# Fitness: 33 reasons to cycle

By Matthew Barbour, Cycling Plus

You might ride to save the planet but you're also saving your brain cells, improving family relations while expanding lung capacity, and increasing your 'happy hormones' as you pile on the miles. Ain't cycling great! Just some of the 33 reasons why, says Matthew Barbour, everyone should get on their bike...

## 1 You'll get there faster

Commute by bike in the UK's major cities and you'll get there in half the time of cars, research by Citroen shows. In fact, if you drive for an hour in Cardiff's rush hour, you'll spend over 30 minutes going absolutely nowhere and average just 7mph, compared to averaging around 12-15mph while cycling.

Edinburgh's transport leader, Andrew Burns, has predicted that a modern-day 20-minute car journey in the Scottish capital could take an hour by 2026, but cycling journeys may get shorter as infrastructure improves.

## 2 Sleep more deeply

An early morning ride might knacker you out in the short term, but it'll help you catch some quality shut-eye when you get back to your pillow. Stanford University School of Medicine researchers asked sedentary insomnia sufferers to cycle for 20-30 minutes every other day. The result? The time required for the insomniacs to fall asleep was reduced by half, and sleep time increased by almost an hour.

"Exercising outside exposes you to daylight," explains Professor Jim Horne from Loughborough University's Sleep Research Centre. "This helps get your circadian rhythm back in sync, and also rids your body of cortisol, the stress hormone that can prevent deep, regenerative sleep."

# 3 Look younger

Scientists at Stanford University have found that cycling regularly can protect your skin against the harmful effects of UV radiation and reduce the signs of ageing. Harley Street dermatologist Dr Christopher Rowland Payne explains: "Increased circulation through exercise delivers oxygen and nutrients to skin cells more effectively, while flushing harmful toxins out. Exercise also creates an ideal environment within the body to optimise collagen production, helping reduce the appearance of wrinkles and speed up the healing process." Don't forget to slap on the factor 30 before you head out, though.

## 4 Boost your bowels

According to experts from Bristol University, the benefits of cycling extend deep into your core. "Physical activity helps decrease the time it takes food to move through the large intestine, limiting the amount of water absorbed back into your body and leaving you with

softer stools, which are easier to pass," explains Harley Street gastroenterologist Dr Ana Raimundo.

In addition, aerobic exercise accelerates your breathing and heart rate, which helps to stimulate the contraction of intestinal muscles. "As well as preventing you from feeling bloated, this helps protect you against bowel cancer," Dr Raimundo says.

#### 5 Increase your brain power

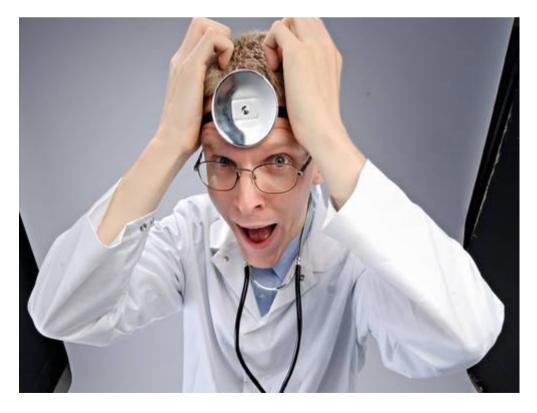
Need your grey matter to sparkle? Then get pedalling. Researchers from Illinois University found that a five percent improvement in cardio-respiratory fitness from cycling led to an improvement of up to 15 percent in mental tests. That's because cycling helps build new brain cells in the hippocampus – the region responsible for memory, which deteriorates from the age of 30.

"It boosts blood flow and oxygen to the brain, which fires and regenerates receptors, explaining how exercise helps ward off Alzheimer's," says the study's author, Professor Arthur Kramer.

#### 6 Beat illness

Forget apples, riding's the way to keep the doctor at bay. "Moderate exercise makes immune cells more active, so they're ready to fight off infection," says Cath Collins, chief dietician at St George's Hospital in London.

In fact, according to research from the University of North Carolina, people who cycle for 30 minutes, five days a week take about half as many sick days as couch potatoes.



Riding's the way to keep the doctor at bay

#### 7 Live longer

King's College London compared over 2,400 identical twins and found those who did the equivalent of just three 45-minute rides a week were nine years 'biologically younger' even after discounting other influences, such as body mass index (BMI) and smoking.

"Those who exercise regularly are at significantly lower risk of cardiovascular disease, type two diabetes, all types of cancer, high blood pressure and obesity," says Dr Lynn Cherkas, who conducted the research. "The body becomes much more efficient at defending itself and regenerating new cells."

## 8 Save the planet

Twenty bicycles can be parked in the same space as one car. It takes around five percent of the materials and energy used to make a car to build a bike, and a bike produces zero pollution.

Bikes are efficient, too – you travel around three times as fast as walking for the same amount of energy and, taking into account the 'fuel' you put in your 'engine', you do the equivalent of 2,924 miles to the gallon. You have your weight ratio to thank: you're about six times heavier than your bike, but a car is 20 times heavier than you.

## 9 It's a status symbol

Forget that car badge, your two-wheeled ride is a far better sign of your pedigree. The Department for Transport's National Travel Survey shows that the richer people become, the further they cycle: the top fifth of earners pedal on average two-and-a-half times as far in a year as the bottom fifth. The London Cycling Campaign says people on higher incomes tend to be better educated about the health benefits of cycling.

## 10 Improve your sex life

Being more physically active improves your vascular health, which has the knock-on effect of boosting your sex drive, according to health experts in the US. One study from Cornell University also concluded that male athletes have the sexual prowess of men two to five years younger, with physically fit females delaying the menopause by a similar amount of time.

Meanwhile, research carried out at Harvard University found that men aged over 50 who cycle for at least three hours a week have a 30 percent lower risk of impotence than those who do little exercise. (Some research has found links between cycling and infertility.)

## 11 It's good breeding

A 'bun in the oven' could benefit from your riding as much as you. According to research from Michigan University in the US, mums-to-be who regularly exercise during pregnancy have an easier, less complicated labour, recover faster and enjoy better overall mood throughout the nine months. Your pride and joy also has a 50 percent lower chance of becoming obese and enjoys better in-utero neurodevelopment.

"There's no doubt that moderate exercise such as cycling during pregnancy helps condition the mother and protect the foetus," says Patrick O'Brien, a spokesman for the Royal College of Obstetricians and Gynaecologists.



A 'bun in the oven' could benefit from your riding as much as you

## 12 Heal your heart

Studies from Purdue University in the US have shown that regular cycling can cut your risk of heart disease by 50 percent. And according to the British Heart Foundation, around 10,000 fatal heart attacks could be avoided each year if people kept themselves fitter. Cycling just 20 miles a week reduces your risk of heart disease to less than half that of those who take no exercise, it says.

#### 13 It's safer than ever

More people than ever are taking to two wheels and cycling levels in the UK have reached their highest point for 17 years. That means more riders on the roads, which surely means more cyclists getting killed by cars? Well, no. Department of Transport figures show that last year cycling increased by 12 percent (measured in total kilometres cycled), but there was also a fall in cycling deaths, down from 136 to 115 – the second lowest level ever.

That's 115 deaths too many, but the stats are moving in our favour. Maybe there really is safety in numbers. (Since this article was written, new quarterly figures have been released showing a significant rise in cycling injuries in the UK. It is hoped that this is just a blip and full-year figures will be less alarming.)

## 14 Your boss will love you

No, we don't mean your Lycra-clad buttocks will entice your superiors into a passionate office romance, but they'll appreciate what cycling does for your usefulness to the company. A study of 200 people carried out by the University of Bristol found that employees who exercised before work or at lunchtime improved their time and workload management, and it boosted their motivation and their ability to deal with stress.

The study also reported that workers who exercised felt their interpersonal performance was better, they took fewer breaks and found it easier to finish work on time. Sadly, the study didn't find a direct link between cycling and getting a promotion.

## 15 Cycle away from the big C

There's plenty of evidence that any exercise is useful in warding off cancer, but some studies have shown that cycling is specifically good for keeping your cells in working order. One long-term study carried out by Finnish researchers found that men who exercised at a moderate level for at least 30 minutes a day were half as likely to develop cancer as those who didn't. And one of the moderate forms of exercise they cited? Cycling to work. Other studies have found that women who cycle frequently reduce their risk of breast cancer by 34 percent.

## 16 Lose weight in the saddle

Loads of people who want to shift some heft think that heading out for a jog is the best way to start slimming down. But while running does burn a ton of fat, it's not kind to you if you're a little larger than you'd like to be. Think about it – two to three times your body weight goes crashing through your body when your foot strikes the ground. If you weigh 16 stone, that's a lot of force! Instead, start out on a bike – most of your weight is taken by the saddle, so your skeleton doesn't take a battering. Running can wait...

#### 17 You'll make more money

If you're cycling to lose weight then you could be in line for a cash windfall... Well, sort of. Sadly, this isn't part of the UK government's Cycle to Work scheme, but rather the findings of a study carried out at Ohio State University in the USA. Researcher Jay Zagorsky analysed data from the National Longitudinal Survey of Youth – which saw 7,300 people regularly interviewed between 1985 and 2000 – to see how their obesity and wealth changed over that period. Zagorsky concluded that a one unit increase in body mass index (BMI) score corresponded to an £800 or eight percent reduction in wealth. So, shed a few BMI points on the bike and start earning.

## 18 Avoid pollution

You'd think a city cyclist would suck up much more pollution than the drivers and passengers in the vehicles chucking out the noxious gases. Not so, according to a study carried out by Imperial College London. Researchers found that passengers in buses, taxis and cars inhaled substantially more pollution than cyclists and pedestrians.

On average, taxi passengers were exposed to more than 100,000 ultrafine particles – which can settle in the lungs and damage cells – per cubic centimetre. Bus passengers sucked up just under 100,000 and people in cars inhaled about 40,000. Cyclists, meanwhile, were exposed to

just 8,000 ultrafine particles per cubic centimetre. It's thought that cyclists breathe in fewer fumes because we ride at the edge of the road and, unlike drivers, aren't directly in the line of exhaust smoke.



Cyclists breathe in fewer fumes than drivers

#### 19 Enjoy healthy family time

Cycling is an activity the whole family can do together. The smallest tyke can clamber into a bike seat or tow-along buggy, and because it's kind on your joints, there's nothing to stop grandparents joining in too.

Moreover, your riding habit could be sowing the seeds for the next Bradley Wiggins or Nicole Cooke. Studies have found that, unsurprisingly, kids are influenced by their parents' exercise choices. Put simply, if your kids see you riding regularly, they think it's normal and will want to follow your example. Don't be surprised, though, if they become embarrassed by your tendency to mismatch fluorescent Lycra when they become teenagers.

## 20 It means guilt-free snacks

Upping your salt intake is seldom your doctor's advice, but in the few days leading up to a big ride or sportive, that's exactly what you should do. This gives you the perfect excuse to munch on crisps and other salty foods you might normally avoid. The sodium in them helps protect your body against hyponatraemia, a condition caused by drinking too much water without enough sodium that can lead to disorientation, illness and worse.

## 21 Get better at any sport

Whether you want to keep in prime shape or just improve your weekly tennis game, a stint in the saddle is the way to begin. A recent medical study from Norway carried the title Aerobic Endurance Training Improves Soccer Performance, which makes it pretty clear that the knock-on benefits to other sports and activities are immense.

## 22 Make creative breakthroughs

Writers, musicians, artists, top executives and all kinds of other professionals use exercise to solve mental blocks and make decisions – including Jeremy Paxman, Sir Alan Sugar and Spandau Ballet. A study found that just 25 minutes of aerobic exercise boosts at least one measure of creative thinking. Credit goes to the flow of oxygen to your grey matter when it matters most, sparking your neurons and giving you breathing space away from the muddle and pressures of 'real life'.

## 23 You're helping others

Many cyclists turn their health, fitness and determination into fundraising efforts for the less fortunate. The London to Brighton bike ride has raised over £40 million for the British Heart Foundation since the two became involved in 1980, with countless other rides contributing to the coffers of worthy causes.

#### 24 You can get fit without trying too hard

Regular, everyday cycling has huge benefits that can justify you binning your wallet-crippling gym membership. According to the National Forum for Coronary Heart Disease Foundation in the US, regular cyclists enjoy a fitness level equal to that of a person who's 10 years younger.

#### 25 Boost your bellows

No prizes for guessing that the lungs work considerably harder than usual when you ride. An adult cycling generally uses 10 times the oxygen they'd need to sit in front of the TV for the same period. Even better, regular cycling will help strengthen your cardiovascular system over time, enabling your heart and lungs to work more efficiently and getting more oxygen where it's needed, quicker. This means you can do more exercise for less effort. How good does that sound?

#### 26 Burn more fat

Sports physiologists have found that the body's metabolic rate – the efficiency with which it burns calories and fat – is not only raised during a ride, but for several hours afterwards. "Even after cycling for 30 minutes, you could be burning a higher amount of total calories for a few hours after you stop," says sports physiologist Mark Simpson of Loughborough University.

And as you get fitter, the benefits are more profound. One recent study showed that cyclists who incorporated fast intervals into their ride burned three-and-a-half times more body fat than those who cycled constantly but at a slower pace.



Cycling can help you lose pounds – but don't take it too far!

# 27 You're developing a positive addiction

Replace a harmful dependency – such as cigarettes, alcohol or eating too much chocolate – with a positive one, says William Glasser, author of Positive Addiction. The result? You're a happier, healthier person getting the kind of fix that boosts the good things in life.

## 28 Get (a legal) high

Once a thing of myth, the infamous 'runner's high' has been proven beyond doubt by German scientists. Yet despite the name, this high is applicable to all endurance athletes. University of Bonn neurologists visualised endorphins in the brains of 10 volunteers before and after a two-hour cardio session using a technique called positive emission tomography (PET). Comparing the pre- and post-run scans, they found evidence of more opiate binding of the happy hormone in the frontal and limbic regions of the brain – areas known to be involved in emotional processing and dealing with stress.

"There's a direct link between feelings of wellbeing and exercise, and for the first time this study proves the physiological mechanism behind that," explains study co-ordinator Professor Henning Boecker.

## 29 Make friends and stay healthy

The social side of riding could be doing you as much good as the actual exercise. University of California researchers found socialising releases the hormone oxytocin, which buffers the 'fight or flight' response.

Another nine-year study from Harvard Medical School found those with the most friends cut the risk of an early death by more than 60 percent, reducing blood pressure and strengthening their immune system. The results were so significant that the researchers concluded not having close friends or confidants is as detrimental to your health as smoking or carrying extra weight. Add in the fitness element of cycling too and you're onto a winner.

## 30 Be happy

Even if you're miserable when you saddle up, cranking through the miles will lift your spirits. "Any mild-to-moderate exercise releases natural feel-good endorphins that help counter stress and make you happy," explains Andrew McCulloch, chief executive of the Mental Health Foundation. That's probably why four times more GPs prescribe exercise therapy as their most common treatment for depression compared to three years ago. "Just three 30-minute sessions a week can be enough to give people the lift they need," says McCulloch.

## 31 Feeling tired? Go for a ride

Sounds counter-intuitive but if you feel too tired for a ride, the best thing you can do is go for ride. Physical activity for even a few minutes is a surprisingly effective wake-up call. A review of 12 studies on the link between exercise and fatigue carried out between 1945 and 2005 found that exercise directly lowers fatigue levels.

#### 32 Spend quality time with your partner

It doesn't matter if your paces aren't perfectly matched – just slow down and enjoy each other's company. Many couples make one or two riding 'dates' every week. And it makes sense: exercise helps release feel-good hormones, so after a ride you'll have a warm feeling towards each other even if he leaves the toilet seat up and her hair is blocking the plughole again. A ride is also a good opportunity to talk. Beats staring at *Strictly Come Dancing*, eh?

## 33 It's not weather-dependent

Rain, sun, wind – forget the forecast, you can ride in almost any weather. Just strip off or layer up and see it as a challenge.