

CYCLING NUTRITION

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Beating Blood Cancers

WHAT TO EAT

Cycling burns more than 300 calories per hour, so don't be alarmed if your appetite increases as you train for your cycling challenge. To make sure you're looking after your body, you need to be:

- Providing fuel for your muscles
- Repairing muscle and tissue damage
- Replacing lost electrolytes and other nutrients

CARBOHYDRATES

A high carbohydrate diet is recommended for anyone involved in an endurance sport such as cycling. Carbohydrates are converted by your body into glycogen – the main energy source for your muscles. Glycogen depletion is the main cause of tiredness. They are broken down into two categories: complex (slow) and simple (fast).

Complex carbs are high in fibre and breakdown into glycogen slowly leaving you with energy for longer periods of time. Simple carbs work in the opposite manner giving your body short but intense amounts of glycogen, therefore on longer rides they require topping up every so often.

You should aim to consume 60-70% carbohydrates in your diet. A mix of both types of carbohydrates is best, however, because complex carbs stabilise blood sugar and even out the body's energy levels, it's advisable to have a stronger emphasis on these.

EXAMPLES OF COMPLEX CARBOHYDRATES:

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|---------------------|--------------|--------------------------------------|---------------------------------------|
| • Apples | • Muesli | • Spinach | • Jam |
| • Apricots | • Navy beans | • Strawberries | • Tinned fruit |
| • Artichokes | • Oat bran | • Tomatoes | • Chocolate |
| • Asparagus | • Oatmeal | • Turnips | • Fudge |
| • Sprouts | • Onions | • Water Cress | • Liquorice |
| • Cabbage | • Oranges | • Whole Barley | • Toffee |
| • Carrots | • Pasta | • Yoghurt | • Syrups |
| • Cauliflower | • Peas | • Examples of simple carbohydrate s: | • Baked goods (made with white flour) |
| • Celery | • Pears | • Cake | • Bread (made with white flour) |
| • Cucumbers | • Pickles | • Fizzy drinks | • Pasta made with white flour |
| • Dill | • Plums | • Honey | • Biscuits (plain) |
| • Grapefruit | • Porridge | • Cereal | |
| • Kidney beans | • Potatoes | • Table sugar | |
| • Lentils | • Prunes | • Sweets | |
| • Lettuce | • Radishes | • Fruit juice | |
| • Milk | • Rice | | |
| • Multi-grain bread | • Soybeans | | |

FAT

Fats help breakdown food to produce glycogen and help store necessary sugars and energy. Around 20-30% of a cyclist's diet should be fats. Try to avoid hydrogenated and saturated fats, so stick with vegetable oils (olive, sunflower, vegetable). Also avoid eating too much animal fat – lean meat is best.

Extra virgin olive oil contains vital nutrients such as vitamin E. Nuts such as almonds, Brazil nuts and walnuts are high in beneficial oils, and avocado is high in monounsaturated fat and potassium.

Protein – Proteins are the building blocks of tissue repair. They also aid glycogen production, so it's important for cyclists to consume 15-20% of protein in their diet to help rebuild muscle and tissue fibres. Although meat contains protein, it's harder to break down, so you're better off with beans, eggs, milk, cheese, nuts and vegetables.

FURTHER NUTRIENTS

Vitamins, minerals, enzymes, bio-flavonoids and other micro-nutrients also have their parts to play in your nutrition. By eating a variety of fresh fruit and veg, you'll be keeping your immune system healthy, maintaining body functions and aiding tissue repair. Be aware that cooking destroys some nutrients.

FLUIDS

Drinking water is equally important as food. A cyclist loses fluid both through sweating and breathing (the vapour can be seen on a cold day). Studies have shown that a loss of 700ml (a usual cycling bottle) of bodily fluids can result in 7% decrease in performance and 1400ml loss gives a 20% drop in performance.

If you become thirsty while cycling then you've left it too late. Even when you feel you don't need it, drink plenty. It's just as important to keep your fluid up after exercise in order to recover.

ENERGY BARS, GELS AND DRINKS

Energy bars and gels are widely used by cyclists. These are easily digested and they boost the body's supply of calories, carbs (mainly complex), protein, vitamins and minerals in order to help the body to continue to function correctly and to avoid premature exhaustion.

Energy drinks are a great idea as they not only hydrate the body but feed it with necessary nutrients including carbs and electrolytes to boost energy at the same time. When used in the form of an isotonic drink (drinking whilst cycling) energy drinks help the body to absorb the fluid faster reducing the risk of dehydration.

Recovery drinks contain complex carbs to assist the body to do just that and because they're in liquid form it's much easier to stomach after a race.

WHEN TO EAT

BEFORE

Load up with slow-burn carbs and fluids. A high carbohydrate breakfast with a little protein will help to set you up for a day of cycling. Load up with porridge, cereal, muesli with milk, toast and peanut butter, honey, jam, bananas, fruit juice etc. You can start your carbo-loading several days before a very long ride or a race.

DURING

Your stores of glycogen are limited and on longer rides (more than an hour or two) you will have to top them up. Individuals vary; you may need to nibble every hour or two to sustain your cycling effort and top up carbs at regular intervals. Carry food with you if necessary.

AFTER

It is important to replenish your glycogen levels as soon as you can when you stop - especially when cycling long distance or on a multi-day ride. The body is most effective at replacing glycogen stores immediately after exercise. A high calorie drink is often the easiest way to get these post-exercise carbs down. A fruit juice, a can of pop or a sports drink as soon as you stop, followed by a large carbo loaded meal as soon as you can!

TOP TEN TIPS

1. Eat a suitable diet ensuring your glycogen reserves are fully stocked
2. Increased high-mileage training will reduce glycogen consumption as your stamina builds (and muscle regeneration slows)
3. Gradually reduce mileage 7 days prior to a major endurance race to build glycogen reserves
4. There are glycogen reserves in muscles and the liver; however the reserve in the liver usually takes longer to mobilise. Therefore begin your ride relatively slowly for between 5-15 minutes (10-15 minutes is best), otherwise you'll burn up your muscles glycogen supply before the liver has started depletion.
5. Eat whilst cycling
6. Drink plenty even if you feel you don't need it
7. Eat lots of carbohydrates the night prior to cycling
8. If taking part in a race, eat at least 3 hours before the race and nothing after 1 hour before; otherwise eat food with low protein and fat so that it's digested quicker
9. Drink a strong black coffee 1 hour before cycling as the caffeine mobilises fatty acids - then follow with plenty of water
10. Don't forget to eat and drink as soon as possible after exercise to regain lost energy and fluid