biking: environmental, health, economic and community

Biking is beneficial to all by: a green, healthy way of transportation. Green by using human power vs gas/electricity; the exercise makes it healthy. It is also much more economical to individuals and society/the public as much less infrastructure is needed by cyclists. The exercise and health aspects are also beneficial to society. And it's fun:)

I know this is long but I found lots of information out there and this is just a small piece. Some of what is below repeats but what is really great is the different places it's found. The diversity is wonderful.

Please be sure to see original sources; info below may not be entire article/web page.

http://mygreenbirmingham.com/2013/10/17/two-wheels-one-rider-how-biking-around-town-helps-you-save-green/

Benefits of Bike Riding: Slimmer waistline, fatter wallet!

Biking can save money and time by reducing trips to the gas station, the car repair shop, and not to mention, trying to find—and even pay for—parking spots.

Why you should ride: In addition to being a more cost-effective way of transportation, bicycling is a great place to start with an exercise routine.

It's a low-impact exercise, meaning there is low strain on the joints in the knees, ankles and hips.

- Cycling builds strength, muscle tone, stamina and coordination by exercising virtually every
 part of the body. It also improves cardio-vascular health. A study done by the British Medical
 Association reveals that biking as little as 20 miles a week can cut the risk of coronary heart
 disease by as much as 50 percent.
- Cycling at a steady pace for an hour burns approx. 300 calories. Because it builds muscle, it boosts your metabolic rate so you're still burning calories even after your ride.

Biking keeps the environment in gear: If the environment could eat, a bicycle would be an apple and a car would be a jelly-filled doughnut. Riding a bike impacts the environment in many positive ways, which helps people as well.

- Bike riding reduces the use of non-renewable fuels like the millions of barrels of oil the U.S. uses every year to gas up cars. According to the Alabama Department of Environmental Management, about 40 percent of the state's particle pollution is soot from fires and automobile tailpipes.
- A study done at the University of North Carolina Highway Safety Research Center showed that about 60 percent of pollution from motorized vehicles is emitted within the first few minutes of driving. Riding a bike for short trips can easily decrease that problem.

How Riding a Bike Reduces Global Warming



Related Articles

- The Pros for the Environment of Riding Bikes
- Top Ways to Stop Global Warming
- How Does Global Warming Affect Daily Life?
- The Effects of Global Warming on the Human Body

Riding a bike provides a fairly fast and dependable mode of transportation that just happens to require no gas. By biking instead of using motor vehicles whenever possible, you'll be simultaneously saving money, getting fit and helping to reduce global warming. Plus, you'll set a positive example for others. In 2009, just .6 percent of Americans biked to work, according to the U.S. Census Bureau, so the biking trend definitely has much room to grow (see Reference 5).

Fewer Driving Emissions

Riding a bike cuts your fuel emissions completely. Thus, bikes provide a cleaner form of transportation than cars, buses, trains or other forms of public transportation. Not only do bikes cut down on the number of vehicles on the road, they cut down on congestion, says the Federal Highway Administration. This means fewer vehicles sit idling in traffic, ultimately reducing the time that the remaining cars spend on the road, thus lowering their emissions (see Reference 1).

Fewer Production Emissions

Due to the small size and relative simplicity, bikes require less energy to produce than a motor vehicle. Turning raw materials into a motor vehicle releases substantial emissions. Component parts of motor vehicles must be produced separately, and each process typically involves

production emissions, as the World Resources Institute points out (see Reference 2). If you're riding a used rather than new bike, your carbon footprint drops even more, because you're reusing existing materials instead of generating more production emissions. The longer you use your bike, the better. Joining a local bike coop will connect you with people who will help you to keep your bike working well for as long as possible.

Reduced Need for Metals

Using a bike rather than a car also reduces the need for metals used in production. Metals used to produce vehicles must often be mined from the earth, which can devastate landscapes and cause deforestation. Pollution may enter the atmosphere through the extraction of these raw materials as well. Contamination of water sources is one of the most serious results of mining. Even small-scale mining can leave landscapes barren of vegetation for years, contributing to global warming by removing trees that clean the atmosphere (see References 3, 4).

Fewer Paved Surfaces

Bikes take up a lot less space than cars, especially when parked. With fewer cars on the road, the demand for new roads and large parking lots decreases. Paved surfaces increase the "heat island effect" -- when built-up areas are several degrees hotter than surrounding rural areas, translating to increased energy demand, especially in warm months, and greater energy-related greenhouse gas emissions. Narrower streets with planters and space for street trees, and green spaces like pocket parks in place of parking lots will make a city greener, healthier and more beautiful -- even removing carbon dioxide from the environment (see Reference 6).

References (6)

- Federal Highway Administration: Health and Environmental Benefits of Walking and Bicycling
- World Resources Institute: Car Companies and Climate Change
- World Resources Institute; Mine the Gap; Marta Miranda and Amanda Sauer; Sept. 2010
- World Resources Institute: The Environmental and Social Impacts of Small-Scale Mining Operations
- U. S. Census Bureau: Commuting in the United States, 2009
- <u>U.S. Environmental Protection Agency: Heat Island Effect</u>

Resources (1)

League of American Bicyclists: National Bike Month

About the Author



Melanie J. Martin specializes in environmental issues and sustainable living. Her work has appeared in venues such as the Environmental News Network, "Ocean" magazine and "GREEN Retailer." Martin holds a Master of Arts in English.

BICYCLE CULTURE

Copenhagen is world famous for its biking culture and now officially the first Bike City in the World. Last year, it was also voted the 'Best city for cyclists' and the 'World's most liveable city'. The Danes are well known for their love of cycling and cities all around the world are now looking at ways to copy this phenomenon. It really is biking heaven for the cyclist in Copenhagen with over 390 kilometres of designated bike lanes.

BICYCLE LINKS

- Cycling Embassy of Denmark
- Ibikecph
- Child-friendly cycling holidays
- Plan your cycling route online

GOOD, BETTER, BEST



The City of Copenhagen's Bicycle Strategy 2011-2025 [PDF]

In Copenhagen's new bicycle strategy you can read about the new initiatives and plans which lay down guidelines for the long term and overriding priorities within the bicycle area.

DID YOU KNOW

- In Denmark there are over 10,000 km of cycle routes
- The city-bike Denmark's first free bicycle scheme was launched in Copenhagen in 1995
- Today, 37 per cent of Copenhageners cycle to work and the target is 50 per cent by 2015





I added a video to a @YouTube playlist http://<u>youtu.be/BCYgajPrT64?a</u> Building liveability: Copenhagen's sustainable urban development



YouTube @YouTube



Apr 18, 2018

http://homeguides.sfgate.com/pros-environment-riding-bikes-79378.html

The Pros for the Environment of Riding Bikes



Related Articles

- How Riding a Bike Reduces Global Warming
- How Does Car Pollution Affect the Environment & Ozone Laver?
- How to Determine the Stem Size for Road Bicycles
- How Does Car Pollution Affect the Weather?

Bike riding has always been a more cost-effective mode of transportation when compared to personal motor vehicles and public transportation. A bike is free to operate and maintenance is inexpensive. The riding is also a healthy option, as the bikes are fueled solely by the power of your own muscles. Bike riding also benefits the environment in significant ways (References 1).

No Air Pollution

The environmental hazards of motorized vehicle traffic are no secret. According to the University of North Carolina Highway Safety Research Center, transportation emits large amounts of pollutants into the atmosphere. The university's research found that 80 percent of the carbon monoxide in the atmosphere came from motorized vehicles that operate on gas and diesel. These sources also contribute 55 percent of the nitrogen oxide pollution in the air. Riding a bike, however, contributes zero pollutants, a statistic that is definitely a pro for the environment. (References 1)

No Nonrenewable Fuels Burned

The University of North Carolina Highway Safety Research Center has also found that motorized vehicles guzzle millions of barrels of oil each day in the form of gas and diesel (See References 3). The U.S. Department of Energy estimates that approximately 10 million barrels of oil were used each day in 2010 (See References 2). Individuals riding bikes are not in cars, so they help reduce petroleum consumption. An increase in bike ridership could cut down on oil consumption over the next decade, because bicycles consume no fuel.

Better for Short Trips

Short car trips waste more fuel and create more pollutants than long car trips. The University of North Carolina Highway Safety Research Center found that 60 percent of the pollutants created from motorized transportation was produced during the first few minutes of the ride. In fact, starting the car cold and then driving up to four miles produces more air pollutants than driving on a long trip. The university found that 15 pounds of pollution could be saved if drivers would park their cars on short trips of four miles or less and ride a bike instead (See References 3).

Reducing the Parking Problem

Parking lots are a problem for the environment, especially with the increasing number of motorized vehicles on the road. This means clearing more land for parking that was once home to plant and animal life. The asphalt, roadway tars and other chemicals poured to make parking lots also release pollutants into the air and create heat islands that contribute to global warming. The removal of trees and complementary vegetation eliminates vital air cleaners that help reduce the quantity of carbon dioxide in the air. Bicycle parking requires little space, which means that bikes help minimize the heat island effect and also preserve habitats.

References (4)

- University of North Carolina Highway Safety Research Center; Pedestrian and Bicycle Information Center: Environmental/Energy Benefits
- U.S. Department of Energy: Reduce Fuel Costs
- Hamilton County Ohio Bicycling Program; University of North Carolina Highway Safety Research Center; Benefits of Biking
- League of American Bicyclists: Ride for the Environment

About the Author

Jonita Davis is freelance writer and marketing consultant. Her work has appeared in various print and online publications, including "The LaPorte County Herald Argus" and Work.com. Davis also authored the book, "Michigan City Marinas," which covers the history of the Michigan City Port Authority. Davis holds a bachelor's degree in English from Purdue University.

http://www.pacommutes.com/biking/eco-impact/

http://joannabicycle.hubpages.com/hub/help-environment-cycling

Help The Environment With Cycling

Updated on February 13, 2010

Joanna Bicycle

Helping The Environment

Each and every person has to contribute his or her share to avoid global warming. You can choose to ride a bicycle for the benefit of our ecosystem.

Bicycles are the only vehicles which do not release any harmful gases into atmosphere. A motorcycle burns four times more energy than a bicycle. Carbon monoxide and carbon dioxide is released into our environment. These are the route cause for most of the respiratory diseases.

Benefits of bicycle riding:

Let us see a small comparison. Say you ride a car to go shopping one mile away.

- You spent on petrol, diesel or gas for your car, exhausting a bit of natural energy.
- You need to find a suitable place to park your car.
- The harmful gases like carbon monoxide emitted by your vehicle do its part to damage our ecosystem.
- Then there are other products like air fresheners which are used inside the automobiles.
- You actually breathe them which may lead to many complications like cancer.
- No exercise is given to the body.
- Accidents in automobiles can sometimes be fatal.

If you are going to take a bicycle for the same reason,

- No fuel is used. You need not spent any money on oil.
- Finding a place to park your bicycle is lot easier than finding a place to park your car.
- No poisonous gases are emitted into the atmosphere. You can take the pride of reducing the level of poison in the gas we are breathing.
- Your body gets fresh air. Your lungs are filled with fresh oxygen making you more active.
- All the muscles of your body get good exercise. This is much better than working out in a gym with sky high subscription.
- Bicycle injuries are rarely fatal and they are not liable to kill you in ninety nine percent cases, whereas it is not so in a motorcycle or in a car.

Bicycle riding – the best way to save our ecosystem:

You can definitely argue if riding bicycle by one single person is going to make any difference at all. But the answer is definitely yes. In this critical situation where each and every one has to do something to save our ecosystem you contribution is definitely worthy.

Leave alone the minute difference it makes in atmosphere. Riding bicycle for 45 minutes a day has drastic effects on your health. It makes you a very fit person without any ailments. The undeniable fact is that US contributes thirty percent of global greenhouse gas emission by automobiles followed by Japan.

Even if one person stops using a car for one week in his lifetime he contributes a lot. Say you spent average three hours a day in your car and reduce it two hours; still you can save seven hours of greenhouse gas emission which is still a remarkable step.

So in a year you would be responsible for stopping 365 hours of green house gas emission. This is equivalent to 10 % of poisonous gases emitted by a small scale chemical industry.

You become fit and healthy in a year, reducing medical expenses, become stress free, spent lesser on fuel and vehicle maintenance. More than all you have taken an effective step in preventing global warming. So bicycle riding makes you a more worthy citizen of the world.

Related Hubs

- Great And Healthy Benefits That The Bicycle Offers
 - The health benefits of a bicycle ride are countless if you compensate with some simple factors. So start using bicycles to keep yourself fit. The main health problem of modern day citizens is obesity and...
- The Cheapest Means Of Own Transportation: The Bicycle
 Bicycles help lot of people from kids to adults to earn their livelihood and serve as the cheapest way of transport, especially in Asian countries. Bicycle was the first self driven metal machine which did...

https://safety.fhwa.dot.gov/ped_bike/docs/case15.pdf (please see pdf) – study put out in Jan of 1993.

https://www.movoto.com/blog/opinions/10-ways-riding-a-bike-can-save-the-world/

10 Ways Riding a Bike Can Save the World

Strap on your helmet, pull up your pants legs, and get ready to save the world-one pedal at a time.

Natalie Grigson

But it's not just all about convenience. Turns out, riding a bike can have a far greater impact (or lack thereof!) on the environment than I ever knew. So if you live or plan on living in a bike-friendly city, check out there 10 reasons that biking it to work isn't just a way to save some time or burn some calories; it is a way to save the planet as well.

And who doesn't want to be a superhero?

Biking Can Reduce Your Household Emissions

Fun Fact! According to the U.S. Census, about half of all Americans live within five miles of their workplace. If you decide to bike those few minutes rather than sit in your car (and probably in traffic), you could reduce your total household emissions by at least 6 percent. That's because these short, engine "warm-up" trips to the office are actually the worst for the environment.

2. Biking Saves Trees

Okay, we've already gone over how biking reduces your carbon footprint, which is beneficial for the environment overall. But more specifically, bicycles reduce the need for clearing land for parking lots. For every one car parking space, 20 bikes can fit easily. So more bikes = less cars = less clearing the beautiful land for asphalt parking lots.

3. Biking Reduces Traffic

If you think short drives with engine warm-up are bad for the environment, that's nothing compared to drives spent predominantly in traffic. Not only are bikes 50 percent faster than cars during rush hour, according to an MIT study in Lyon France; but every year, cars sitting in traffic produce 12,140 pounds of pollutants—that's .97 pounds per mile! You know how much pollution bikes produce? None.

In fact, according to experts at UCF, if only 1 percent of those who drive regularly biked instead, automobile emissions would fall by 2 to 4 percent.

4. Biking Supports Local Businesses

When you use your car to get around, you're more likely to do silly things like hop on the highway and drive greater distances for your errands. This not only craps all over the environment with CO2 emissions, but with a bicycle, you're more likely to keep things local and support the businesses near you. Studies show that local businesses help to sustain vibrant, compact, and walkable town centers, which in turn, reduce sprawl, habitat loss, and water and air pollution. It's a beautiful cycle.

5. Biking Can Make You More Productive

Not only can you zoom past cars sitting in traffic on your bike, and get to work earlier than the rest of those sad saps sitting at the stop light; but you will feel more energized and ready to get to it when you get there. Studies show that biking is just one physical activity that can boost your mental health—not to mention your endorphins, making you happier. And what can you do with all of that renewed energy and spunk? Save the planet.

6. Biking Can Reduce Healthcare Costs

Hear me out. Bikers tend to be in good physical shape and are less likely to be obese than motorists. Not only does this mean that bikers will look better in their spandex, but it also means that they tend to cost us—yes, all of us—less when it comes to health care expenditures. According to Good.is, adding 30 minutes of biking daily can save each of us \$544 on healthcare per year.

7. Biking Has a Smaller Impact from Production

Because bikes are made out of rainbows and fairy dust. Okay, not exactly—but the production of bicycles has a much smaller environmental impact than the production of cars, which are essentially just mini pollution factories. In manufacturing cars, several tons of waste and 1.2 billion cubic yards of

polluted air are generated each year. That's not even including the 40 million pounds of air releases and 24 million pounds of hazardous waste from cars' painting and coating.

8. Biking Saves Whole Forests

On an even larger scale, biking can help prevent deforestation, since bikes use much less rubber and fuel/lubricants than other forms of transportation like cars and buses. Each year the huge amount of rubber and fuel/lubricants used in cars clears thousands and thousands of acres of forests for rubber plantations.

9. Biking is an Animal's Best Friend

It isn't just air pollution that bikes cut down on; it's also noise pollution. And you know who hates noise pollution? Animals. Humans are really the only animals that will stick around an area so loud with the noise of car horns and engines. Others will flee to quieter areas, and unfortunately, they are becoming fewer and farther between.

Bikes are also good for animals because one happy side effect of biking is a decrease in road kill. In fact, I'd imagine if you hit a deer with your bike, you'd be the one worse for wear.

10. Biking Can Fight Crime

Next time you hop on your bike, mentally put on your cape and save-the-world boots, because you're not only helping to save the environment, you're also helping to save lives!

According to the FBI, almost twice as many people die in vehicle crashes per year than by any other form of homicide—about 33,000 last year alone. Do

you know how many bicycle crashes kill people each year? 667—almost 100 percent of which also involved, you guessed it, a car.

To put that into perspective for yo

u, mull this over: You have a 1 in 84 chance of dying in a car accident. Your chances of dying in a biking accident, though, are 1 in 4,919.

So I'm not saying that biking makes you superior—it's just that it helps save the animal population, improves peoples' lives, their lifespans, and the health of the planet overall. Plus, it's just fun.

https://youcanbikethere.com/environmental-benefits/

ENVIRONMENTAL BENEFITS HOW DOES BICYCLE COMMUTING CONTRIBUTE TO A CLEAN ENVIRONMENT?

- 1. Bicycling uses no fuel.
- 2. Bicycles take a lot less energy to make than a car.
- 3. Bikes don't require toxic batteries or motor oil.

HOW MUCH AIR POLLUTION IS PREVENTED BY COMMUTING BY BICYCLE?

The actual calories you burn while riding your bike depend on your weight, speed, distance and other factors.

10 mile round trip commute 5 days a week for a year

Vehicle	MPG	Gasoline	Emissions
Small Car	35mpg	68 Gallons	.7 Tons of CO2

Midsize Car	20mpg	124 Gallons	1.3 Tons of CO2
SUV/4×4	14mpg	170 Gallons	1.9 Tons of CO2

And those are just the pollutants from fuel use. From the foam and plastic in its seats to the petroleum in its tires, each car is a small pollution factory. Several tons of waste and 1.2 billion cubic yards of polluted air are generated in its manufacture alone! In 2008 the US produced 1.6 million billion metric tons of waste mining ore for automotive production. In the US each year, painting and coating cars produces 40 million pounds of air releases and 24 million pounds of hazardous wastes.

During its lifetime, on the road, each car produces another 1.3 billion cubic yards of polluted air and scatters an additional 40 pounds of worn tire particles, brake debris and worn road surface into the atmosphere.

Bicycling significantly reduces transportation emissions while also reducing traffic congestion and the need for petroleum. The total number of pounds of pollutants, (comprised of hydrocarbons, carbon monoxide, nitrogen oxides and carbon dioxide), emitted per year is 12,140.30 lbs/year (or 0.97 lbs/mile) for passenger cars and 17,025.80 lbs/year (or 1.21 lbs/mile) for light trucks.

HOW MUCH MORE ENVIRONMENTALLY FRIENDLY IS BICYCLING COMPARED TO DRIVING A HYBRID

- 1. Hybrid cars are much larger than bikes. 14,000 pounds of carbon are produced in the production of each vehicle.
- 2. Most hybrids require large batteries such as nickel metal hydride batteries which are known carcinogens, and have been shown to cause a variety of teratogenic effects. Also, nickel mining is often done in open cast mines with all the attendant pollution that goes along with excavating large holes in the ground.
- 3. Hybrids do use some gas to run, while bikes require none.

4. When you rely on a car for transportation, you are more likely to go further for errands and not rely on completely carbon free forms of transportation such as walking and bicycling. You support your local businesses when you get there by bike or walking.

https://www.tmr.qld.gov.au/Travel-and-transport/Cycling/Benefits.aspx

Cycling benefits

- Print
- Email

Health benefits



Health professionals recommend at least 30 minutes of moderate-intensity physical activity each day. This is enough to maintain good health, even if the exercise is broken up into short 10 minute bursts.

Riding to work, school, uni or college, or taking your bike on short neighbourhood trips is a convenient and practical way to incorporate regular exercise into your busy day.

Regular exercise, such as cycling and walking is important.

Environmental benefits

Bike riding uses minimal fossil fuels and is a pollution-free mode of transport. Bikes reduce the need to build, service and dispose of cars.

Cycling 10 km each way to work would save 1500 kg of greenhouse gas emissions each year. Also, as traffic delays and interruptions to traffic flow in Australia's six major cities account for around 13 million tonnes of greenhouse gas emissions each year, cycling during peak hours would contribute to further emission reductions by reducing congestion and improving traffic flow.

Visit the environment section of our website for additional information.

Economic benefits

Transport (15.5%) is second only to food (18.2%) as the largest item of household expenditure in Australia. The family car costs up to 55 cents per kilometre to run. In comparison, the cost of buying and maintaining a bike is around one per cent of the cost of buying and maintaining a car.

The family car costs on average 79 cents per kilometre to operate¹. In comparison, the cost of buying and maintaining a bike is much cheaper, and even if you already own a car, a bicycle is more cost effective than driving if you ride at least 20 kilometres a week².

Four out of 10 Queenslanders own a bike and more than half of all Queenslanders have a bike in working order in their household.

Using a bike for shorter trips may allow you to avoid buying a second car, which will save families thousands of dollars each year. The RACQ estimates that the cost of buying a new car every five years with an average mileage of 15 000 km per year varies from A\$84.63 to A\$194.90 per week.

Cycling 10 km each way to work each day will save about A\$1700 per year in transport costs (including all running costs and depreciation). Also, bicycle parking is usually free, easily accessible and more convenient than car parking.

Social benefits

Bicycles are more affordable to run. While only 10% of the world's population can afford a car, an estimated 80% of people can afford a bike.

Cycling provides economic and independent travel for those who might otherwise have their travel options restricted. It offers increased mobility to many groups of the population with low rates of car ownership, such as low income earners, unemployed people, seniors and those under 18 years of age.

Shared cycling and pedestrian facilities also create benefits for pedestrians and people with disabilities by providing an increased network of paths and improved road crossings.

Cycling enables people to interact socially and feel more at home in their local community. More people cycling and walking provides additional opportunity for social interaction on the streets and this enhances a sense of community.

More bikes in a neighbourhood provides a safer road environment and children can also take advantage of slower and less dangerous traffic to cycle as well.

Transport benefits

Maintaining and improving the transport network costs the Australian government an average of A\$27 million every working day.

Bikes do less damage to road surfaces than cars. Bike paths give people 'freeways' for the price of footpaths.

The estimated costs of congestion are A\$5 billion per year. More bikes and less cars on the road can reduce this congestion and its associated costs.

Bikes and cycling facilities can extend the catchments of existing public transport services. On average, 10 times more households are within cycling distance of public transport than are within walking distance.

The majority of car trips to school are within walking distance. Cycling or walking these trips significantly reduces congestion around schools and improves safety for children.

To achieve a 75% increase in cycling trips, each person in Australia would have to substitute only two car trips per month with cycling.

Bicycles offer door-to-door service because they can be parked closer to destinations than cars. They are often quicker than cars over short distances of up to $5\,\mathrm{km}$.

Bicycle lanes and paved shoulders on roads create a number of benefits for motorists, cyclists and pedestrians. These include:

- improved safety for cyclists and motorists—due to reduced need to travel out of the lane to pass cyclists
- additional space for motorists to stop in the event of a mechanical difficulty, emergency, or to escape potential crashes or reduce their severity
- access for emergency vehicles as motorists have more space to move out of their path
- extra sight distance and turning space.

Cycling conserves roadway and residential space, thereby providing opportunities for less cement and more plant life in urban areas. Up to 40% of urban areas in Australia are taken up by providing infrastructure for motor vehicles including roads, car parking, service stations and auto manufacturers.

¹RACQ 2010, RACQ Private Vehicle Ownership Costs 2010, viewed 28 April 2011, http://www.racq.com.au/motoring/cars/car_economy/vehicle_running_costs.

https://www.helloinspire.com/blog/clean-power/bike-to-work-benefits

The Environmental and Financial Benefits of Biking to Work

Good for your health, great for the planet

The trend of "biking to work" has been taking hold in the United States for many years now, and for good reason. Riding a bike is good for your health. And less time spent driving around in a car means less greenhouse gases released into the atmosphere.

How Much Carbon Does the Average Commuter Produce?

Commute distances vary person to person and city to city.

But, in a city like Los Angeles, where the average commute time is a <u>brutal 29.3 minutes</u>, it's safe to assume that most people aren't within walking distance of their job. So let's take a hypothetical situation to illustrate the amount of waste happening here.

According to this study from Statistic Brain¹, 29% of people commute between 1 and 5 miles to work one way, and 22% commute between 6 and 10 miles one way. So let's say that you live five miles from work. Your daily round trip commute distance is 10 miles. Too far to walk, but not too far to ride your bike. Now let's take a look at your impact when you drive your car.

Let's say you drive a sensible mid sized vehicle that gets a conservative 25 MPG. This is also - coincidentally - around the national average² in miles per gallon of gas, according to a study conducted by the University of Michigan. According to the EIA, your average motor vehicle produces about 19.64 lbs of carbon per gallon of gasoline burned, the average retail cost per gallon of gasoline in the United States is around \$2.25. This means that – daily – your ten mile round trip commute costs you around .90 cents for gas, and produces around 7.856 lbs. of CO2.

All things considered, those aren't huge sums, but over a full year, they add up fast. There are 261 workdays³ on the calendar in 2016. Let's assume you're a very industrious worker, you never call in sick, and you never take superfluous days off. But - because you're not a robot and you need to recharge - you take a two week vacation. So the

other 251 days of the year, you're hard at work. That means 251 days of commuting. This means your commute by car is only costing you \$225.90 in gas per year, and producing a whopping 1,971.86 lbs of carbon dioxide. When you look at the above numbers, riding your bike to work becomes a pretty attractive alternative. You save a little cash, you help the earth, and you get some exercise.

Invest in an Electric Bike to Make it Easier

One of the reasons that we all haven't ditched our cars yet is that many us live pretty far from work.

In fact, over the last 15 years, people in the top 15 US metros have fewer employers in their vicinity. That's where technology comes in as workaround. The introduction and mass proliferation of the electric bike has made it easier to make even a long commute in an earth friendly way.

Electric bike technology is evolving. New models are everywhere, and while the initial investment⁵ is usually high, the race is on to bring the price down. Certain progressive cities – like Madrid, Spain – have even pioneered "e-bike sharing programs" to help further the movement. Here in the United States, Oakland, CA has introduced a solar e-bike share program⁶.

The most high performance electric bikes on the road today can top out at 20 MPH. That's really fast for a bike. A much more conservative speed to travel on an electric bike is around 10 MPH max speed. Which means an electric bike has the ability to turn a five mile one way into a 5 – 10 minute trip. 20 minutes, tops. Even those of us who are less athletically inclined can reduce time in the car while doing something good for the environment.

Not bad, right? Save money, save time, save the earth, and get a bit of exercise. Now, if technology could just take care of that whole needing a job to to survive and buy things problem, then pesky commutes would be a thing of the past.

- 1. statisticbrain.com/commute-statistics/ <u>←</u>
- 2. umich.edu/~umtriswt/EDI_sales-weighted-mpg.html €
- 3. hr.uiowa.edu/payroll/2016-fiscal-year-payroll-calendar ←
- 4. brookings.edu/research/the-growing-distance-between-people-and-jobs-in-metropolitan-america/#notesBoxHeader ←
- 5. treehugger.com/bikes/mate-folding-electric-bike.html ←

6. abc7news.com/technology/oakland-unveils-citys-first-solar-electric-bike-share-station-/1158281/ ←

https://www.cityofchicago.org/city/en/depts/cdot/supp_info/bicycling - benefitsofbiking.html

Benefits of Biking

Benefits of Bicycling

- 1. Health
- 2. Time
- 3. Money
- 4. Environment
- 5. Fun

Health

More than 1.2 million Chicago residents have sedentary or irregular activity lifestyles that contribute to over 20 conditions and diseases including heart disease, stroke, high blood pressure, diabetes, cancer, poor weight management, and mental health problems. In Chicago, inactive lifestyles are contributing to an obesity "epidemic" with more than 20 percent of the city's children and 60 percent of adults overweight or clinically obese. There is an emerging consensus that our transportation system contributes to this health crisis. The good news is that increased physical activity can help prevent and manage of these problems. Switching to bicycling for transportation offers the opportunity to convert sedentary transportation time into healthy physical activity. If you would like to learn more about using your bicycle for trips to work, school, for shopping and to run errands, visit some of the links below:

- Bike to Work Guide
- Bike to Work Manual
- McDonald's Cycle Center
- Bike to Transit (PDF)
- Student Bicycling in Chicago (PDF)
- More guides and publications...

Time

Many trips are faster by bicycle than by car, especially short trips under three miles. For longer trips, combine biking and transit (See the <u>Bikes and Transit page</u>). Chicago's roads are clogged, and

motorists spend hours stuck in traffic - often for trips that could be accomplished as quickly on a bicycle.

Money

Bicycles cost little to buy or operate, and there's no gas, parking, or insurance to pay for. Dependence on the private automobile is expensive. Households in the Chicago region spend an average of 17 percent of their budgets - or \$7,500 per year - on transportation.

Environment

Bikes don't pollute the air or require lots of land for roads and parking lots. Tailpipe emissions from automobiles and trucks account for almost half of Chicago's air pollution, contributing to asthma and other respiratory problems suffered by 650,000 children and adults in Metropolitan Chicago.

Fun

Last, but not least, bicycling is fun! Chicago boasts hundreds of exciting destinations that are accessible through the city's bikeway network. Pick a destination, then consult the Chicago Bike Map to find the best ways to get there. <u>Bike Chicago</u> offers five months of bicycling activities during spring and summer, while <u>Bike Winter</u>continues the fun into the cold-weather months.

--

https://www.cityofchicago.org/city/en/depts/cdot/provdrs/bike.html

https://www.bikingexpert.com/ultimate-guide-to-the-benefits-of-biking/

Ultimate Guide To The Benefits Of Biking

The major part of the worldwide cities is noisy, polluted and uninhabitable. The main cause? Vehicle traffic. Traffic that literally paralyzes the vast majority of the urban centers, increases harmful emissions of greenhouse gasses and produce noise pollution, not to mention the significant economic disbursements and increasing stress level it causes.

The fact is that in the rush societies we live in we tend to use the car even for the most simple tasks, such as taking short trips to the mall or driving through the city during a warm spring afternoon, to relax after work. Most of the times we find ourselves stuck up in traffic, waiting in long queues at the traffic lights or struggling to find a parking space,

but we often don't realize how many resources we consume when choosing four wheels over more practical and environmentally friendly transportation means.

In fact, getting behind the wheel translates in spending a lot of fossil fuel, thus causing environmental pollution, spending a lot of money on fuel, thus reducing the economic availability and increasing the stress level, causing health issues and further financial loss.

For all those reasons reminded above it is essential to return to a more sober and healthier lifestyle. And the best thing to do, if using public transportation doesn't appeal to you, is to start cycling.

Cycling has many advantages. It is healthy, accessible, fun, cheap, environmentally friendly and efficient from an energetic standpoint. If you need more reasons, read this Ultimate Guide To The Benefits Of Biking to find out why you should ride a bike instead of driving a car.

Ultimate Guide to the Benefits of Biking

Benefits Of Biking: Health Benefits

Stress Reduction

Weight Control

Keeps You Fit

Heart Protection

Maintains The Joints Healthy

Reduces Fatigue

Rises The Expectancy Of Life

Benefits Of Biking: Environmental Benefits

Benefits Of Biking: Financial Benefits

Personal Financial Benefits Of Biking

Local Financial Benefits Of Biking

Final Thoughts

Benefits Of Biking: Health Benefits

Since the health benefits are probably the most important benefits of biking, it is clear why they are the first to talk about in this Ultimate Guide To The Benefits Of Biking. However, before talking about these benefits, we should first understand what happens to our body when riding a bike.

Cycling engages our body as a whole. Various groups of muscles are used when pedaling, and the human-bicycle system is achieved by using five contact points. First of all are the hands on the handlebars, then the feet on the pedals and then the pelvis on the saddle. The legs and buttocks, with their cyclical movement, provide the driving force, while the trunk gives the stability to both cyclist and bike. Finally, the arms and the shoulders contract to keep the position of the system.

Therefore, if you are new to cycling, you should focus on strengthening all these sets of muscles through various exercises. In fact, it is a common mistake especially among the newbies to focus on the lower part of the body alone when training before cycling. This will produce fatigue for your upper body part and the overall cycling experience will not be one of the bests.

If you want to transform cycling into a usual activity, including to use the bike for the daily commuting and for leisure activities, you should understand that it is essential to develop all your body in a harmonic way, without focusing only on certain muscle groups.

You should also keep in mind that cycling is a resistance sport that uses the body as a whole. Cycling can be defined as a global sport because all the muscles interact between them to transmit the power to the pedals, maintain the balance, and resist against the gravity force that would make us fall. Each muscle has a determined function and understanding its activity can help you evaluate your strengths and improve your weaknesses.

So, here are the main muscle groups and how they are involved in biking.

- **Legs:** as you can imagine, the legs do the dirty work. They transfer the power emitted by the muscles to the pedals and provide the moving force. Basically, when you pedal the hip joint stretches and flexes cyclically, while the knees move in a sort of elongated eight. The ankles rotate to allow the pedaling while the tight muscles are working to create the energy that will be transmitted to the pedals. The pedaling task is finalized by the calf muscles.
- **Neck, shoulders, and arms:** often forgotten, the neck muscles are exposed to a lot of tension while cycling, as they maintain the position of the head. Without proper workout, the neck muscles suffer and often stiffen while trying to overcome the gravity force. For this reason, many cyclists complain about neck pain. The shoulders, on the other hand, bear the weight of the head and neck, providing stability when pulling the handlebars. Finally, the arms operate the steering and provide stability as well. They also absorb the vibrations transmitted by the front wheel.
- Chest, abdomen, and back: most of the times the chest muscles are contracted to support the effort of the arms and of the shoulders and to maintain the balance, especially while riding uphill or during sprints. For this reason, even if it might not seem so, the chest muscles are always active when cycling. The abdomen muscles are also involved in maintaining the balance, together with the back muscles. However, you should know that the back muscles are also involved in achieving the pedal movement, therefore it is essential to have strong abs to sustain the stability. If the back muscles get overloaded, you may face unpleasant consequences. The lumbar muscles are also very important in achieving balance and stability.

As you can see, almost all the muscles are involved in the cycling movement, therefore it is clear why bike riding is so benefic for the overall health.

However, bicycle use is not the same for everyone. Different cycling styles use the muscles in slightly different ways. Whether you ride your bike on the roads, on dirt paths and mountain routes or if you are a touring cyclist, you should find out how your muscles will be used.

• **Bike racing:** the philosophy that stands behind bike racing is simple: ride the bike at maximum speed for various miles. Seen under a physical-mechanical point of view, bike racing or road cycling is the one that takes the most advantages of the closed kinetic chain of the moving force. By using the muscles in a rhythmic way you will notice decreased levels of fatigue on flat surfaces, but increased levels on the uphill and downhill roads. In fact, while going up and down the muscles start producing lactic acid and for this reason, many road cyclists prefer riding the bike without standing on the saddle while climbing on ramps. On the other hand, to maintain an aerodynamic position on the bike, cyclists put their back under a lot of pressure.

- Off-Road Cycling: in the case of the off-road cycling the riding style changes completely and the muscles are also used in a different way. On a bumpy terrain, the cyclists are constantly trying to maintain the stability and balance. This put a lot of pressure on the abs and back muscles, muscles that are normally used to maintain the balance of the body in almost any situation. The legs muscles are also put under a lot of effort because of the constant change in the terrain's characteristics. The changing movement finally impacts on the knees, diminishing blood flow and increasing fatigue. The chest muscles, the arms and the shoulders work hard to maintain stability and absorb the vibrations transmitted by the bumps on the terrain. Therefore, the hands and the arms also work a lot during off-road cycling.
- **Utility/Touring Cycling:** this category actually refers to those cyclists that ride both on and off roads, being basically hybrids of the two categories described above. However, the cyclists in this category typically don't reach the speed of the road cyclists and don't face the technical difficulties of the off-road cyclists. The back feels less fatigue in this case, thanks to the raised position of the body, while the upper part of the body struggles less to maintain the balance. However, the cyclists in this category usually use the bike on a daily basis, mainly in crowded towns and in many cases in heavy traffic conditions. This cause them to stop many times while commuting and this has a major impact on the hip muscles.

Keeping in mind the information above, you will be able to decide which muscle groups need more workout and how to maintain the good fitness of your body. However, as you can see, cycling has a huge impact on all the body muscles, helping you maintain your health through regular workout.

In addition to all the benefits given by the movement, cycling has many other health benefits worth mentioning. Here are some of the most important:

Stress Reduction

Cycling lowers stress and diminishes the symptoms of depression. As all the other sports, cycling stimulates the endorphin production. This hormone reduces the fatigue and pain and has a positive effect on the mood. On the other hand, riding a bike boosts the energy and improves the mental state, therefore those who practice cycling regularly not only maintain their body fitness but they also seem to be younger than those who don't practice any sport at all. Lastly, cycling is an outdoor activity that keeps you in contact with nature, thus it can further reduce stress.

Weight Control

Cycling is indicated for those who want to <u>lose weight</u> or just keep their current one. How many <u>calories are burnt during a cycling</u> session depends on how you pedal and for how long, but if you maintain a good rhythm you will probably be able to burn as much as 500 calories per hour. However, if you want to achieve a good result in terms of weight loss and control, you should ride the bike regularly. Keep in mind that only with a regular physical activity and with a correct nutrition you will be able to lose weight.

Keeps You Fit

Cycling will help you maintain the muscles tone, including calves, buttocks, and lower back muscles. Furthermore, you will also strengthen the back muscles involved in maintaining the posture, therefore the spine will also benefit from this sport. Actually, because of the particular position that one must maintain while cycling, the sport is indicated to those who suffer from spine affections such as low back pain.

Heart Protection

Cycling is an excellent sport that can be practiced by those who want to prevent cardiac diseases, including the elderly people who want to keep their heart in a good shape. The cardiac muscle increases its strength and resists more under fatigue when a constant physical activity is undertaken. A regular low-intensity aerobic activity, such as cycling, controls the blood sugar and cholesterol levels, as well as the level of the fatty acids present in the blood, with demonstrated benefits on the prevention and management of diseases such as high blood pressure, ischemic heart disease, diabetes, and obesity. Furthermore, cycling also increases the lung ventilation capacity, increasing the oxygen level and optimizing the sugar consumption. These bring further benefits to the heart, not to mention that the overall vascular and lymphatic systems enjoy a better blood and lymph flow.

Maintains The Joints Healthy

Some sports, such as running, gradually consume the joints, especially the knee joints, because of the constant impact of the body with the terrain. Cycling, on the other hand, keeps our body at a distance from the terrain. For this reasons, knee, ankle and hip

joints are protected from the impact shocks. Furthermore, in addition to not putting any pressure on the joints, cycling has a protective effect on the cartilages thanks to the constant rotary movement of the legs.

Reduces Fatigue

Generally, cyclists, despite the presumable fatigue, are able to ride long uphill trails and boost more energy than those who don't practice this sport. According to a study published by Georgia University in Psychotherapy and Psychosomatics magazine, riding a bike for at least three times a week at a moderate rhythm stimulates the dopamine production, increasing the energy levels with about 20% and reducing fatigue with as much as 65%.

Rises The Expectancy Of Life

As we showed above, cycling has many benefits for the heart and circulatory system. Avoiding heart diseases the life expectancy rises. A Danish study claims that regular cycling can raise the life expectancy with four years for men and five years in the case of women. To confirm this is another study published in 2011 in the International Journal Of Sports Medicine that revealed that cyclists who participate in the Tour de France typically live about eight years longer than other athletes.

As you can see, we can say that the health benefits of biking are systemic, having a positive impact on the overall well-being. However, if you want to make sure that cycling remains a pleasure, there are a few precautions to take:

- First of all, make sure that the height of the saddle is adjusted to your own height before
 hitting the road. You should be able to extend the legs almost completely during pedaling
 and the wrong size of the frame or the wrong position of the saddle can damage your leg
 muscles or joints.
- Secondly, pay attention to your clothing. You should choose adequate clothing that is suitable for the outdoors temperature too. Ideally, the clothes you're wearing should allow the vaporization of sweat and protect you from the wind.
- Use a helmet, goggles and gloves every time you go cycling. These will limit the injuries in case of accidents.

Now that you know what are the health benefits of biking, let's see a few of the other benefits of this beautiful sport. As the environmental benefits of biking are probably the most important after the health ones, we are going to discuss them in detail.

Benefits Of Biking: Environmental Benefits

When thinking about the environmental <u>benefits of biking</u>, we mainly refer to the benefits of riding a bike on a regular basis, especially as an alternative to the motorized vehicles. In fact, biking can help resolve major environmental problems, from lowering the pollution levels to traffic reduction.

Many of you will probably think that commuting by bike is not an option, but statistics say that about 50% of car commuting is made for distances up to three miles. Furthermore, other 30% of the commuters use the car for distances shorter than 1.5 miles. This means that at least in 80% of the cases, riding a bike to work or school is a valid alternative.

To make you better understand why commuting by bike is a better choice and how it can help protect the environment, let's discuss a few other numbers.

If we speak about fossil fuel, 500 calories are the equivalent of about 55 ml of gasoline. This quantity of gasoline, on average, can fuel a car for only 0.62 miles.

A brief look at those numbers clearly highlight the benefits of commuting by bike over motorized vehicles. In fact, by reducing the fossil fuel consumption the waste gasses are also reduced. Not only your city will become cleaner, but the multinational companies will also have to reduce the fuel production.

This means that the natural resources will be less exploited and air pollution will be reduced at a global level as well.

Commuting by bike is also faster in most cases than commuting by car. In fact, for distances up to three miles, the majority of the routes are inside the urban centers. In most cases commuters who use cars to go to work or school get stuck in traffic, wasting a lot of time waiting at traffic lights or in traffic jams. There is no doubt that biking is faster than commuting by car.

Furthermore, commuters who use both bikes and the public transportation help reduce the overall traffic and pollution even more. In fact, some statistics show that the commuters who use the public transportation systems usually live in a range of about 10 minutes (about half a mile) away from the public transportation stops. Those who instead prefer to pedal to the bus stop or underground station increase the range to about two miles. This not only increases the number of potential public transportation users with the subsequent effects on the local economy but also decreases the number of those who would rather commute by car.

Other environmental benefits of biking are related to the production process. The resources and costs needed to manufacture a bike are fewer compared to the resources and costs needed to manufacture a car or another type of motorized vehicle. On the other hand, bikes generally last longer in time compared to the motorized vehicles.

A simpler manufacturing way generates less pollution, therefore biking is beneficial for the whole world.

The use of bicycles for daily activities also reduces the space needed for parking facilities. In fact, on the space needed to park a car can be parked as many as ten bikes. The reduction of parking facilities can subsequently increase the green areas of a city with all the additional benefits related to this aspect. Locals will have a cleaner air, more leisure spaces, and a good-looking city.

As it is shown above, the constant use of a bicycle can effectively improve the quality of the environment by reducing the harmful emissions and improving the quality of life not only locally but globally.

Benefits Of Biking: Financial Benefits

Lastly, using a bike has many financial benefits as well. What should be underlined is that biking doesn't have financial benefits only at a personal level, but it also has a positive impact on the local economy. To understand how using a bike is benefic for both personal and municipal finances, we will discuss these aspects separately.

Personal Financial Benefits Of Biking

At a personal level, it is clear how biking helps boost our finances. The main benefit is linked to the lower costs of owning a bike compared to owning a car.

Using a bike for the daily commuting will save you all the money needed for fuel, but this is not the only thing you will save on. In fact, the maintenance costs of a bike are lower than the maintenance costs of a car. In the case of damages, the various parts of a bike typically cost less compared to the car parts. All these aspects will save you a lot of money.

On the other hand, if you don't own a car at all, you will also save the road tax and insurance money.

If you own a car but use it less frequently the car maintenance costs are also reduced because the car parts, such as the tires, last longer.

But commuting by bike, or at least biking regularly, will save you money in an indirect way too.

Firstly, biking keeps you fit. Therefore, you will not have to pay for a monthly subscription at the gym or spend a lot of money for weight losing diets. Biking also helps you maintain your health, therefore you will spend less for medicines or medical check-ups.

Biking can even help you save money on heating during the cold season because those who cycle regularly have better temperature tolerances and need less heat.

Local Financial Benefits Of Biking

As we said before, biking has a positive impact not only on your personal finances, but it also helps to grow the local economy. This usually happens in those communities that promote biking and the economic benefits are, most of the times, substantial.

One of the ways in which biking can boost the local economy is through the popular bike sharing systems.

In fact, the municipalities that invested in bike sharing systems can use the daily or monthly fees for many purposes, including improving the infrastructure or building more facilities in the city.

On the other hand, less traffic means less damage to the streets and roads. This will save a lot of public money that would have been spent on repair works and road improvement.

In those communities that promote biking, the organization of various <u>biking related</u> <u>events also boost the local economy</u>. In fact, biking events can increase tourism that has a benefic impact for both the municipality and for the local commercial activities. Speaking about the commercial activities, the bike rental shops can increase their sales during these events, as it is likely that many visitors will rather rent a bike than bring their own.

The hospitality sector will also benefit from an increased number of tourists and this will bring further welfare in the local area.

From biking tourism will also benefit many other businesses too. First of all, the local tour operators can organize city tours by bike to attract the passionate cyclists. Secondly, bike rental and repair shops will most likely increase their sales as well.

The overall cycling tourism is also likely to grow in the bike friendly cities that boast appropriate infrastructure and facilities. In fact, passionate cyclists will most likely visit those places where they can practice their favorite sport in all peace.

Examples of how biking can have a positive impact on the local economy are the Western European cities where local councils invested in creating biking facilities and

infrastructures, such as Amsterdam or Copenhagen. These cities are not only famous for their green approach towards environmental issues, but the economy of these cities is thriving.

When it comes to parking facilities, the <u>economic advantage of using bikes</u> over cars is also evident. First of all, as we already mentioned above, one car parking slot can accommodate up to ten bikes. For this reason, the local councils will spend less on the construction of new parking facilities destined to bikes compared to car parking facilities.

On the other hand, the local councils can apply a bike parking tax that will further increase the local income.

Lastly, biking can bring local financial benefits by boosting the house prices. The increment in the house prices happens because communities that prefer biking over other transportation means enjoy a higher life quality. There is less pollution in those places and more tranquility, therefore people are more likely to want a home in such an area. The increment of the demand will subsequently increment the selling price. The same applies for house rentals.

To better understand the economic benefits of biking, the following video will explain how biking helped boost the economy in Vermont:

Final Thoughts

As shown in this Ultimate Guide To The Benefits Of Biking, practicing this sport is probably the best thing you can do. You will not only lead a healthier lifestyle, but you will also improve the environment and help the personal and local economy grow.

There is to say that biking, in addition to all the benefits reminded above, also has a series of social benefits. Here is a brief list:

- Allows all social categories to commute, including children, elderly people, and those who can't afford a car or to pay for public transportation.
- Encourages social interactions. This is beneficial for the psychological health, making people feel accepted by the society.

• Increases the safety on roads, especially in the residential areas.

What do you think? Do you practice biking as a leisure activity or do you use a bike for commuting purposes too? Do you want to add other benefits to this guide?

If you want to share your biking tips or concerns, or if you want to discuss any points of this guide, please leave a comment below. I would love to hear your thoughts. Also, please share this article by clicking one of the social buttons. Your friend might also find this guide useful.

https://www.theguardian.com/environment/bike-blog/2014/oct/16/why-cyling-is-great-for-everyone-not-just-cyclists

Why cycling is great for everyone – not just cyclists

Peter Walker

Mass cycling could save the NHS £17bn in 20 years, cut 500 road deaths a year and reduce smog, says a new study for British Cycling

At some point during most discussions about promoting cycling the question crops up: "Yeah, but some people don't want to cycle or can't cycle – how are bike lanes any use for them?"

The answers are many and overwhelming. However, they can be hard to pin down. Luckily, someone has just done just that in a thorough and easy to follow way.

That someone is <u>Dr Rachel Aldred</u>, a sociologist and expert on transport, particularly cycling, at the University of Westminster. She was commissioned by <u>British Cycling</u> to pore over studies from around the world and put together a list of all the potential benefits if, unexpectedly and overnight, the UK became a mass cycling nation in the vein of the Netherlands or Denmark.

The <u>compact 24 page document</u>, with an associated one-page infographic sheet (below), is released to mark today's debate in parliament about the

progress, or lack thereof, in implementing the sensible, if unambitious, recommendations of last year's Get Britain Cycling report.

Let's ignore for now the somewhat pathetic actual progress made on cycling in Britain, and use Aldred's publication to conjure up an imagined future where 20% of trips are made by bike. Life would be much better for cyclists. If cycling were as safe in Britain as the Netherlands, she writes, this would save around 80 cyclists' lives a year. That's a lot. But it's just the beginning.

A move away from car trips soon brings more safety for all, not just cyclists – one study found a sufficiently big shift to bikes could save 500 road deaths a year.

A British Cycling infographic on the societal benefits of mass cycling. Photograph: British Cycling

Then, let's take public health. Britain, like many developed, car-centric nations, is facing an epidemic of illnesses associated with inactivity and obesity, not least type two diabetes, which experts say <u>could soon bankrupt the entire NHS</u>. Here's what Aldred concluded:

If people in urban England and Wales cycled and walked as much as people in Copenhagen, the NHS could save around £17bn within 20 years.

Seventeen billion pounds? Surely even the <u>hardly pro-bike Ukip</u> might like the sound of that.

But the health benefits don't end there. More cycling means less smog. Aldred concludes:

Shifting 10% of short urban trips from car to cycle, in English and Welsh urban areas outside London, could save over 100 premature deaths annually.

Fewer cars also means less noise. A Canadian study cited in the report found people living in the noisiest areas for vehicle noise suffered 22% more deaths from heart disease than those in the quietest areas.

Advertisement

Aldred also covers the issue of how mass cycling can promote wellbeing. It is, she notes, an area where more work is needed, but studies have found people who commute by bike are less stressed than those who do so by car. More widely, urban areas with less vehicle traffic tend to be more cohesive and neighbourly, other studies have found.

In a parallel way, better access to cycling can assist independence for younger people – almost half of Dutch primary school children ride to school against about 1% in the UK.

Bikes can also help older people avoid isolation, as well as stay mentally and physically healthy. When I met Aldred recently, she told me an astonishing statistic not included in her paper, that among the Dutch about 20% of those aged 80 to 84 regularly cycle.

But what of the economy, you cry! People need their cars to shop. Without a car culture, the high street would die. That's <u>Eric Pickles' view</u>, seemingly. Problem is, he's wrong. Forget even the Dutch this time. When New York City introduced segregated bike lanes recently there were widespread predictions of economic hardship along the routes. Instead, average trade rose by 24%.

Also on the economy, the paper notes that while traffic delays in London alone are estimated to cost £1.5bn a year, bike-based trips are much more predictable.

There is more, but I don't want to drone on too much. You can <u>read the full</u> <u>paper yourself</u>, with footnotes to the original studies.

These benefits are fairly well known, but written down together it's an astonishing case. Let's recap: a city or country where lots of people cycle is (much) healthier, and happier and more social, less isolated, less polluted, significantly safer, and more welcoming to human beings, notably the old and young. Why aren't we building hundreds of miles of safe, segregated bike lanes right now? Well, that's another debate.

Ultimately it's about what sort of society we wish to live in. I realise that's a slightly hubristic claim for someone writing about bike lanes, but stick with me. Let's look at a <u>story the other week in the Rutland and Stamford Mercury</u> about a local woman's safety campaign.

Mel Finnemore, a firefighter with two young children, has decided she wants to push for a law obliging all primary school pupils to wear high visibility jackets when they travel to and from school, to keep them safe from traffic. She told the paper she hopes to use people like paramedics and construction workers as a positive message:

I want to get the message across to children that it is 'hip and happening' to wear high visibility jackets.

Some children think horses are cool, others think that of bikes, so I'm trying to show them that it's cool to wear bright jackets like the professional men and women do.

There is, of course, a big difference: paramedics and construction staff are people whose work intrinsically involves a risky environment. Primary school children are just living their lives.

Is this really the world we want to create? Yes, around 1,500 pedestrians under 16 (plus about 300 child cyclists) are killed or seriously injured each year in Britain. But is the solution really to make children dress up as tiny firefighters or fun-sized paramedics to brave the car-centred chaos of a walk to school? Why not treat the absurdly hostile environment as the problem?

I can opine all I like on this blog and it won't change much. Only parliament can do that. Aldred's paper has been sent to every MP ahead of today's debate. Each one should read it. Each one should attend the debate. And then each one should make the short walk to the Department for <u>Transport</u> to demand, puce-faced and outraged, what the hell they're waiting for.

11.15am update

Ahead of today's debate the Department for Transport has just <u>published its</u> grandly-titled Cycling Delivery Plan, a supposed 10-year vision for boosting bike numbers in England. While only a draft, it's pretty disappointing — long on stirring words but with very little of note when it comes to actual ambition or cash. It seeks to increase spending on cycling to £10 per person per year by about 2020, and double the number of trips by bike by 2025. These are very limited aims.

Cycling charity the CTC has put out their response to the document, and it chimes with mine:

This is a derisory plan not a delivery plan. The prime minister's 'cycling revolution' with its Penny Farthing budget is going nowhere unless the chancellor finds funding for cycling in his autumn statement.

It seems we must wait longer for real political leadership on the issue.

http://planetsave.com/2011/05/20/bike-to-work-day-today-bike-photos-top-10-reasons-to-bike/

TOP 10 BENEFITS OF BICYCLING by Zachary Shahan

If you weren't aware, today is National Bike to Work Day in the U.S. That means that even if it is the only day of the year you do so, you should bike to work today!

Of course, biking is such a pleasant experience (for most people) if you get out there and try it out for transportation purposes, you'll probably find that you love it & want to do it more.

I was wondering what to write about for bike to work day, and have just decided to write on the top 10 reasons you should bike, while including a lot of cool, bicycling pictures. So, here we go:

- 1. Bicycling is fun! Really, this is something that doesn't get emphasized enough by bicycling advocates trying to address environmental problems. While it's obvious once you get out there and do it, for the many people who haven't (for transportation purposes), these may not be so obvious.
- 2. You'll protect the climate and environment. Transportation is one of the leading causes (if not the #1 cause) of global warming. It is also what over 70% of oil is used for in the U.S. (So, if you're concerned about global warming or peak oil AND YOU SHOULD BE bicycling is an easy, quick, fun solution you can implement today.)
- 3. It'll save you a ton of money. The average American spends about \$8,758 or 15% of their income a year on transportation, largely on automobiles in

DIRECT COSTS. If you add in the <u>costs of war for oil</u>, the increased cost of healthcare from air and water pollution and climate change, and <u>other externalities</u>, that will even go much higher. Luckily, if you want to save thousands upon thousands of dollars a year, you probably can by ditching the car and biking instead. Think it's a scam? How could it be? I and many other people have done so and saved thousands if not <u>hundreds of thousands</u>.

- **4. It's good for your health!** Everyone wants to be healthier, right? Well, the moderate or rigorous exercise you get from bicycling (depending on how and where you bike) can go a looooong way in helping you on that. It's definitely an easy, fun, and cheap way to improve your health and feel better.
- **5. You can skip the traffic headache.** Traffic, it's generally one of the top complaints of Americans, #2 last time I saw (but that was awhile ago). While bikers do have to ride in traffic as well, the details are a bit different. While cars pile up at red lights and might have to sit through 3 or 4 light changes, bikers can easily coast to the front of the line and don't have to experience the boring torture of stop-and-go traffic. There's definitely a great feeling involved in coasting past dozens of cars stuck in traffic and then pedaling off as soon as the light turns green.
- **6. The bicycling community.** Driving, you probably don't think much about connecting with or being a part of the same community as other drivers, but that's different when you're biking. Whether you just see a few bikers or see hundreds on your ride (like in <u>Berlin, a great bicycle city</u> I recently visited), you feel a sort of kinship with them all when you see them out there in the same way. I think this is one reason why bicycle groups are so big and why mini bicycle communities seem to pop up wherever there are more than 5 bicyclists.
 - 6. Bicycling makes streets and cities nicer. There's no doubt about it people don't like pollution, including noise pollution, traffic, or unsafe streets. Bicycling cuts down on pollution, noise, and traffic tremendously. Additionally, it makes streets much safer. I lived in Groningen in the Netherlands for 5 months, a city named "World Bicycling City" on a number of occasions and boasting a 50-60% bicycle commute rate. I noticed after awhile that I lived on one of the busiest and 'largest' streets in the city I was right in between the city center (and the whole rest of the city) and the city's huge University. It took me awhile to realize because the street was so tranquil, only two lanes, and

despite thousands and thousands of people going by my window every morning, I could mostly just here the clicks of broken bicycles (there are a lot in the Netherlands) or their bells (used well when bicyclists pass each other in the wide bike lanes). There's hardly a street nicer to live on, but if the bicycle commute rate were, say, 1% instead of 50-60%, the street and living on it would be an absolute nightmare!

7.

- **8. Bicycles & bicyclists are cool.** Come on, everyone knows it. Want to be cool? Get on a bike. It can be a road bike, cruiser, city bike, folding bike, mountain bike, or something else, but chances are that no matter what kind of bike it is, it will make you cooler.
- **9. Bicycling is efficient and fast.** As perhaps the most efficient mode of transport, bicycling can get you someplace using minimal energy and time. In cities, in particular, which are, by definition, places where a lot of people live in relatively small areas, moving around by bike rather than a large automobile can be faster for many or most trips. 40% of trips in the U.S. are 2 miles or less, perfect distances for bicycling, and you don't have to spend time in traffic, finding parking, filling up on gas, or waiting for a bus or subway train.
- **10.** You can forget about parking. Another things Americans love finding parking... not! It is a complaint of too many people. But what did I just mention above? Cities are dense places. Cars don't exactly fit well in them. Rather than struggle to find parking in a dense city, you can easily lock your bike up right outside the entrance of your destination and skip that whole mess. Some good reasons to bike today (& every day)? I think so.

Now, I didn't mention this above, but since today is bike to work day... a lot of employers offer benefits or cash for bicycling to work these days (since it saves them money on parking, increases your work performance, decreases your sick days, and makes them look good). Check out if your employer does (or try to convince them to) and, if they do, add that to the list above somewhere.

More reasons bicycling is great & you should bike to work today?

https://www.betterhealth.vic.gov.au/health/healthyliving/cycling-health-benefits

Cycling - health benefits

Summary

- Cycling can help to protect you from serious diseases such as stroke, heart attack, some cancers, depression, diabetes, obesity and arthritis.
- Riding a bike is healthy, fun and a low-impact form of exercise for all ages.
- Cycling is easy to fit into your daily routine by riding to the shops, park, school or work

On this page: Where to get help

On this page:

- 1. Cycling for health and fitness
- 2. Health benefits of regular cycling
- 3. Cycling and specific health issues
- 4. Hand cycling and health
- 5. Where to get help
- 6. Things to remember

To be fit and healthy you need to be physically active. Regular physical activity can help protect you from serious diseases such as obesity, heart disease, cancer, mental illness, diabetes and arthritis. Riding your bicycle regularly is one of the best ways to reduce your risk of health problems associated with a sedentary lifestyle.

Cycling is a healthy, low-impact exercise that can be enjoyed by people of all ages, from young children to older adults. It is also fun, cheap and good for the environment.

Riding to work or the shops is one of the most time-efficient ways to combine regular exercise with your everyday routine. An estimated one billion people ride bicycles every day – for transport, recreation and sport.

Cycling for health and fitness

It only takes two to four hours a week to achieve a general improvement to your health. Cycling is:

- Low impact it causes less strain and injuries than most other forms of exercise.
- A good muscle workout cycling uses all of the major muscle groups as you pedal.
- Easy unlike some other sports, cycling does not require high levels of physical skill. Most people know how to ride a bike and, once you learn, you don't forget.
- Good for strength and stamina cycling increases stamina, strength and aerobic fitness.
- As intense as you want cycling can be done at very low intensity to begin with, if recovering from injury or illness, but can be built up to a demanding physical workout.
- A fun way to get fit the adventure and buzz you get from coasting down hills and being
 outdoors means you are more likely to continue to cycle regularly, compared to other
 physical activities that keep you indoors or require special times or places.
- Time-efficient as a mode of transport, cycling replaces sedentary (sitting) time spent driving motor vehicles or using trams, trains or buses with healthy exercise.

Back to top

Health benefits of regular cycling

Cycling is mainly an aerobic activity, which means that your heart, blood vessels and lungs all get a workout. You will breathe deeper, perspire and experience increased body temperature, which will improve your overall fitness level.

The health benefits of regular cycling include:

- increased cardiovascular fitness
- increased muscle strength and flexibility
- improved joint mobility
- decreased stress levels
- improved posture and coordination
- strengthened bones
- decreased body fat levels
- prevention or management of disease
- reduced anxiety and depression.

Back to top

Cycling and specific health issues

Cycling can improve both physical and mental health, and can reduce the chances of experiencing many health problems.

Obesity and weight control

Cycling is a good way to control or reduce weight, as it raises your metabolic rate, builds muscle and burns body fat. If you're trying to lose weight, cycling must be combined with a healthy eating plan. Cycling is a comfortable form of exercise and you can change the time and intensity – it can be built up slowly and varied to suit you.

Research suggests you should be burning at least 8,400 kilojoules (about 2,000 calories) a week through exercise. Steady cycling burns about 1,200 kilojoules (about 300 calories) per hour.

If you cycle twice a day, the kilojoules burnt soon add up. British research shows that a half-hour bike ride every day will burn nearly five kilograms of fat over a year.

Cardiovascular disease and cycling

Cardiovascular diseases include stroke, high blood pressure and heart attack. Regular cycling stimulates and improves your heart, lungs and circulation, reducing your risk of cardiovascular diseases.

Cycling strengthens your heart muscles, lowers resting pulse and reduces blood fat levels. Research also shows that people who cycle to work have two to three times less exposure to pollution than car commuters, so their lung function is improved. A Danish study conducted over 14 years with 30,000 people aged 20 to 93 years found that regular cycling protected people from heart disease.

Cancer and cycling

Many researchers have studied the relationship between exercise and cancer, especially colon and breast cancer. Research has shown that if you cycle, the chance of bowel cancer is reduced. Some evidence suggests that regular cycling reduces the risk of breast cancer.

Diabetes and cycling

The rate of type 2 diabetes is increasing and is a serious public health concern. Lack of physical activity is thought to be a major reason why people develop this condition. Large-scale research in Finland found that people who cycled for more than 30 minutes per day had a 40 per cent lower risk of developing diabetes.

Bone injuries, arthritis and cycling

Cycling improves strength, balance and coordination. It may also help to prevent falls and fractures. Riding a bike is an ideal form of exercise if you have osteoarthritis, because it is a low-impact exercise that places little stress on joints.

Cycling does not specifically help osteoporosis (bone-thinning disease) because it is not a weight-bearing exercise.

Mental illness and cycling

Mental health conditions such as depression, stress and anxiety can be reduced by regular bike riding. This is due to the effects of the exercise itself and because of the enjoyment that riding a bike can bring.

Back to top

Hand cycling and health

Hand cycles are similar to recumbent tricycles, but they are powered with hand instead of foot pedals. Velcro straps can be used to secure the hands to the pedals if necessary.

This style of tricycle allows amputees, people with spinal injuries and those recovering from certain conditions such as stroke to cycle as a form of exercise and recreation. Hand cyclists get cardiovascular and aerobic benefits similar to those of other cyclists.

Back to top

Where to get help

- Your doctor
- Bicycle Network Victoria Tel. (03) 8376 8888 or 1800 639 634 (for country callers)

Back to top

Things to remember

- Cycling can help to protect you from serious diseases such as stroke, heart attack, some cancers, depression, diabetes, obesity and arthritis.
- Riding a bike is healthy, fun and a low-impact form of exercise for all ages.
- Cycling is easy to fit into your daily routine by riding to the shops, park, school or work.
- Cycling is easy to fit into your daily routine by riding to the shops, park, school or work.

Back to top

References

- Chertok M, Sheppeard V, Rissel C, Voukelatos A, 2004, 'Comparison of air pollution exposure for five commuting modes in Sydney car, train, bus, bicycle and walking', Health Promotion Journal of Australia, vol. 15, no. 1 (abstract only). More information here.
- Fitzsimmons S, Buettner LL, Easy Rider wheelchair biking: A nursing-recreation therapy clinical trial for the treatment of depression. **More information here.**
- Proietto J, Baur LA, 2004, 'Management of obesity', Medical Journal of Australia, vol. 180, no. 9, pp. 474–480. More information here.
- Batty GD, Lee I, 2004, 'Physical activity and coronary heart disease', British Medical Journal, vol. 328, pp. 1089–1090. More information here.
- Physical activity, Heart Foundation. More information here.
- Ogilvie D, Egan M, Hamilton V, Petticrew M, 2004, 'Promoting walking and cycling as an alternative to using cars: Systematic review', British Medical Journal, vol. 329, p. 763. More information here.

https://www.bicycling.com/training/motivation/8-ways-cycling-will-make-you-healthier

8 Ways Cycling Will Make You Healthier

Riding a bike can help you lose weight, recover from injury, and even get smarter—and that's just for starters

A study conducted by Charles Hillman back in 2007 showed that <u>exercise boosts brainpower</u> and helps to stave off Alzheimer's in the elderly. That same year, Dr. Phil Tomporowski showed that kids are even more positively impacted by time on the bike—and that exercise can help control issues like ADD. (Read one cyclist's account of how <u>riding helped him manage his ADHD</u>.)

RELATED: Five Ways Cycling Makes You Happier, Smarter, and Sexier



stux/pixabay

Recover From Injury

A recent study found that elderly patients with <u>knee pain</u> and osteoarthritis actually improved their condition when cycling was introduced to their routines, proving that as we get older, taking time to exercise—even just spinning a few minutes a day—can be hugely beneficial.

Improve Your Heart

Cycling is also great for your heart—although not just because you love riding so much (though that's a great reason too!). A recent study in *Medicine & Science in Sports & Exercise* spent five years looking at the activity of 1,500 subjects. Those who were active on a daily basis were 31-percent less likely to develop high blood pressure.

RELATED: Short Bike Rides Add Up to Big Heart Health Gains

Feel Sexier

Best news ever: You aren't the only one who thinks spandex is super hot. A survey of 600 men and women commissioned by The British Heart Foundation found that cyclists were perceived as 13-percent more intelligent and cooler than other people, and a whopping 23 percent said a cyclist would be their preferred blind-date athlete.

Lose Fat

It shouldn't really come as a surprise that <u>weight loss</u> is one of the big benefits of regular cycling, but it bears repeating. The media is often quick to promote the idea that diet is the only way to actually shed fat, but science is proving otherwise. A recent study

showed that older, diabetic women could only drop visceral fat if exercise, along with diet, was introduced into their routine. The same was proved true for younger women.

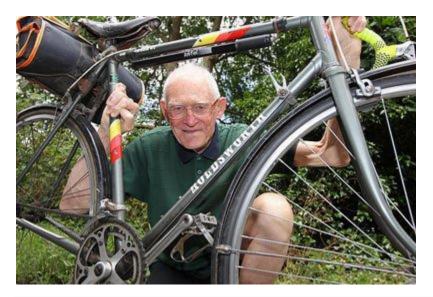
RELATED: 3 Top Ways to Burn Belly Fat While Riding

Help Prevent Cancer

<u>Maintaining a healthy weight</u>, regular exercise, and a conscientious diet (think lots of <u>leafy greens</u>, <u>lean proteins and healthy grains</u>) all helps lower your risk of cancer. And a study published in the *Journal of the American Medical Association* recently looked at nearly 14,000 men and concluded that those with a higher fitness level as they approached middle age were at a lower risk for lung and colorectal cancer.

Feel Better About Yourself

It's no surprise that exercise in general (and cycling in particular) helps <u>improve your self-esteem</u>. The next time you take the perfect <u>mid-ride selfie</u>, score that Strava QOM you've been chasing, or finish a really hard workout, your body will release a whole bunch of feel-great hormones that will make you feel like you can take over the world.



Live Longer

According to one study of <u>Tour de France</u> riders from the past, cycling actually increased their longevity. On average, the former pros lived to 81.5 years compared to the general population's 73.5 years: a 17-percent increase! Anther study suggested that even casual bike commuters benefit: For individuals who shift from car to bicycle, it was estimated that three to 14 months could be gained compared to the potential downsides of <u>bike commuting</u>.

https://www.bikeradar.com/beginners/gear/article/30-reasons-to-take-up-cycling-23965/

30 great benefits of cycling

Riding bikes boosts your brainpower, relationships, health and happiness

Whether it's to boost your fitness, health or bank balance, or as an environmental choice, taking up bicycle riding could be one of the best decisions you ever make.

Not convinced? Here are 30 major cycling benefits, spread across improving your health, happiness and relationships.

- Cycling fitness: 25 top tips to be a fitter rider
- Cycling tips: 25 essential pieces of riding advice
- UK readers: can you help us get more people on bikes? Whether you're a keen cyclist or a complete beginner, we'd love you to get involved in our Get Britain Riding campaign, in association with B'Twin

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.

And even in bike-friendly or less congested cities outside of the UK, you'll still generally get around the city centres faster on a bike.

2. You'll sleep more deeply

An early morning ride might tire 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. You'll 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 the University of Illinois 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

Is cycling good for you? Yes! 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.

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. Cycling improves 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.

It's official: cycling is good for your sex life

10. 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 inutero neurodevelopment.

Cycling while pregnant will help both mother and baby

"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.

Cycling while pregnant: tips and advice

11. 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.

12. 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.

13. 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.

14. Lose weight by riding your bike

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...

How to lose weight cycling

15. 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. Researcher Jay Zagorsky, from Ohio State University, 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.

16. 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.

Cyclists breathe in fewer fumes on the street than drivers

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.

17. Bike riding 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.

18. 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.

Cycling is something the whole family can do together

Moreover, your riding habit could be sowing the seeds for the next Bradley Wiggins. 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.

19. 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.

20. 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'.

21. 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.

22. 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.

23. 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?

24. 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.

Riding regularly will help you burn off the fat

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.

How to lose belly fat by cycling

25. 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.

26. 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.

27. Make friends and stay healthy

The social side of riding could be doing you as much good as the actual exercise and health benefits. 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.

28. It'll make you 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.

Cycling makes you happy — science says so!

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.

Why cycling makes you happy

29. 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.

30. 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.

https://www.nhs.uk/Livewell/fitness/pages/cycling.aspx

Benefits of cycling

All you need to know about getting into cycling, including:

- benefits of cycling
- cycling safety tips
- organised cycling events
- safety gear checklist
- bicycle road safety check

Find out about the health benefits of cycling and get tips on equipment, road safety, and cycle routes.

Benefits of cycling

Cycling is one of the easiest ways to fit exercise into your daily routine because it's also a form of transport.

Cycling also:

- saves you money
- gets you fit
- · helps the environment

It's a low-impact type of exercise, so it's easier on your joints than running or other high-impact aerobic activities. But it still helps you get into shape.

The best way to build your cardiovascular fitness on the bike is to ride for at least 150 minutes every week.

For example, you could cycle to work a few days a week, or do a couple of shorter rides during the week with a longer ride at the weekend. You'll soon feel the benefits.

If you're just getting started, check out our guide to <u>cycling for beginners</u>.

http://www.cyclingweekly.com/news/latest-news/benefits-of-cycling-334144

15 Benefits of cycling: why cycle for exercise?

- Michelle Arthurs-Brennan
- June 22, 2017 11:03 am
 - Thinking about joining the cycling family? Here are 15 reasons you should get on your bike this summer
 - image: https://imagesvc.timeincuk.net/v3/keystone/image?url=http://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/01/General-cycling-04-630x420.jpg&q=82

• The benefits of cycling are almost as endless as the country lanes you could soon be exploring. If you're considering taking up cycling, and weighing it up against other

potential activities, then we're here to tell you that cycling is hands down the best option.

- >>> Best cheap road bikes under £1000
- Admittedly, we're biased but there are an awful lot of good reasons to choose bike riding as your newest pass time. Here are just a few...

1. Cycling improves mental well-being

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/06/StNeotsCC31-630x420.jpg&q=82

•

- Cycling makes you happy: fact. (Chris Catchpole)
- A <u>study by the YMCA</u> showed that people who had a physically active lifestyle had a wellbeing score 32 per cent higher than inactive individuals.
- There are so many ways that exercise can boost your mood: there's the basic release of adrenalin and endorphins, and the improved confidence that comes from achieving new things (such as completing a sportive or getting closer to that goal).
- Cycling combines physical exercise with being outdoors and exploring new views. You can ride solo giving you time to process worries or concerns, or you can ride with a group which broadens your social circle.
- Former Hour Record holder Graeme Obree has suffered from <u>depression</u> through much of his life, and told us: "Getting out and riding will help [people suffering with depression]... Without cycling, I don't know where I would be."

2.Cycling promotes weight loss

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2014/02/Weight-scales-weiging.jpg&q=82

•

- Weight loss is one benefit of cycling
- The simple equation, when it comes to <u>weight loss</u>, is 'calories out must exceed calories in'. So you need to burn more calories than you consume to lose weight. <u>Cycling burns calories</u>: between 400 and 1000 an hour, depending on intensity and rider weight.
- Of course, there are other factors: the make-up of the calories you consume affects the frequency of your refuelling, as does the <u>quality of your sleep</u> and of course the

amount of time you spend burning calories will be influenced by how much you enjoy your chosen activity.

 Assuming you enjoy cycling, you'll be burning calories. And if you eat well, you should lose weight.

• 3. Cycling builds muscle

• image:

 $https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2016/08/WATSON_00004707-161-e1471358162269.jpg&q=82$

•

- Build muscle on the bike (Photo: Watson)
- The resistance element of cycling means that it doesn't just burn fat: it also builds muscle particularly around the glutes, hamstrings, quads, and calves. Muscle is leaner than fat, and people with a higher percentage of muscle burn more calories even when sedentary.
- To be clear you won't end up with quads like a track sprinter unless you invest a serious amount of time at the squat rack. But you will develop a nice toned derriere.

• 4. Enjoy second breakfasts

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2015/05/0ats-and-cinnamon.jpg&q=82

•

- Chow down breakfast before AND after a ride.
- If you decide to <u>cycle to work</u>, you've got a great excuse to add a couple of guilt free snacks to your day.
- Since a half hour ride to work should be burning between 200 and 500 calories, you've got a license to enjoy a smug second breakfast at your desk.
- If you're serious about <u>burning fat</u>, you could do your morning ride fasted (sans breakfast) but that's mainly a habit reserved for the most dedicated of nutters.

• 5. Better lung health

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeinc

uk.net/inspirewp/live/wp-content/uploads/sites/2/2017/04/traffic-web1.jpg&q=82

•

- You won't be alone if this point seems contradictory to common sense. But a recent study suggests that people who ride a bike are actually exposed to fewer dangerous fumes than those who travel by car.
- A <u>study by the Healthy Air Campaign</u>, Kings College London, and Camden Council, saw air pollution detectors fitted to a driver, a bus user, a pedestrian and a cyclist using a busy route through central London.
- The results showed that the driver experienced five times higher pollution levels than the cyclist, as well as three and a half more than the walker and two and a half times more than the bus user. Long story short: the cyclist won.

• 6. Cuts heart disease and cancer risk

• image

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2016/01/IPCIMMGLPICT000004487645.jpg&q=82

•

- Up your heart health and life expectancy by bike
- Cycling raises your heart rate and gets the blood pumping round your body, and it burns calories, limiting the chance of your being overweight. As a result, it's among a selection of forms of exercise recommended by the NHS as being healthy ways to cut your risk of developing major illnesses such as heart disease and cancer.
- New evidence was presented in the form of a <u>study conducted by the University of Glasgow</u>, earlier this year. Researchers studied over 260,000 individuals over the course of five years and found that cycling to work can cut a riders risk of developing heart disease or cancer in half. The <u>full study can be read here</u>.
- Dr. Jason Gill of the Institute of Cardiovascular and Medical Sciences commented:
 "Cycling all or part of the way to work was associated with substantially lower risk of adverse health outcomes."

7. Cycling is low impact

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2016/11/Running-impact-bones-chris-catchpole-12-e1478017177817.jpg&q=82

•

- Cycling is a low impact form of exercise
- Many of the upshots we discuss when we talk about the benefits of cycling are exercise related. Reckon it might be easier to just go for a run?
- Running is weight bearing and therefore injury rates are higher. <u>Cycling, by contrast to running</u>, is not weight bearing.
- When scientists compared groups of exercisers long distance runners and cyclists, they found the runners suffered 133-144 per cent more muscle damage, 256 per cent more, inflammation and DOMS 87 per cent higher.
- Read more at http://www.cyclingweekly.com/news/latest-news/benefits-of-cycling-334144#x8flqDQJUumfTBiY.99

Whilst cycling is less likely to result in an overuse injury, they can still crop up. A professional bike fit is a good idea – skimping here is a false economy if you end up spending more cash on physio.

The lack of weight bearing also means that cycling does not do as much to increase bone density as other sports – so it's a good idea to add a little strength training in to your programme.

8. Cycling saves time

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2014/05/pothole-commute-cycling.jpg&q=82

Cycle to save time (and money)

Compare these three experiences:

- 1. Get in the car, sit in traffic, queue to get into the car park, park, pay to park, arrive
- 2. Walk to bus stop, wait for bus, complain about bus being late, get on bus (pay), watch as it takes you round-the-houses, arrive, about half a mile from your destination
- 3. Get on the bike, filter past traffic, lock the bike, arrive

Short journeys contribute massively to global pollution levels, and often involve a fair amount of stationary staring at the bumper in front. Get on the bike, and you'll save on petrol or cash on public transport, as well as time.

9. Cycling improves navigational skills

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/04/tom-stewart-web-tom-and-james.jpg&q=82

Get lost in the lanes, and let your sense of direction get you home. (Andy Jones)

In the world of car sat navs and Google maps, sometimes there's just not that much incentive to sharpen your natural sense of direction (however superior or otherwise it may be).

Unless you've invested in a <u>GPS cycling computer</u> with mapping capabilities such as a <u>Garmin 1000</u>, then getting out and exploring the lanes can provide essential exercise for your internal mapping capabilities, giving you (with practice) a better idea of which way is West.

10. Improve your sex life

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2014/10/cycling-sex-appeal-3-e1496760263977.jpg&q=82

Cycling could improve your sex life

Most of us know that sex is a good thing, but not everyone knows that it's actually good for your overall health. In fact, regular sex could indeed prolong your life.

Dr Michael Roizen, who chairs the Wellness Institute at the Cleveland Clinic, says: "The typical man who has 350 orgasms a year, versus the national average of around a quarter of that, lives about four years longer." Similar findings were revealed for women.

So can <u>cycling improve your sex life</u>? Well – it builds some rather essential muscle groups. Dr Matthew Forsyth, urologist and keen cyclist from Portland, Oregon, commented: "All these muscles [worked on the bike] are used during intercourse. The better developed these muscles, the longer and more athletic intercourse will be."

Add in that – thanks to spending plenty of time showing off all the lumps and bumps in skintight lycra (and occasionally double-oh-AND-seven) – cyclists tend to be fairly comfortable in their own skin, and you've got a recipe for success.

11. Sleep better

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2016/01/Sleep-clock.jpg&q=82

Ride a bike for a good night's sleep

It probably isn't rocket science that tiring yourself out on the bike will improve your <u>sleep</u> – but now it's been proven. Researchers at the <u>University of Georgia</u> studied men and women aged 20 to 85 over a period of 35 years, and found that a drop in fitness of 2 per cent for men and 4 per cent for women resulted in sleep problems.

Dr Rodney Dishman was one of the lead authors, and commented: "The steepest decline in cardiorespiratory fitness happens between ages 40 and 60. This is also when problems of sleep duration and quality are elevated."

Looking for causes behind the link the scientists suggested it could be a reduction in anxiety, brought about by exercise, that elevates the ability to sleep. Exercise also protects against weight gain with age, which is another cause of sleep dysfunction.

12. Boost your brain power

image:

 $https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2013/05/Phrenolog_04.jpg&q=82$

Up the power of your noggin

Exercise has been repeatedly linked to <u>brain health</u> – and the reduction of cognitive changes that can leave us vulnerable to dementia later in life.

A <u>2013 study</u> found that during exercise, cyclists' blood flow in the brain rose by 28 per cent, and up to 70 per cent in specific areas. Not only that, but after exercise, in some areas blood flow remained up by 40 per cent even after exercise.

Improved blood flow is good because the red stuff delivers all sorts of goodies that keep us healthy – and the study concluded that we should cycle for 45-60 minutes, at 75-85 per cent of max 'hear rate reserve' (max heart rate minus resting heart rate) four times a week. Nothing stopping you riding more, of course.

13. Improve handling and spacial awareness

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2016/12/Dan-Baines-cornering-bike-handling-Gabba-wet-rain-winter.jpg&q=82

Improve your handling skills – on and off the bike!

Cycling isn't just about raising your heart rate and getting you breathless – unless you're doing it on <u>Zwift</u>. There are technical elements – <u>climbing</u>, <u>descending</u> and <u>cornering</u> all teach you to use your body weight to get the bike to go where you want it to.

Gaining the skills to manage these technical elements can provide a massive confidence boost – especially when you start to see improvement. Plus, you might just find your abilities to manage that dodgy shopping trolley with the worky wheels greatly improves.

14. Strengthen your immune system

image:

 $https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2012/10/cyclist_with_a_cold-e1496759745842.jpg&q=82$

Sleep well, eat well and your immune system should be improved

Dr. David Nieman and his colleagues at Appalachian State University studied 1000 adults up to the age of 85. They found that exercise had huge benefits on the health of the upper respiratory system – thus reducing instances of the common cold.

Nieman said: "People can knock down sick days by about 40 percent by exercising aerobically on most days of the week while at the same time receiving many other exercise-related health benefits."

Professor Tim Noakes, of exercise and sports science at the University of Cape Town, South Africa, also tells us that <u>mild exercise</u> can improve our <u>immune system</u> by increasing production of essential proteins and waking up lazy white blood cells.

Why choose the bike? Cycling to work can reduce the time of your commute, and free you from the confines of germ infused buses and trains.

There is a but. Evidence suggests that immediately after intense exercise, such as an <u>interval</u> <u>training session</u>, your immune system is lowered – but adequate recovery such as eating and sleeping well can help to reverse this.

15. Grow your social circle

image:

https://imagesvc.timeincuk.net/v3/keystone/image?url=https://keyassets.timeincuk.net/inspirewp/live/wp-content/uploads/sites/2/2017/02/vc-colets-cycling-weekly-club-ride-with-4.jpg&q=82

Cyclists from VC Colets

Cycling is an incredibly sociable sport. Grassroots cycling revolves around cycling club culture — which in turn revolves around the Saturday or Sunday club run: several hours of riding at an intensity that enables easy chat, interrupted only by a cafe stop (or the occasional puncture).

Joining a cycling club or group is an excellent way to grow your social circle, and if you're new to riding – you'll probably find all the maintenance and training advice you may have been looking for there, too.

Read more at http://www.cyclingweekly.com/news/latest-news/benefits-of-cycling-334144#x8flqDQJUumfTBiY.99

https://momentummag.com/mental-health-benefits-of-cycling/

March 29, 2016

Pedaling Towards Happiness: 7 Mental Health Benefits of Riding Bikes

Bicycling is great for your physical health, but did you know it has numerous positive mental health impacts as well?



Written by: Hilary Angus

We all know that riding bikes is great for our physical health. It improves cardiovascular fitness, reduces body fat, builds strength, and improves circulation. But what about our mental health?

The link between exercise and improved mental health is not new, many studies over the years have made the connection the two. But as the body of research grows, it becomes clear that regular exercise – especially physical activity outdoors – should not simply be a supplementary method to improve our mood, but a key part of any strategy to combat depression, anxiety, and the general stress of daily life.

While some people ride to get fit, there are many who ride bikes simply because it makes them happy, and happiness is not trivial. How you feel about yourself, your life, and the world is just as important as the mechanical workings of your body. In fact, science suggests that mental health may even be a <u>stronger predictor of life expectancy</u> than physical health, or even heavy smoking.

1. "Lifestyle" Exercise Improves Subjective Mood

Even half an hour of daily exercise has been observed to improve people's subjective mood and well-being. A <u>meta-analysis of studies</u> relating to mood and physical activity looked specifically at people who engaged in casual physical activity, rather than competitive sport, and found that those who had active lifestyles reported feeling in a better mood and having better overall well-being than those who did not. Given that we all have to get around town, biking to work is one of the easiest ways to integrate 30 minutes of non-competitive physical activity into our daily lives.

A Fairly Obvious Study Confirms Active Transportation Reduces Body Fat

2. Physical Activity Improves Self-Esteem

"What we think about ourselves is probably the central concept in our conscious lives," theorized William McGuire and his colleagues in 1976. Whether you buy fully into that notion or not, it would be difficult (nay, impossible) to argue that our perception of our selves isn't important to our happiness and overall satisfaction. With the incursion of social media into every facet of our lives, it's becoming increasingly difficult to have a positive view of our own lives while constantly being bombarded by the achievements of others. So if you need a cure for the Instagram blues, bicycling has your back. A metanalysis of studies on physical activity and self-esteem determined that the former has a positive impact on the latter, and the impact was not significantly altered by the intensity or duration of physical activity. So just a little cruise here or a few days biking to work there can have an overall positive impact on your perception of yourself. And why shouldn't it, you're wonderful!

3. Physical Activity is an Effective Anti-Depressant

A <u>long-term study</u> of adults in Alameda County, California determined that high levels of physical activity led to a significantly decreased risk of developing clinical depression later in life, even when adjusted for other factors such as socioeconomic status, life events, social supports, and other health habits. Similarly, a <u>meta-analysis of other studies</u> on the subject found that, for youth and adults already suffering from depression, physical activity can be as effective as psychotherapeutic techniques to treat the disorder. Unlike most psychotherapies, there were no observed negative effects of physical activity in treating depression.

4. Aerobic Exercise Reduces Anxiety

While everyone feels a little bit anxious now and then, anxiety that endures can have real, lasting impacts on a person's quality of life. Anxiety disorders, including panic attacks and social anxiety, can be anywhere from unsettling to crippling. They can affect a person's ability to hold a job, maintain relationships, and participate in the various responsibilities of daily life. A 2001 study found that aerobic exercise can reduce generalized anxiety as well as reduce anxiety sensitivity, which is a precursor to panic attacks and panic disorder. While high-intensity aerobic exercise was found to be more impactful, low-intensity exercise was also effective at reducing anxiety.

5. Physical Activity Reduces Stress

Seven out of 10 American adults report feeling stress at least once daily. While everybody has different coping mechanisms for stress, exercise is the method most frequently recommended by health care professionals to reduce its symptoms. By

bumping up the production of endorphins, physical activity relieves tension, elevates mood, and helps to stabilize sleep patterns disrupted by stress.

6. Exercising Outdoors is Better for Your Mental Health

While swimming laps at the local pool, hitting the gym or dropping in on a gym class are all effective ways to achieve the aforementioned mental health benefits of exercise, there's another reason biking might be the way to go. A <u>2011 study</u>determined that partaking in physical activity outside was associated with greater feelings of revitalization, increased energy and positive engagement, together with decreases in tension, confusion, anger and depression. Basically, exercise is great for mental health. Exercise outside? Even better.

7. You Don't Have to Sit in the Stupid, Horrible, Soul-Crushing Scourge of Humanity that is Traffic

Admittedly, all of the above benefits of exercise are not limited to bicycling, they could also be achieved by an activity such as jogging, hiking, swimming outside, joining a sports team, or anything fun and physical of the sort. But do you know what those activities can't do for you? Get you out of the hell-on-earth that is rush hour in a city in a car. Scientifically speaking, navigating city traffic is mind-numbing, enraging, and anxiety-inducing.* Traffic is a mental health nightmare,** and driving is bad for the soul.*** The positive impacts of physical activity are compounded by the positive impacts of not having to drive a car every day. So get cycling, your mental health depends on it.

- *Anecdotally speaking
- **As of yet unconfirmed by science, but a pretty good hypothesis.
- ***If anybody wants to do this research, we'll be the first to promote it.

https://billbonebikelaw.com/news-from-the-road/top-9-mental-benefits-cycling/

Top 9 Mental Benefits of Cycling

the physical health benefits are certainly noteworthy and abundant, it is important to recognize the fact that cycling is really great for your brain too. The mental and psychological benefits of cycling are legitimate yet incredibly under-publicized. In today's stressful working environment, people are often looking for ways to relax their minds and take a break from the daily hustle that causes stress. From work drama to family issues, the list of daily anxieties goes on and on. Cycling, however, is an excellent way to curb these common stressors for all types of people.

Whether you choose to cycle to get fit, for competitive purposes, or even for social reasons, riding a bicycle regularly is an excellent way to keep your mind and body happy. Let's take a look at the top mental benefits of cycling:

- 1. Stress reducer. Let's face it, life can be really demanding sometimes. Getting out on your bicycle every day helps to reduce these stresses. Not only has it been proven that cardiovascular exercise helps to reduce stress and ease anxiety, but cycling in particular has been said to benefit the rider's overall state of mind.
- 2. Depression and other forms of mental illness can be reduced from bicycling. The sheer enjoyment of riding a bike can be enough to ease the mind of some of its demons.
- 3. Cyclists sleep better. Riders are able to get their circadian rhythm in sync by riding regularly. In addition, cycling can help to reduce levels of cortisol in the body which is a stress hormone that may block regenerative, deep sleeps.
- 4. Cycling improves memory. As aging sets it, it is often difficult to maintain a sharp memory. Riding a bike helps to build new brain cells in the hippocampus, this is the region of the brain responsible for a person's memory.
- 5. People who choose to cycle instead of drive gain a sense of pride by helping save the environment. Reducing your carbon footprint and avoiding adding to the world's pollution does a wonder for making you feel good about yourself.
- 6. Riding a bike will help you with creative thinking. All kinds of artists and musicians turn to cycling when they are suffering a mental block. The ability to exercise while getting fresh air helps to increase problem solving skills as well as creativity.
- 7. Cyclists enjoy the benefits of a "cycling high". Similar to a "runner's high", cyclists often note that the endorphins that come from the physical exercise of riding a bike make them feel happy.
- 8. Avid cyclists note that they have an addiction to riding. This positive addiction is a great way to refocus your mind's energy to a positive place.
- 9. Cycling helps productivity. With the ability to really boost energy levels, a quick afternoon bike ride can play a huge role in helping you have a productive evening.

Cycling is a great sport for many reasons. Giving your mind that extra boost of positivity is important for your overall happiness. The psychological and mental advantages of riding a bike regularly are something that really helps maintain cheerfulness in our daily lives.

https://www.runtastic.com/blog/en/health-benefits-of-cycling/

DO YOU KNOW THE TOP THREE HEALTH BENEFITS OF CYCLING?

by Runtastic Team 07.08.2017

"Is cycling good for me?" I also asked myself this question at the beginning of my bike career. And I can answer with complete confidence: Yes, it is!," said cycling expert and Race Across America participant Gerhard Gulewicz. Learn today about the three main health benefits of cycling and afterward hop on your bike for a ride

1. CYCLING PROMOTES WEIGHT LOSS

Cycling is probably the best exercise for improving your fitness in a healthy way while <u>burning off fat</u>. But cycling isn't just ideal for those looking to shed some weight – it is also perfect for people interested in getting physically active. "Cycling is simply fun to do... even if it is sometimes a bit strenuous at first," admitted the cycling expert.

2. CYCLING STRENGTHENS THE CARDIOVASCULAR SYSTEM

Cycling works your cardiovascular system and boosts your metabolism. Provided, of course, that you pedal at the right intensity! "Newcomers to cycling often make the mistake of riding too fast. Hop in the saddle and full speed ahead – this is usually what people think. But this is the wrong approach if you want to improve your health in the long run. Choosing the right intensity and duration is very important."

3. CYCLING IS LOW IMPACT

Cycling increases your stamina and stokes your fat-burning engine. Apart from swimming, cycling is the easiest exercise on your joints. This is why it is ideally suited for overweight people. If someone is having trouble with knee pain, cycling can help relieve this problem: the circular and continuous motion of pedaling strengthens your leg muscles without the impact of other sports like running. And since you also shed a few kilos in the process, cycling is doubly beneficial for your joints.

AND LAST BUT NOT LEAST: HOW OFTEN SHOULD YOU GO CYCLING?

So, are you dying to climb on and go, but aren't sure how often you should go cycling per week?

"First, there is no such thing as too much if you ride at the right intensity," said Gerhard Gulewicz. In fact, the best thing would be to leave the car in the garage and get around by bike instead. For instance, if you cycle 20 minutes to work and back every day, then within just five days you will have already completed three hours and 20 minutes of cardio training and thus strengthened your cardiovascular system.

When you are starting out, try to go cycling for 30 minutes 2 times the first week. Then add a third 30-minute ride in the second week. In week 3, you can start to lengthen each ride by 5 to 10 minutes. You should wait a while before attempting any really long rides. And always remember the following rule: it's not the distance that kills you, but the intensity.

Tip:

For your first bike ride, you should select a flat route and cycle for no longer than 30 minutes. In terms of intensity, you should choose a pace where you can easily breathe through your nose.

"Many of you are probably thinking... 30 minutes? That's nothing. But the fact is that cardio training is defined as at least 20 minutes of continuous physical activity, and 30 minutes on your first day is more than enough exercise," said the cycling expert. "After your first ride, you want to feel like you could have easily kept going. This will make you even more excited about your next ride!"

https://www.forbes.com/sites/kevinmurnane/2017/04/25/new-research-indicates-cycling-to-work-hasextraordinary-health-benefits/#6c35b2593e62

New Research Indicates Cycling To Work Has Extraordinary Health Benefits

Kevin Murnane, CONTRIBUTOR Opinions expressed by Forbes Contributors are their own.

It should come as a surprise to no one that physical activity and exercise is good for you. What may come as a surprise to many is just how good it can be. Research reported in the <u>British Medical Journal</u> last week indicates that cycling to work has extraordinary health benefits.

The research was carried out by a team of investigators at the <u>University of Glasgow</u>. They tracked 263,450 people for five years who traveled to work and lived in England, Scotland or Wales.

The participants in the study were categorized based on the mode of transportation they took to and from work. The categories and their definitions are shown in the following table.

Transportation categories	How people got to work
Non-active	Car, public transit or both
Walking only	Walking
Cycling	Cycling or cycling plus some walking
Mixed-mode walking	Mixture of walking with car and/or public transit
Mixed-mode cycling	Mixture of cycling or cycling plus some walking with car and/or public transit

The frequency of illness or death from different causes was measured within each of the categories. The researchers measured death from all causes, cancer incidence and death, and cardiovascular disease incidence and death. Cancer and cardiovascular disease are the leading causes of death in both the UK and the US.

There are many factors that affect cancer and cardiovascular disease in addition to how a person travels to work. The researchers went to great lengths to control many of these factors. The analyses were carried out controlling for sex, age, ethnicity, deprivation (measured as a combination of household unemployment and overcrowding, and non-ownership of a car or home), other illnesses such as diabetes, hypertension and depression, body mass index, smoking, diet (alcohol, fruits and vegetables, red meat, oily fish, poultry, and processed meat), time spent walking for pleasure or engaged in strenuous sport, level of occupational physical activity, and sedentary behavior. This was an exceptionally well-controlled study.

Night time commuter cycling.

The effects of walking and cycling were measured by comparing them with the Non-active mode of transport. Cycling to work was associated with very large health benefits. Commuters who cycled to work had a 41% lower risk of dying from all causes than people who drove or took public transport. They also had a 46% lower risk of developing and a 52% lower risk of dying from cardiovascular disease, and a 45% lower risk of developing and a 40% lower risk of dying from cancer.

Mixed-mode cycling was associated with good benefits that were not as large. Mixed-mode cyclists had a 24% lower risk of dying from all causes. They had a 32% lower risk of developing and a 36% lower risk of dying from cancer. There were no significant associations between mixed-mode cycling and cardiovascular disease.

Walking to work was associated with a 27% lower risk of developing and a 36% lower risk of dying from cardiovascular

disease. There were no significant associations between walking and any of the other measures. There were also no significant associations between mixed-mode walking and any of the measures.

A Bicycle commuter.

All of the observed benefits for both cyclists and walkers increased with the distance traveled. This is important because it means that even if you live too far from your job to cycle the entire distance, your health can benefit if you can ride a bike part of the way each day.

One might be inclined to question the beneficial effects associated with cycling to work that are reported in the study simply because they are so large. Although the study was very well done, there are, as always, limitations. The researchers point out that they were unable to control for obesity and the participants in their study may have been healthier on average than the general population.

In addition, the mode of transportation and the distance traveled were reported by the participants, not objectively measured by the investigators. Self-reported data is usually subject to higher degrees of bias, distortion or inaccuracy. Finally, while the study measured associations between health outcomes and modes of transit using a well-controlled prospective design, the evidence for a strong association between cycling and better health does not justify the conclusion that cycling was the cause of the observed health benefits.

Encouraging cycling to work.

The results of this study are of obvious interest to anyone who travels to work and wants to avoid cancer and cardiovascular

disease. The study should also be of interest to employers and municipalities.

Cancer and cardiovascular disease are debilitating illnesses that have long-term effects. The study indicates that employers can reduce time lost due to illness by making it easy for their employees to cycle to work. It also suggests that the costs borne by municipalities for long-term treatment of people with cancer and cardiovascular disease can be reduced by making city streets safe and friendly for cyclists.

Moreover, the size of the effects seen in the study indicate that the benefits reaped by employers and municipalities are likely to be substantial. Encouraging people to ride their bikes to work while making it safe for them to do so is a win-win for everybody.

Kevin Murnane covers science, technology and video games for Forbes. His blogs are The Info Monkey & Tuned In To Cycling and he's The Info Monkey on Facebook & @TheInfoMonkey on Twitter.

https://www.weightlossresources.co.uk/logout/sport/cycling.htm

Try a Sport - Cycling

Pedal your way to fitness.

Try a Sport - Cycling for Weight Loss

by WLR Staff, Adam Vaughan

Why use cycling to lose weight?

If you want to lose weight by cycling, you will find pedal power great fun.

It's challenging, sociable and offers a great workout. Suitable for everyone, any age or level of fitness, cycling helps weight loss as it burns calories, improves health and gets you out and about.

More and more cycle paths are being opened and biking to lose weight is becoming a more comfortable and enjoyable option. What a great way to get out in the fresh air and help your weight loss goals!

What are the benefits of cycling?

- You will lose fat and burn calories by increasing heart rate, helping to achieve your <u>weight loss goals</u>
- Cheap and pollution free, cycling burns calories, and you'll lose weight.
- · Cycling improves health.
- All round fitness, along with strength and endurance are increased as cycling exercises the <u>major muscle groups in the legs</u>: the quadriceps, glutei, hamstrings and calves.
- Pedal power is low impact and takes the weight of the body, so for many people who cannot do high impact sports because of the pressure it puts on their joints, such as running, cycling is a great alternative.
- You need no special training! If a sport is complicated, you may not take it up. Most of us can already ride a bike - and as the saying goes, once learnt you never forget!

Go it alone or make cycling a sociable event, whatever you do your bike will get you out and about and you'll enjoy it!

How many calories will cycling burn?

Depending on your weight and exertion level cycling will help you lose weight by burning off between 75-670 extra calories in a half-hour session.

How will cycling improve my health?

- When cycling for health, exercise can be maintained for a long period of time without your leg muscles getting too tired, although you may feel the burn! Your heart and lungs get a solid workout which is excellent for improving your cardiovascular fitness levels.
- As your heart and lungs get stronger you will be able to more efficiently transport oxygen around the body which is the key to a high level of

fitness. Your resting pulse rate will decrease as will your blood fat levels and blood pressure. All of these combined will <u>reduce your risk of heart</u> disease.

 Cycling for 30 minutes just 2-3 times a week will help with all other aerobic <u>exercises</u> too and reduce the chances of you having to stop your activity to get your breath back, and again improve your weight loss.

Before you know it a 10 mile bike ride will be a great hour out of the house rather than a chore to lose weight.

An interesting statistic... If one third of all short car journeys were made by bike, national heart disease rates would fall by between 5 and 10 percent (Bikes not Fumes, CTC, 1992). Info from BikeBiz.

Getting Started

Anyone can ride a bike; once learned, never forgotten. There are hundreds of different cycles to choose from – mountain bikes, road racing bikes, touring bikes and hybrid bikes. Ask a dealer's advice on what is best for you.

Once you have your bike start off slowly and build up. Keep off roads until you build up your confidence. Try out short journeys initially such as taking rides around your local block. Also where possible, stick to flat roads and paths until you have built up to a certain level.

Your weight loss journey will be more enjoyable if you start off gently.

You can then increase the distance and speed and try cycling to places you would normally go to by car or bus. Within a month riding a few miles will no longer be a problem and you could even consider cycling to work if it's a suitable distance.

Once you feel that your cycling has improved enough why not take on a <u>challenge</u> and complete one of the many cycling events that go on throughout the country. Setting yourself a challenging goal will help to give you the motivation needed to <u>train regularly</u> and stick at it when the going gets tough.

Mountain bike, road bike, or track bike - you can go for a top of the range machine or a standard, easy to ride model from £100. Look around for second-hand shops; you can pick up some bargains. Or look in the garage, a little work and that bike will be roadworthy!

What enjoyment can I get from cycling?

Biking is a great way to view your local scenery. Unlike a jog or walk you can travel a much greater distance in a shorter time and take in more of the world around you. Try varying your cycling routes as much as possible as this helps to keep pedal power fun and interesting, preventing boredom and a lack of <u>motivation</u>, the biggest obstacles when losing weight.

Will cycling bulk me up?

Due to the nature of the activity, cycling burns calories and is unlikely to build large quantities of muscle. Instead it is much more likely that your thighs, burn and waist will all slim down and tone up, making cycling a great exercise for those wanting to help their weight loss.

As you progress and start to bike longer distances your body core, abdominals and back will get stronger and firmer and leg strength will also greatly increase.

Is cycling environmentally friendly?

Bicycles are very much an understated form of transport, especially with the increase in congestion on today's roads as well as the soaring fuel prices.

Riding your bike to work requires no petrol, insurance, MOT or Vehicle Excise Duty, as well as free parking! It also gives out zero emissions so it's beneficial for the environment too.

Most people who drive to work by car travel five miles or less, a distance easily achievable after some cycling training. So you can improve health, fitness and burn off calories everyday without having to allocate time for a gym session or workout.

This is something that the city of London in particular is really working towards. In July 2010 the first two cycling 'Superhighways' opened, with plans for more already underway.

Many smaller cities also have a good cycle route system running through them so check your local authorities' website to see where they have been established.

7 AMAZING health benefits of cycling

Even though the United Nations has declared June 3 as World Bicycle Day last week, until now, April 19 has been celebrated as Bicycle Day in honour of the Swiss scientist Albert Hofman who ingested LSD and then rode home on his bicycle.

Written by Anjali Jha | New Delhi | Updated: April 19, 2018 9:41:42 am

Often we hear people complaining about how they don't get enough time to indulge in any kind of physical activity or are too tired to do anything after a hard day's work. But what most people tend to forget is that regular physical activity can reduce the risk of contracting any serious disease and if gymming is not your cup of tea, then one of the easiest ways to keep fit is to ride a bicycle.

Even though the United Nations declared June 3 as World Bicycle Day last week during the 72nd Regular Session of the UN General Assembly in New York, April 19 is also considered as Bicycle Day according to pop culture in honour of the Swiss scientist Albert Hofman. Apparently, on this day in 1943, the father of LSD (lysergic acid diethylamide) ingested the chemical compound and then rode home on his bicycle.

While the debates might never end, you can always catch up on the health benefits of cycling. **Obesity and weight control**

Cycling can help reduce weight as the muscles get a good amount of exercise and one tends to burn body fat. It also helps raise the metabolic rate, so if you are trying to shed some extra kilos, then cycling is the best option. "Riding a bicycle regularly is one of the best ways to reduce the risk of health problems associated with a sedentary lifestyle. It's a healthy, low-impact exercise that can be enjoyed by people of all ages", says Dr Paritosh Baghel, consultant physician at SL Raheja Hospital.

Staves off depression

Cycling is a good way to have a healthy mind and stave off depression. It gives time for introspection and also helps to lift up the mood owing to the rush of adrenaline and endorphins.

Better lungs

A recent study shows that people who use cycling for commutation get exposed to less dangerous fumes than those who travel by car. The Healthy Air Campaign, Kings College London, and Camden Council issued the study and fitted air pollution detectors on a driver, a bus user, a pedestrian and a cyclist and asked them to ply through a busy route through central London. The results showed that the driver experienced five times higher pollution levels than the cyclist, three and a half times more than the walker and two and a half times more than the bus user.

Cut heart disease and cancer risk

It won't be an exaggeration to say that people who ride a cycle daily have less risk of suffering from heart diseases and cancer. A recent study conducted by the University of Glasgow found that cycling to work can cut a riders risk of developing heart disease or cancer in half.

Provides better sleep

Insomnia is not a rare thing in this day and age. For those people who find it difficult to sleep, cycling can be their remedy. Tiring yourself out on the bike will help you sleep better.

Improves immunity

Cycling can improve your immune system by increasing production of essential proteins and stimulating the white blood cells. "Exercise of any form helps boost the immune system, cycling does it the same way. It also helps increase the body's stamina and gives a boost to the endurance capacity of a person", said Dr Baghel.

Boost brainpower

While riding, several thoughts gush into our mind, consciously or unconsciously. Negotiating those thoughts and navigating your way home back from unfamiliar roads is like solving a Sudoku puzzle, but at warp speed. These kinds of experiences help build our brainpower and increase problem-solving capacity.

https://www.strongtowns.org/journal/2016/5/10/the-economic-benefits-of-biking-cannot-be-ignored

THE ECONOMIC BENEFITS OF BIKING CANNOT BE IGNORED

MAY 11, 2016

BY RACHEL OUEDNAU

We at Strong Towns have been in favor of better bike and walk infrastructure from the beginning. We know that bike and walk friendly towns have a greater chance of being economically viable because this sort of environment encourages business success, and shifts towns away from the <u>extensive construction and maintenance costs of roads for cars</u>.

A recent article by Scott Lane on the <u>Stantec blog</u> entitled, "<u>Show me the money: Why complete streets make economic sense</u>" dives into these economic benefits of biking with hard facts and the data to back it up.

Lane <u>writes</u>, "Cycling alone contributes an estimated \$133 billion annually to the U.S. economy, supporting 1.1 million jobs and generating nearly \$18 billion in tax revenues."

Biking is so often framed as something people do for exercise or leisure, but this data shows biking has value and purpose far beyond that.

The economic impacts of biking can be measured in several ways. One is property values. Lane <u>explains</u>:

A study from Minnesota suggests that property values increase because of trails: 70% of real estate agents surveyed use trails as selling points for homes, and over 80% thought that they would make a home easier to sell. The Indianapolis Cultural Trail has seen property values within a block of this eight-mile urban trail increase by 148% since it opened in 2008. (Notice how we don't have to mention bike-walk icons like Portland or Boulder even once to demonstrate this point?)

Biking also generates revenue for many businesses outside the cycling industry including hospitality, commercial and more. Of course, biking also offers enormous economic benefits in the money saved by choosing to bike instead of drive--both for individuals and for towns as a whole.

As Lane <u>states</u>: "These benefits are hard to ignore, especially in an era when many people and communities are striving to save money, reinvent themselves economically, get older without fearing a loss of mobility, and improve their health."

Read the rest of the article here.

https://bikeleague.org/sites/default/files/Bicycling and the Economy-Econ Impact Studies web.pdf

Bicycling Means Business:
The Economic Benefits of Bicycle Infrastructure

https://www.aarp.org/livable-communities/learn/transportation-mobility/info-2013/economic-benefits-of-bicycle-infrastructure-investments.html

Economic Benefits of Bicycle Infrastructure Investments

AARP Livable Communities

Overview

The national bicycle industry contributes approximately \$133 billion annually to the U.S. economy by supporting over 1 million jobs, generating nearly \$18 billion in federal, state, and local taxes, and providing nearly \$47 billion for meals, transportation, and lodging purchases during bike trips and tours.

The League of American Bicyclists produced this report to examine the positive impact the bicycle industry and bicycle tourism can have on state and local economies. Additionally, the report discusses the cost effectiveness of investments for bicycle infrastructure, analyzes the cost savings associated with bicycling, and identifies the benefits of bike facilities for local business districts and neighborhoods. The evidence provided in this report demonstrates that investments in bicycle infrastructure may be an effective way to generate tourism, support economic activity, and enhance communities as a whole.

Key Points

Bicycling is a healthy, inexpensive, and environmentally-friendly alternative to driving that can have a substantial impact on state and local economies. Though the automobile is still responsible for the majority of trips made in the U.S., there is

increasing attention being paid by citizens and policymakers to bicycling as a viable, cost-effective mode of transportation.

Other report highlights include:

- After investing in proper bicycle infrastructure, North Carolina's Outer Banks region generates \$60 million annually in economic activity through bicycle tourism.
- A 2009 study of a commercial street in Toronto, Ontario demonstrated that promoting bicycling is good for business. According to the study, people who biked or walked to the area reported they spent more money in the area per month than those who drove to the area. Three-quarters of merchants surveyed for the same study believed that business activity would improve or stay the same if a bike lane replaced half of the on-street parking.
- The Texas Transportation Institute states that, "Gridlock costs the average peak period traveler almost 40 hours a year in travel delay, and costs the United States more than \$78 billion each year...traffic jams are wasting 2.9 billion gallons of gas every year."

How to Use

This report makes a strong case for the economic impact the bicycle industry and bicycle tourism can have on state and local economies. Government officials, local leaders, and active transit advocates can use this report as a resource when educating their own locality on the importance of bicycle infrastructure investments. When negotiating for investments in bicycle infrastructure, the "Savings" section of the report, found on page 6, should be used to emphasize the impacts in savings on health, road construction, congestion, and environmental remediation. As examples in the U.S. and abroad demonstrate, a modest shift from driving to bicycling is possible. However, it is unlikely without federal, state, and local investments in bicycle facilities.

View Full Report: <u>Economic Benefits of Bicycle Infrastructure Investments (PDF – 13 MB)</u>

https://sacbike.org/for-businesses/economic-benefits-of-bicycling/

ECONOMIC BENEFITS OF BICYCLING

Economic benefits of bicycling

<u>Bicycling Means Business: The Economic Benefits of Bicycle Infrastructure</u> (Advocacy Advance)

A comprehensive overview that demonstrates benefits for retail sales and visitor spending. Bicycling Means Business: How Cycling Enriches People and Cities (Streetsblog)

<u>Bikenomics</u> (Grist.org)

Collected posts from Portland bike activist Elly Blue. The full collection was published in 2013 as a <u>book</u> by the same title.

<u>Bikes Aren't Just Good for You, They're Good for the Economy Too</u> (Fast Company) <u>Cyclists and Pedestrians Can End Up Spending More Each Month Than Drivers</u> (The

Atlantic Cities)

Economic benefits of bicycling (Alta Planning)

Extensive bibliography that touches on property value and business impacts, jobs and the bike industry, the environment, health, trails and more.

<u>How Bicycles Bring Business</u> (Momentum Magazine)

Shoppers on bike are good for business (Toronto Star)

Concise introduction to some basic principles about the economic benefits of bicycling.

Case studies

Estimating the Employment Impacts of Pedestrian, Bicycle and Road

<u>Infrastructure</u>(Political Economy Research Institute, University of Massachusetts, Amherst) *A case study from Baltimore*.

East Village Shoppers Study (Transportation Alternatives)

A case study from the East Village neighborhood in New York City.

Safer Streets Pay Off for Businesses (The Atlantic Cities)

Seven test cases from three New York City boroughs show an increase in business activity in neighborhoods where streets have been made safer for people traveling by bike and on foot.

Tourism

Economic Impact (Adventure Cycling Association)

Collected studies on the economic impacts of investments in bicycle infrastructure, mostly focused on tourism initiatives. These studies point to potential benefits for the Sacramento region as a center of bike tourism and bicycling by visitors.

<u>5 easy ways to be a bike-friendly business</u> (The Path Less Traveled)

Young Adults

The so-called Millennials – adults age 30 and under – drive less and ride bikes more, and they prefer to live and work in bike-friendly urban centers. This trend has the potential to change the face of American cities, including the Sacramento region.

<u>Do Millennials Want to Call Your City 'Home'?</u> (Governing)

<u>How Millennials Move: The Car-Less Trends</u> (National Association of Realtors)

Millennials Say They'd Give Up Their Cars Before Their Computers or Cell Phones (The Atlantic Cities)

Why Young Americans Are Driving So Much Less Than Their Parents (The Atlantic Cities)

It is time to start burning the calories. Bike riding is one of the best exercises.

Cycling is a great form of exercise for many people, especially for people over 40. It can be used for weight loss or weight management. Much of it depends on how far you pedal and how vigorously you pedal, much the same as any other physical activity.

I personally ride the bike to lose weight and to make my heart work harder, so I will ride the bike more vigorously than most.

Buying a bicycle is a major decision, well not as major as a house or car, you still want it to last and you want to get the most out of it. Also check out my selection of Electric Bikes, these will solve many of your spring and summer commuter problems.

Please Check with a Physician before You start any exercise program or diet.

How to use the bike to Burn Calories

There are several ways to increase your resistance if you want to burn calories. One of the best ways is to go uphill. This will escalate your heart rate and have you huffing and puffing before you know it.

To get maximum benefit, choose a resistance between 70-80 revolutions per minute. RPM stands for "Revolutions Per Minute". For RPM on an outdoor bicycle, simply count the number of pedal strokes you take in a minute. And set the gears accordingly.

Another method of burning calories is to lower your gears a notch or two to increase the resistance, so you have to pedal a little harder.

Don't look at going down a hill as time to take a breather, but as a way to pedal as fast as you can.

You should also consider lowering your calorie intake, to really lose some weight.

Some Books that Will Help You Get the Most Out of Bicycle - These books will also be an inspiration to you.

One thing that I like about books, is that you can keep going over the same inspirational piece over and over again. Books help you to keep your focus. You will find these books a great help as you ride your bike.

Road Bikes are One of the Best Ways to Lose Weight

Road or Racing Bikes are made for speed. While mountain bikes can be used to burn calories, racing or road bikes are the best. They are lighter than mountain bikes, and you can really fly on asphalt on these racing bikes. Remember the faster that you can pedal, the more calories that you can burn..

I Started Riding a Bicycle When I was Just a Kid

It was my chief source of transportation.

Cycling is an excellent form of exercise, especially for people over 40 years of age. It is much easier on the joints than jogging or aerobics. People over seventy after surgery are still able to cycle. It also allows you to deal with high blood pressure.

The nice thing about cycling is that you can go at the speed that you want. If you want a good vigorous work out, you will burn a lot of calories, and if you want a more leisurely ride, you will burn calories, but nothing like the vigorous bike ride.

You can burn almost as many calories as jogging, and that is why I now cycle. It is much gentler on the joints than jogging or aerobics. It is great for people who want to get into shape, especially for those that have had a long period of inactivity. I highly recommend it for anybody over forty. With any form of exercise, the more resistance, the more calories you burn. I am lucky to have a lot of hills where I live, and it can be quite a task to get up some of these hills, but I do it. I work up a good sweat and feel it in my legs. You should try to cycle no less than 4 days a week for the best effects.

But Please talk to your doctor first!

The bicycle was my main method of transportation. I would use it for my paper route, to go fishing, to visit my friends, etc. My father was not into driving me around, like modern day parents, and my mother didn't learn to drive until she was somewhere around 40, and by then I had my own car. Nobody told me about the exercise benefit about racing my friends down the hill, or down the street. I went by a middle school a year ago, and there were absolutely no bikes on the bike stand! Parents in my day were demanding that more bike stands be provided by the school, because kids would have to lay their bikes on the ground. I was proud of my bike, I was pretty fast.

We would also take our bikes up the Cascades following fishing streams to fish, and this was long before mountain biking was popular. Sometimes, we would come down the logging roads to be met by the cops who were out looking for us. Even though my father was overly strict, he never gave me heck for these excursions and he never forbade me to do it again, he just suggested that I try to get home a little earlier.

There were many years that I never rode a bike. I took up jogging, weightlifting, tennis, and other sporting endeavors. I had to give up jogging because of shin splints. Unfortunately, while I was jogging, the running shoes were appalling, there was no scientific analysis about the pavement and shock on the knees or legs, or I might have continued. It was weight lifting and nautilus after that.

I rediscovered the benefits of cycling when I was looking at a way to burn some fat, that I had managed to accumulate after only 3 years.

http://www.ibike.org/encouragement/benefits.htm

60+ Benefits (Advantages) of Bicycling

and many more:

https://www.google.com/search?q=biking+helps+the+environment

https://www.google.com/search?q=biking+helps+the+health

https://www.google.com/search?q=biking+helps+economic

https://www.google.com/search?q=biking+helps+the+community

https://www.google.com/search?q=environmental+benefits+of+biking

https://www.google.com/search?q=health+benefits+of+biking

https://www.google.com/search?q=economic+benefits+of+biking

https://www.google.com/search?q=community+benefits+of+biking