

Nutrition for Cyclists

Eating the right combination of carbohydrates and protein can help you become a stronger and faster cyclist, and help your muscles recover quicker from each exercise session. What will suit you best depends very much on your level of training, your personal tastes and your digestive tolerances, although recommendations from other cyclists can be helpful too.

Before

Starting out with sufficient energy reserves is vital, but it's best to allow one to four hours after eating a proper meal before setting off, otherwise your body may not have had time to digest the food properly.

If it's been a while since you last ate and you're already peckish, or you're heading out first thing, think about grabbing a quick snack like a banana or energy bar, perhaps a slice of toast or half a bagel. Alternatively, a few swigs of a sports drink can give you a quick boost - these are easier to digest than solid food, and are a good source of carbohydrate if you can't stomach anything more substantial.

Keeping hydrated while training is also an absolute must. As a rough guide, try to drink 500ml of water, diluted juice or a sports drink two hours before a ride, and another 150ml just before you leave.



During

If you plan to ride for less than an hour, plain water should be all you need to top up your fluid levels while you're out. Exercise for longer, though, and you may find sports drinks helpful. These usually contain sugar, maltodextrin and electrolytes including sodium - the exact constitution will vary between manufacturers. Experiment with several varieties to see what suits you best, and which flavours you prefer.

For long rides (over 60 minutes), consider taking a snack with you so you're not left running on empty. Energy gels washed down with water will give you an added boost, as will jelly beans or a banana.

After

Replacing fluid after a ride is just as important as before and during. Drinking around 500ml of water or diluted juice in the first 30 minutes after your ride should be plenty, but if you have a headache or feel nauseous you should have more.

After hard sessions, especially if you plan to train again the next day, think about having a recovery drink. The carbohydrate-protein ratio of these drinks will speed up muscle repair, rehydrate you quickly and also give your immune system a boost.

Energy bars are also good for topping up your fuel reserves when you get back. Like recovery drinks, they contain a mixture of carbohydrate and protein that will help your muscles recover faster. Other good post-ride snacks include eggs on toast, a fruit smoothie and a tuna sandwich. If you can, try to eat within half an hour of completing your ride, as this will maximise the benefits.

Eating And Training: How To Time It Right

By Liz Applegate



Many cyclists know exactly what they should eat and when they should eat it. It's the practical application of this

theory that messes them up. You are either ravenous when you don't want to be - during training - or not hungry when you should be - immediately after training. The problem is that when you are planning your ride around a busy work schedule, your brain, leg muscles and stomach don't always stay in sync. An early-morning ride, for example, can leave you feeling fatigued during your working day. A midday training session may become no more than an afterthought if hunger overrides your motivation. And an after-work jaunt may press your dinnertime perilously close to bedtime.

If you are looking for ways to get back into sync, read on. The following advice will help you coordinate your meals with your training schedule, based on the time of day you cycle.

Early Birds

To eat or not to eat? That is the eternal question of those who like to ride as the sun is coming up.

The answer is, if you can, you should fuel up before your morning ride. This performs two functions. First your muscles receive an energy supply to help you power through the ride. Secondly, your entire body, especially your brain, receives the fuel and nutrients it needs for optimal functioning. It shouldn't be a surprise that studies support this and that eating before a ride boosts endurance compared with fasting for 12 hours. People who eat before exercise rate the exercise as better and as less rigorous compared with those who fast. Here are a few refuelling strategies for both types of morning exercisers:

Early risers

Choose high-carbohydrate foods that are low in fat and moderate in protein. Aim for about 400-800 calories, which will fuel your training without making you feel sluggish. Drink about half a pint of water two hours before your ride to offset sweat loss.

Try these 400- to 800-calorie pre-ride breakfasts:

- Two slices of toast and a piece of fruit
- Cereal with skimmed or semi-skimmed milk and fresh fruit
- A toasted bagel topped with low-fat cheese and tomato slices

Late sleepers

Most cyclists fall into this category and don't have time to eat and digest a full meal before they head out of the door. If you fall into this camp, experiment to see what you can stomach before you train. Here are a few suggestions:

- Half a pint of a carbohydrate drink
- An energy gel washed down with water
- Half a bagel

A high-carbohydrate evening meal should power you through your pre-breakfast ride.

For both types

Whether you are an early or late riser, your body needs calories from carbohydrate, protein and other nutrients after you have finished riding. A recovery meal will help fuel your morning at work, preventing post-ride fatigue. Eat within an hour of your training and be sure to include both carbohydrate and protein. Here are some options:

- A fruit smoothie made with a tablespoon of protein powder
- Eggs on whole-wheat toast and fruit juice or fresh fruit
- Leftovers from dinner - pasta, soup, chilli or even vegetable pizza

The Lunchtime Crowd

People who cycle during lunch hours sometimes find that hunger gets the better of them. By noon, your fuel from breakfast is long gone and your blood sugar may start to dip. Rather than increasing the size of your breakfast (which may just leave you feeling sluggish), you should bring a light, pre-ride snack to work.

Remember the following three points as you ride:

1) Timing Eat one to four hours before your ride to allow enough time for food to leave your stomach.

2) Quantity Eat 100-400 calories, depending upon your body size and what you had for breakfast.

3) Content Select foods that are rich in carbohydrate, low in fat and moderately high in nutrients. Try these mid-morning snacks:

- A breakfast or energy bar with five grams of fat or less
- One slice of whole-wheat toast topped with fruit spread
- A 75g serving of dried fruit with a can of vegetable juice
- One packet of instant oatmeal made with skimmed milk

Post-cycle lunch

The obvious problem with lunch-hour exercise is that you don't have time for lunch. But you need fluid and food to recover and fuel your brain for the rest of the working day. Packing your own lunch becomes a must - unless you have a work cafeteria where you can grab food for desktop dining. Packed lunches don't have to take a lot of time. Try these tips:

- Opt for convenience and shop for lunch items that save time, such as yoghurts, raisins, nuts and cereal bars
- Always add fruit. Toss one or two pieces of fruit in your lunch bag for a reliable source of nutrient-packed carbohydrate
- Make the most of leftovers. Choose any food from the previous night's dinner that you've already packed in a sealed container ready for transport, reheating and eating

Evening Exercise

After a stressful day at the office, there's nothing like a cycle ride to burn off excess tension. The problem is that you sometimes don't feel like heading out of the door if you're hungry or just exhausted. If you do manage to ride, sometimes you return home so ravenous that you eat everything in sight as you make your evening meal. Then you might eat dinner as late as 8pm and end up going to bed with a full stomach.

What to do?

It's very simple - just stick to the following two principles:

1. Eat healthily during the day to avoid any intestinal upset that might thwart your training plans. Also eat often and enough that you're adequately fuelled for your session to avoid the 'I'm too hungry' excuse.
2. Eat lightly after exercise to recover well without causing digestion to interfere with your sleep.

Here are some tips for evening exercisers:

- Never skip breakfast. Eat at least 500 calories for your morning meal. For example, quickly throw together a fruit smoothie made with yoghurt, fruit and juice. Or try cereal topped with nuts, skimmed milk and a piece of fruit.
- Make lunch your main meal of the day. Focus on high-quality protein, such as fish, tofu, lean beef, chicken or bread with cooked grain, along with fresh fruit.
- Always eat a mid-afternoon snack. Around three hours before your ride, eat a snack of fruit or an energy bar together with half a pint of water.
- Drink more fluids. Grab a drink as soon as you step back through the door after your ride. And keep drinking as you prepare your meal. This helps replace sweat loss and may prevent you trying to eat everything in sight.
- Eat moderately at dinner. Some people worry about eating too close to bedtime because they fear the calories will go straight to their fat cells. That's simply not true. Your body will use those calories to stockpile fuel in your muscles. On the other hand if you eat more calories than your body needs - no matter what time of day or night - your body will eventually store the excess as f

Cycling Nutrition Made Simple

By Mark Remy



Nutrition is pretty basic at its core: eat more fruit and vegetables; eat fewer chips and cheeseburgers. But you have so many options these days that they can confuse you. Here are four simple tips that will make eating easier, courtesy of sports nutritionist Nancy Clark.

Divide up your plate

You'll go crazy trying to calculate whether your dinner breaks down into the ideal ratio of carbohydrate, protein and fat. Instead, use this easy rule: about a quarter of your plate should be covered with a protein food (lean red meat, chicken, fish etc), and the rest should be filled with vegetables and complex carbohydrates (whole-grain bread, rice and potatoes).

Make drinking into a habit

You know by now that you should drink eight 250ml glasses of water a day, and even more if you're training extra hard. So make it simple: keep a two-litre water bottle on your desk, and ensure that you drain it by the end of your work day. (Then request a desk closer to the toilets.)

Eat little and often

Frequent snacking throughout the day is a sure way to avoid low blood sugar levels and tiredness by the time you get home for your ride. Research shows that eating little and often is best for cyclists... as long as you're eating the right things!

Make a point of taking high-carbohydrate snacks to work with you so that you aren't caught out. Avoid high-fat snacks such as crisps and chocolate, opting instead for high-carbohydrate and low-fat snacks, which make the best fuel. Dry breakfast cereal, plain popcorn, bagels, low-fat crispbreads, bananas and other fruit are all excellent choices.

Don't ignore the main meals

Regular sensible snacking is important, but proper meals are where carbo-loading really counts. Pasta is deservedly the cyclist's favourite, but there are plenty of other excellent high-carbohydrate foods, such as rice, baked potatoes, lentils, muesli and even baked beans. Still, beware! Some high-carbohydrate foods are also high in fat. Lasagne, thin-crust pizza, croissants and granola are some of the worst culprits.

Drink more water

Water is the body's most important nutrient. It makes up between 50 and 60 per cent of your bodyweight and provides the medium in which most of the body processes occur. Aim to drink throughout the day, with a pint of water (or a sports drink) an hour before you ride, and half a pint for every 30 minutes of cycling. On days when you cycle you should aim to consume five litres during the day, twice as much as is necessary on rest days.

Learn to drink on the run

Drinking on the go is an important element of technique and one you will need to practice.

Carbo-load for recovery

Immediately after a ride it's important to refuel your body with high-carbohydrate food or drink. The first four hours after strenuous exercise is a crucial time for taking on new glycogen to replace what you've lost while working hard. Aim to keep stocking up every 15 minutes or so rather than gorging on one meal, because this maintains higher blood glucose and insulin concentrations, which in turn makes greater absorption into the muscles possible. Recent research suggests that including around 25 per cent protein in your recovery food will optimise the recovery of your muscles.



Amazing Graze

By Beth Moxey Eck

Nutrition experts now believe that grazing on five smaller meals throughout the day is better than eating three big ones. Why should this be? It's mainly because a steady food intake keeps your energy levels consistently higher. Also, when you graze, you never become overly hungry, so you don't get the urge to overeat. This makes weight control easier. You also tend to choose higher-quality foods if you never let yourself become too hungry.

But which snacks are best? See below:

Bananas

Why they're good: Bananas are full of carbohydrates. They are a good source of vitamin B6, which is vital for managing protein metabolism. (Cyclists need more protein during and after training.)

When they're good: Before, during, or after exercise. They're great blended into a fruit smoothie. Or simply whip frozen banana chunks with milk in a blender for a delicious recovery shake.

Calories: 105kcal per medium-sized banana

Carrots

Why they're good: Carrots are low in calories, but filling. This makes them excellent if you're watching your weight. They contain carotene and vitamin A, which promote eye health and a strong immune system.

When they're good: Eat them at night when you want something to munch but don't want extra calories. Or eat them before dinner if you're famished. This way, you won't overindulge once you sit down for your meal.

Calories: 30-40kcal per medium-sized carrot

Cereal bars

Why they're good: A low-calorie cereal bar will satisfy your sweet cravings, without the fat calories of a chocolate bar. And unlike chocolate bars, cereal bars also come with B vitamins and iron.

When they're good: Whenever you feel like satisfying your sweet tooth - without feeling guilty.

Calories: From about 110kcal per 30g bar

Cereal with skimmed milk

Why it's good: Most cereals are vitamin and mineral fortified, and they're great with fresh fruit sliced on top. Cereal is a quick-to-prepare, easily digestible and healthy way to satisfy your sweet tooth. (Even sweetened cereals such as Frosties and Sugar Puffs are a better low-fat alternative to biscuits.) Choose cereals that have five grams of fibre or more per serving.

When it's good: Fine as a pre-ride snack, a post-ride pick-me-up, or even as a trail mix during a long, easy ride.

Calories: Between 200kcal and 500kcal (per 45g of cereal with 250ml of skimmed milk)

Chocolate milk

Why it's good: Chocolate milk is cold and helps keep you hydrated. It also provides plenty of protein, carbohydrates and B vitamins. The calcium in milk will help keep your bones strong.

When it's good: An ice-cold shot of chocolate milk is the perfect reward after a hot summer ride.

Calories: 160kcal per 250ml of semi-skimmed chocolate milk

Cottage cheese

Why it's good: It's packed with protein, which cyclists need in larger amounts than sedentary people, for muscle rebuilding and repair. It serves as a good calcium source as well.

When it's good: Any time except just before cycling. Great with fruit after an intense training session or race.

Calories: 72kcal per 100g of low-fat cottage cheese

Dried apricots

Why they're good: These chewy little morsels are low in fat and high in carbohydrate, and provide a decent amount of vitamin A, fibre and potassium.

When they're good: Any time. Toss chopped apricots over your cereal at breakfast, or eat whole ones plain before your afternoon training session or as a sweet treat after dinner.

Calories: Around 80kcal for 10 dried apricot halves

Prunes

Why they're good: Prunes (dried plums) contain no fat and are packed with carbohydrates. They're also a good source of fibre and potassium. Eating potassium-rich foods such as prunes helps lower high blood pressure.

When they're good: Prunes make a healthy snack almost any time. But don't eat them just before your ride, as they can act as a laxative.

Calories: Roughly 100kcal for five prunes

Energy bars

Why they're good: Designed especially for athletes, you can choose from high-carb bars, protein recovery bars, or ones that contain a mixture of carbs, protein and even vitamins. They're tasty and come in all kinds of flavours.

When they're good: Post-exercise. Liquid energy is better during or just before exercise.

Calories: 200-300kcal per 75g bar

Fig rolls

Why they're good: Chewy fig rolls are a tasty, convenient source of carbohydrates and fibre. They are carbs that are quickly digestible, making them great on-the-run snacks.

When they're good: Any time, even during the middle of a marathon when you need to refuel in a hurry. Of course, if you're prone to 'cyclist's trots', save them until after the race.

Calories: 110kcal per two fig rolls

Fruit ice-lollies

Why they're good: This refreshing, low-calorie treat is loaded with vitamin C, which fortifies your immune system and helps boost iron absorption. (Make sure you choose lollies made with fruit juice, rather than sugary artificial versions.)

When they're good: They're great any time, but they're best immediately after a tough, hot ride.

Calories: 75kcal per lolly

Fruit yoghurt

Why it's good: Yoghurt is a great source of calcium, protein and potassium - and it's low in fat and fairly high in carbohydrates. The live and active cultures added to certain types of yoghurt (often called 'bio') will also boost your immune system.

When it's good: Any time. Some cyclists swear by it as a highly digestible pre-race snack, despite its protein content.

Calories: 250kcal per 200g of low-fat yoghurt

Green soya beans

Why they're good: Soya beans in any form are a high-quality source of protein, iron, B vitamins and heart-healthy isoflavones (which also help keep your bones healthy). Soy protein has been shown to lower risk of heart disease and cancer.

When they're good: Eat them after a ride, or as a low-calorie, but filling, after-noon snack.

Calories: 147kcal per 100g raw or boiled

Home-made pizza

Why they're good: Fresh tomatoes, peppers, sliced onion and mushrooms piled on a ready-made pizza base and lightly sprinkled with low-fat mozzarella or feta cheese - need we say more? A slice of pizza supplies energy from the carb-rich base, protein and bone-strengthening calcium from the cheese and a range of vitamins and phytochemicals from the vegetables.

When they're good: Eat a slice after cycling, or as an afternoon snack to keep you energised for your evening ride.

Calories: 250kcal per slice (100g)

Hummus on pitta bread

Why it's good: Split the pitta bread and toast until crisp. Then simply break into pieces and use instead of cracker biscuits. This filling snack packs plenty of protein, fibre, vitamin B6 and folic acid (but be careful: hummus can have up to 27.9g of fat per 100g, even though it's almost all the 'healthy' kind). The latter is especially important for a healthy pregnancy, and has recently been shown to prevent anaemia and breast cancer.

When it's good: Hummus works well as a substantial mid-morning or afternoon snack. It's also a healthier evening alternative to peanuts or other fried party snacks.

Calories: 280kcal per three tablespoons of hummus and one pitta

Individual cheeses

Why it's good: Many cyclists - especially those who don't eat many dairy products - fail to meet their calcium requirement. Individually-wrapped cheeses are available at most supermarkets, and make a tasty, convenient way to take in calcium and protein as well as a little fat. Don't go overboard, though, most full-fat cheeses are at least 25 per cent fat.

When it's good: Have a cheese or two with some high-carbohydrate foods after a long ride. Research shows that eating a little protein along with carbohydrates can speed your recovery.

Calories: 80kcal per cheese

Kiwi fruit

The bright-green flesh of one kiwi fruit provides more vitamin C than the average adult needs in a day, helping to fight off infections, colds and flu. Kiwi fruit contain some potassium, too, which can help to lower blood cholesterol levels, and the really good news is that they contain only 29 calories each.

Popcorn

Popcorn's image was given a boost when Madonna claimed that it is her favourite snack. Popcorn's biggest advantage is that it is low in fat, comprising mainly carbohydrate. There are only 55 calories in a cup of plain popcorn - just make sure you avoid the buttered and toffee-coated varieties

Porridge

Why it's good: Studies show that a bowl of porridge helps lower cholesterol. Porridge will also fill you with plenty of carbohydrates to boost energy and alertness.

When it's good: An excellent meal before a race, or whenever you wake up feeling hungry and ready for a hearty breakfast.

Calories: 250kcal per bowl made from 45g dry oats and semi-skimmed milk

Rice cakes with peanut butter

Why they're good: Rice cakes are low in calories, most of which come from energising carbohydrates. Peanut

butter is an excellent source of protein and heart-healthy polyunsaturated and monounsaturated fat. It also contains vitamin E, which helps with muscle recovery.

When they're good: A perfect filling snack for mid-morning or mid-afternoon.

Calories: 125kcal for one rice cake with one dessertspoons of peanut butter

Smoothies

Why they're good: If you use fruit and skimmed milk, smoothies (made by blending frozen fruit such as bananas, with skimmed milk, orange juice and ice) are an easy way to consume a healthy dose of calcium, potassium and vitamins C and A.

When they're good: A cooling summer treat, a smoothie works well for breakfast, before a ride, or as a refreshing, re-energising, post-ride treat.

Calories: Approximately 200kcal per 350ml

Smoked ham and cheese bagel

Why it's good: Bagels are a conveniently-sized source of complex carbs, while smoked ham is an excellent source of protein and folic acid. A light slathering of low-fat cream cheese will provide additional calcium and potassium. Top it off with a sliced tomato and red onion and you'll add vitamin C, vitamin A and antioxidants as well.

When it's good: As a substantial, post-ride snack or light meal.

Calories: Roughly 300kcal per bagel with two slices of ham and one tablespoon of low-fat cream cheese

Tuna fish

Why it's good: Tuna comes with protein and heart-healthy omega-3 fats. Research shows that men who eat at least 80-100g of fish per week are less likely to die of a heart attack, and that women who eat at least two servings of fish per week reduce their risk of rheumatoid arthritis.

When it's good: Perfect for lunch or an afternoon snack. Consider a tuna salad with low-fat mayonnaise and sliced tomatoes on granary bread. Are you hungry yet?

Calories: 110kcal per 100g, canned in spring water