

Cycling and Health – Physical Activity

Note – This is a fuller version of an article in the Cycling and Health supplement of Spokes Bulletin 125, which is at spokes.org.uk – see the Bulletin tab or click [here](#).

Cycling is one of the easiest ways to fit exercise into your daily routine: saves you money, gets you fit and helps the environment. Cycling is not a technically demanding skill to learn and is a low-impact type of exercise. Cycling is easier on your joints than running or other high-impact aerobic activities. But it helps you get into shape. To build your cardiovascular fitness on the bike ride for at least [150 minutes every week](#) and follow the Chief Medical Officers Guidelines for Physical Activity.

Cycling is good for your lifespan - Cycling is a great way to increase your longevity, as cycling regularly has been associated with [increased 'life-years'](#), even when adjusted for risks of injury through cycling. A [study of 30,640 people living in Copenhagen](#) showed that people who did not cycle to work were 39% more likely to die during the 15-year study. The health benefits of cycling outweigh the injury risks by between 13:1 and 415:1, according to studies. The figure that is most often quoted - and endorsed by the Government - is 20:1 (life years gained due to the benefits of cycling v the life-years lost through injuries). People who cycle regularly in mid-adulthood typically enjoy a level of fitness equivalent to someone 10 years younger and their life expectancy is two years above the average.

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 diet. 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 about 2,000 calories a week through exercise. Steady cycling burns about 300 calories per hour. If you cycle twice a day, the calories burnt soon add up. Half-hour bike ride every day will burn nearly five kilograms of fat over a year. Cycling has the added benefit of ramping up your metabolism, even after the ride is over.

Physical activity benefits for adults and older adults

BENEFITS HEALTH	
+	BENEFITS HEALTH
Zz	IMPROVES SLEEP
+	MAINTAINS HEALTHY WEIGHT
+	MANAGES STRESS
+	IMPROVES QUALITY OF LIFE

REDUCES YOUR CHANCE OF	
Type II Diabetes	-40%
Cardiovascular Disease	-35%
Falls, Depression and Dementia	-30%
Joint and Back Pain	-25%
Cancers (Colon and Breast)	-20%

What should you do?

For a healthy heart and mind	To keep your muscles, bones and joints strong	To reduce your chance of falls		
Be Active	Sit Less	Build Strength	Improve Balance	
VIGOROUS	MODERATE			
RUN	WALK	TV	GYM	DANCE
SPORT	CYCLE	SOFA	YOGA	TAI CHI
STAIRS	SWIM	COMPUTER	CARRY BAGS	BOWLS
MINUTES PER WEEK 75 OR 150 VIGOROUS INTENSITY (BREATHING FAST, DIFFICULTY TALKING) OR MODERATE INTENSITY (INCREASED BREATHING, ABLE TO TALK) OR A COMBINATION OF BOTH		BREAK UP SITTING TIME	2 DAYS PER WEEK	
Something is better than nothing. Start small and build up gradually; just 10 minutes at a time provides benefit. MAKE A START TODAY: it's never too late!				

UK Chief Medical Officers' Guidelines 2011 Start Active, Stay Active: <http://bit.ly/startactive>

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.

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 by inducing the immune system. There is no evidence to suggest prostate cancer is linked to cycling.

Diabetes and cycling - The rate of type II maturity onset diabetes is dramatically 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. Without action, 60% of men, 50% of women and 25% of children will be obese by 2050 in the UK – and cost the NHS £10 billion per annum.

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. Around 70% of body weight goes through the saddle and handlebars instead of through your ankles. The bigger you are, the more important that will be. Cycling does not specifically help osteoporosis (bone-thinning disease) because it is not a weight-bearing exercise. Spending so much time in the saddle can lead to a loss of sensation in the genitals and there have been suggestions of lower sperm counts in elite male cyclists.

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 producing endorphins and because of the enjoyment that riding a bike can bring.

References:

<http://www.nhs.uk/Livewell/fitness/Pages/Cycling.aspx>

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

<http://www.cyclinguk.org/campaigning/views-and-briefings/health-and-cycling>

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Wikipedia [https://en.m.wikipedia.org/wiki/Chris_Oliver_\(surgeon\)](https://en.m.wikipedia.org/wiki/Chris_Oliver_(surgeon))

