

Health benefits of cycling

This document is a summary of some recent studies on the health benefits of cycling.

Cyclists live longer!

Anderson, Lars Bo “**All-Cause Mortality Associated With Physical Activity During Leisure Time, Work, Sports and Cycling to Work**” Archives of Internal Medicine Vol 160 No. 11 June 12, 2000.

This study took place in Copenhagen, Denmark over 14.5 years. It found that cycling to work (an average of 3 hours cycling per week) decreased risk of mortality by about 40% compared to a sedentary control group. This study involved 30,000 people. The study took into account age, health status, and socio-economic factors such as education. It also found that older people gained even more from physical activity than younger people.

The full report can be found at
<http://archinte.ama-assn.org/issues/v160n11/full/loi90593.html>

Lower cholesterol and less risk of heart attacks

Department of Environmental Protection and BikeWest “**Cycling 100 Trial**” 1999

Cycling 100 was a year-long program in Perth in which free bikes were provided to 100 commuters who volunteered to replace some car trips to work with bicycle commuting. The participants' health was monitored before and after the trial. The study found that the cyclists' physical work capacity and aerobic fitness improved. They also experienced significant reductions in LDL cholesterol levels (bad cholesterol) and significant increases in HDL (good cholesterol). They also lowered their risk of heart attacks and strokes.

The Department of Environmental Protection: www.environ.wa.gov.au
BikeWest: www.transport.wa.gov.au/metro/bikewest

Deterrents versus benefits

Ian Roberts, Harry Owen, Peter Lumb, Colin MacDougall. “**Pedalling Health – Health Benefits of a Modal Transport Shift.**” 1995

Getting more people cycling as part of daily life may be one of the best ways to improve the community's health and tackle sedentary lifestyles, according to this report. It details health benefits including lower cholesterol, lower blood pressure and reduced risk of heart disease and obesity. The report suggests that the physical risk associated with cycling (i.e. accidents) and costs of providing cycling facilities is far outweighed by the health and environmental benefits of cycling.

The study can be found on the web at: <http://sciweb.science.adelaide.edu.au/sundries/ph.nsf>

Just what the doctor ordered ...

British Medical Association “**Cycling Towards Health and Safety**” 1992, Oxford University Press: Oxford

This book highlights the health benefits of cycling. The issues covered include positive effects on physical and mental health, environmental benefits, and the deterrents and dangers versus the improved life expectancy that results from cycling regularly (eg, the ratio of benefit of cycling to risk involved is 20:1).

A site including recommendations from the BMA is online at:
<http://www.demon.co.uk/southern/bug/bikelife.html>

Breathe easy

Van Wijen, Verhoeff, Henk, Van Bruggen. **The exposure of cyclist, car drivers and pedestrians to traffic-related air pollutants.** Environmental Health 67 pp 187-193

This study provides statistics on the pollutant concentrations breathed in by cyclists and motorists in one hour during the same journey at the same time and found that motorists are subject to higher pollution levels. Despite the fact that a cyclist breathes about two to three times as much air as the motorist due to physical exertion, the motorist breathed about 60% more carbon monoxide (cyclist: 2670ug/m³, motorist: 6730 ug/m³). Other pollutants all showed significantly lower levels in the cyclists. Physical exercise is also shown to assist in resisting the effects of air pollution.

This study was part of a European Commission publication called “**Cycling: the way ahead for towns and cities.**” which is available from
http://europe.eu.int/comm/environment/cycling/cycling_en.htm

Get a buzz from a bike

Kate Mytanwy has spent many years working in Mental Health in Australia, and has written several pieces on suicide prevention and the promotion of physical activity for mental health reasons. Her article, ‘Get a buzz from a bike’, surveys both clinical and non-clinical studies into depression and cycling.

The full story can be found at:
<http://www.depressionet.com.au/articles/exercise.html>

Cycling and depression

Suzanne Fitzsimmons and Linda L. Buettner. **Easy Rider wheelchair biking: A nursing-recreation therapy clinical trial for the treatment of depression**

The study investigated the following hypothesis: Older adults who participate in a therapy biking program will have lower levels of depression than those who do not participate in a therapy biking program.

The design for this study was a classical experimental design with randomization, a control and treatment group and pre- and post-testing. All consenting residents were pre-tested for depression using the short form Geriatric Depression Scale (GDS)

The therapy program, called the Easy Rider program, was scheduled to run four times during the day with a maximum of five subjects scheduled into each session.

The hypotheses, older adults who participate in a therapy biking program will have lower levels of depression than those who do not participate in a therapy biking program was accepted at a highly significant level.

The report of the study can be found at:

<http://www.recreationtherapy.com/articles/monograph-syracuse.htm>