, fibre and antioxidants.

**Breads & Cereals** – An important source of carbohydrate, fibre, vitamins and Minerals.



**Milk & Milk Products** – Great sources of calcium, Vitamin D and protein. Choose low fat versions.

**Meat & Meat Alternatives** – A great source of protein, iron and zinc. Again go for low fat versions.

### What nutritional strategies am I going to need to use?



**Before the race...** In the week up to the race make sure that you are consuming a high CHO diet which is also low in fat. This helps to load the muscles up with stored carbohydrate (called glycogen). Pasta and rice based dishes are perfect lunch and dinner ideas, coupled with plenty of fruits and vegetables. Make sure you do not skip meals and always have a balanced breakfast. Keep up your fluid intake as well!

On the morning of the cycle challenge a high carbohydrate breakfast is going to top up carbohydrate stores as well as prevent hunger. This breakfast meal should ideally be 2 – 4 hrs before starting the race. Make sure breakfast is low fat. Ideas could be; porridge with milk and a banana, a glass of juice and two pieces of toast with honey, or a bowl of Weetbix with milk and tinned peaches, with a glass of milk or a bagel or spaghetti on toast with a glass of fruit juice. For those individuals who cannot stomach a solid meal a liquid meal is a better option. This may be a smoothie or liquid food substitute.

Try to have around 250- 300mLs of fluid immediately before the race as this helps to prime your stomach for later on. Make sure you practice your pre-event meal before the day so that you know that you will not get stomach upsets or discomfort from what you decide to eat and drink.

#### **Do Sports Drinks Work?**

*Yes they do but, you should look for a sports drink which contains 4 – 8 % carbohydrate and a sodium content between 500 – 700 mg/L. You must also try the drink in training first so that you know that it works for you and you tolerate it well.*

**During the race...** Fluid balance is crucial during exercise so you should plan to be as hydrated as possible before, during and after the event. For an event over 90minutes a sports drink is going to be your best option in terms of rehydration. Fluid balance is incredibly important on your ride due to the fact that you will sweat and lose water during this time. Remember that you also lose water when breathing so don't think that because you don't sweat a lot that you don't have to consider your fluid intake!

General recommendations are that you should consume approximately 150 – 200mLs of fluid per 15 – 20minutes. This may change depending on individuals and on other factors such as heat and humidity.

It is vital that you practice these guidelines in training before the ride. It is often a good idea to try and use clear bottles and mark 200mL sections so that you know how much fluid you have been through. This is more difficult if you are using a camelbak. Make sure you know where drink stations are located or where support crew will be if you need to refill your fluid supply.

### Choosing snacks to take on the ride

For events longer than 90 minutes you are going to require extra carbohydrate to top up your glycogen levels throughout the ride. Factors which you should consider when choosing snacks for yourself are:

- they need to be high in carbohydrate
- they need to be low in fat
- they need to taste good and be easy to eat
- and they should be convenient (e.g. can you unpeel bananas while riding? How much can you store in your riding shirt?)

General recommendations state that you should aim to consume between 30 – 60grams of carbohydrate per hour. Remember that carbohydrate can come from both food sources and from your sports drink.



### After the race...Making a great recovery

Recovery is a part of a nutritional plan which often gets overlooked. As you finish after such a long ride it is tempting to indulge in all of those things you may have avoided over the previous couple of months. Sports nutrition plays a role in recovery by: replenishing your glycogen stores, restoring electrolyte and fluid balance, and helping repair muscle damage by providing nutrients. Fluid balance needs to be addressed in your recovery plan. After the ride you should aim to replace 1.5x the amount of fluid that you have lost. This can be difficult to calculate in some situations so an easier way to check if you are hydrated is to check that you have clear urine. You will also need to consume between 1 – 2 grams of CHO per kg of body weight immediately after finishing. For example a 70kg man would need between 70 – 140grams of CHO immediately after finishing. Many individuals find that eating solid food is not so appealing after such a long event so a liquid supplement can be useful. A sports drink is a great choice as it will replace CHO, as well as water and electrolytes all in one go. For those who like to tuck into a substantial snack or meal make sure that it contains a source of high CHO, moderate protein and is relatively low fat.

Recovery ideas include:

**White Bread Sandwich with Jam**

**Sports Gels or Bars**

**Cereal e.g. cornflakes with milk &/or yoghurt and fruit**

**Bananas with Fruit Yoghurt**

**Smoothies**

**Baked Potatoes**

**Panini with lean chicken and salad**

**Sandwich**

**Sweets like Jellybeans or Jet Planes**

**Cereal Bars**

**Creamed corn on Toast**

**Creamed Rice with tinned peaches**

**Sports Drinks or Fruit Juice**

**Baked Bean or Spaghetti Toasted**

**Pasta or rice based dishes**

Be careful with celebrating after your ride has finished. Alcohol and caffeine containing drinks may impair fluid rehydration. Make sure that if you do intend to drink either of these that you fully rehydrate first. If you have sustained injuries, alcohol can be particularly damaging to these so choose carefully what you drink later in the day.

### Summary Points

- **Plan your nutrition for the event and practice these strategies**
- **Aim to consume 150 – 200mLs of fluid per 15 – 20 minutes**
- **Aim to consume 30 – 60 grams of CHO per hour**
- **Make a rapid recovery – have 1 – 2 grams of CHO per kg of bodyweight immediately after finishing and rehydrate fully (make sure your urine is clear)**
- **Make sure you incorporate foods that you enjoy in your plan**
- **Enlist the help of a Sport & Exercise Science NZ Sports Nutrition Practitioner for more help and detailed guidelines**

Sarah is a sports nutritionist who holds a BSc (Human Nutrition & Physiology) and is currently completing a MSc looking at the nutritional knowledge and practices of elite adolescent athletes. She is also a SESNZ Sports Nutrition Practitioner and works with athletes from recreational level up to international level. Check out Sarah's website at [www.sportsnutritionist.co.nz](http://www.sportsnutritionist.co.nz). You can also contact Sarah by phone: 027 415 6175, email: [sarah@sportsnutritionist.co.nz](mailto:sarah@sportsnutritionist.co.nz).

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*for a healthy lifestyle*

