

Rochester DMC City Loop

HEALTH BENEFITS OF WALKING & BIKING

CURRENT U.S. HEALTH STATISTICS

HEALTH BENEFITS



80% of Americans **DO NOT ACHIEVE** the recommended 150 minutes per week of **MODERATE EXERCISE**.

(CDC, 2013)



Residents of **WALKABLE COMMUNITIES** are **2x** as **LIKELY TO MEET PHYSICAL ACTIVITY GUIDELINES** compared to those who do not live in walkable neighborhoods.

(Frank, 2005)



2/3 of Americans **ARE OVERWEIGHT OR OBESE. ***

(CDC, 2016)



For every **0.6 MILE WALKED** there is a **5% REDUCTION IN THE LIKELIHOOD OF OBESITY**.

(Frank, 2004)



CARDIOVASCULAR DISEASES are the **#1 CAUSE OF DEATH** in the United States.

(Mozaffarain, D. et al, 2014)



20 MINUTES WALKING OR BIKING each day is associated with

21% LOWER RISK OF HEART FAILURE FOR MEN and **29% LOWER RISK FOR WOMEN**.

(Rahman, 2014 and 2015)



1,630 Americans **DIE EVERY DAY FROM CANCER**, mainly that of the lung, breast and colon.

(American Cancer Society, 2016)



MODERATE EXERCISE for 30-60 minutes a day **REDUCES THE RISK OF LUNG, BREAST AND COLON CANCER** by a minimum of **20%**.

(National Cancer Institute, 2009)



86% of workers in the United States **DRIVE OR RIDE IN A PRIVATE VEHICLE TO COMMUTE**, sitting on average for 26 minutes each way.

(U.S. Census Bureau, 2013)



PEOPLE WHO BIKE BURN an average of **540 CALORIES PER HOUR** and **PEOPLE WHO WALK BURN** an average of **280 CALORIES PER HOUR**.

(De Geus, 2007 and CDC, 2015c)

Physical Health

*Note: Body mass index (BMI), used to define obesity and overweight, should not be used to define the overall health of an individual. However, research has shown that elevated BMI is strongly correlated with various adverse health outcomes. (CDC, 2016)

CURRENT U.S. HEALTH STATISTICS

HEALTH BENEFITS

Mental Health



1 in 5 Americans report their **STRESS LEVELS AS EXTREME.**

(American Psychological Association, 2011)



BIKE COMMUTERS REPORT LOWER STRESS LEVELS compared to auto commuters.

(New Economics Foundation, 2011)



50% of Americans will **DEVELOP AT LEAST ONE MENTAL ILLNESS** during their lifetime.

(CDC, 2011)



30 MINUTES OF WALKING per day can **REDUCE ANXIETY AND THE RISK OF DEPRESSION.**

(Sharma, 2006)

Environmental Health



ASTHMA IS THE LEADING CHRONIC DISEASE IN CHILDREN and the number one reason for missed school days.

(CDC, 2015a)



A minimum of **20 MINUTES OF PHYSICAL ACTIVITY, 3X WEEK, STRENGTHENS THE LUNGS**, including those of individuals living with asthma.

(PubMed Health, 2014)



Exposure to **TRAFFIC EMISSIONS** is linked to exacerbation of **ASTHMA, REDUCED LUNG FUNCTION, ADVERSE BIRTH OUTCOMES** and childhood **CANCERS.**

(CDC, 2009)



IF 8% MORE CHILDREN LIVING WITHIN 2 MILES OF A SCHOOL WERE TO WALK OR BIKE TO SCHOOL, the air pollution reduced from not taking a car would be **EQUIVALENT TO REMOVING 60,000 CARS FROM THE ROAD** for one year, nationally.

(Pedroso, 2008, SRTS)



40% OF ALL TRIPS in the U.S. are **TWO MILES OR LESS**, and two-thirds of them happen in cars.

(NHTS, 2009)



BIKING 2 MILES, rather than driving, **AVOIDS EMITTING 2 lbs of POLLUTANTS**, which would take 1.5 months for one tree to sequester.

(EPA, 2000 and NC State, 2001)

For more information, please contact Chris Saleeba of our Healthy Communities Group at chrisaleeba@altaplanning.com

References

- American Cancer Society (2016). Cancer Facts & Figures 2016. <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf>
- American Psychological Association (2011). Stress in America: Our Health at Risk. <https://www.apa.org/news/press/releases/stress/2011/final-2011.pdf>
- CDC. (2011) CDC Report: Mental Illness Surveillance Among Adults in the United States. http://www.cdc.gov/mentalhealthsurveillance/fact_sheet.html
- CDC. (2013) Press Release: One in five adults meet overall physical activity guidelines. <https://www.cdc.gov/media/releases/2013/p0502-physical-activity.html>
- CDC. (2009) Healthy Places: Respiratory Health & Air Pollution. <https://www.cdc.gov/healthyplaces/healthtopics/airpollution.htm>
- CDC. (2015a) Asthma and Schools. <https://www.cdc.gov/healthyschools/asthma/index.htm>
- CDC. (2015b) Faststats Disability. <http://www.cdc.gov/nchs/faststats/disability.htm>
- CDC. (2015c) Physical Activity for a Healthy Weight. http://www.cdc.gov/healthyweight/physical_activity/
- CDC. (2016) Obesity and Overweight. <http://www.cdc.gov/nchs/faststats/obesity-overweight.htm>
- De Geus B, De Smet S, Nijs J, Meeusen R. Determining the intensity and energy expenditure during commuter cycling. British Journal of Sports Medicine. 2007;41(1):8-12. doi:10.1136/bjsm.2006.027615.
- EPA (Environmental Protection Agency). Emission Facts, 2000.
- Frank LD, Schmid TL, Sallis JF, Chapman J, Saelens BE. (2005) Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ. Am J Prev Med, 28(2S2).
- Frank, Lawrence D. et al. (2004) Obesity relationships with community design, physical activity, and time spent in cars. American Journal of Preventive Medicine, Volume 27, Issue 2, 87 - 96.
- Mozaffarian D, Benjamin EJ, et al. (2014) Heart Disease and Stroke Statistics - At-a-Glance. American Heart Association. https://www.heart.org/idc/groups/ahamh-public/@wcm/@sop/@sm-d/documents/downloadable/ucm_470704.pdf
- National Cancer Institute. (2009) Physical Activity Fact Sheet. <http://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/physical-activity-fact-sheet>
- National Institute of Aging. (2015) Go4Life Physical Activity Guidebook <https://www.nia.nih.gov/health/publication/exercise-physical-activity/introduction>
- NC State. College of Agriculture and Life Sciences. Trees of Strength Factsheet, 2001. <https://www.ncsu.edu/project/treesofstrength/treefact.htm>
- NHTS (National Household Transportation Survey). US Department of Transportation. 2009.
- Pedroso, M., & Hubsmith, D. (2007). Safe Routes to School Steps to a Greener Future. Safe Routes to School National Partnership.
- PubMed Health. (2014). Asthma: What effect do sports and exercise have? <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0072701/>
- Rahman, I., Bellavia, A., Wolk, A., & Orsini, N. (2015). Physical Activity and Heart Failure Risk in Women. Circulation: Heart Failure, 7(6), 877-881. <http://doi.org/10.1161/CIRCHEARTFAILURE.114.001467>
- Rahman, I., Bellavia, A., Wolk, A., & Orsini, N. (2015). Physical Activity and Heart Failure Risk in a Prospective Study of Men. JACC: Heart Failure, 3(9), 681-7. <http://doi.org/10.1016/j.jchf.2015.05.006>
- Sharma, A., Madaan, V., & Petty, F. D. (2006). Exercise for Mental Health. Primary Care Companion to The Journal of Clinical Psychiatry, 8(2), 106.
- The New Economics Foundation. (2011) Measuring Our Program: The Power of Well-being. ISBN 978 1 904882 89 3.
- U.S. Census Bureau. (2013) American Community Survey. <http://www.census.gov/programs-surveys/acs/data.html>