



## BREAST CANCER AWARENESS

### Physical Activity Benefits for Breast Cancer Prevention

There are a variety of strategies in development for the prevention of breast cancer. It is deemed a sedentary lifestyle may increase cancer risk through several mechanisms such as increased insulin-resistance and inflammation and decreased immune system functioning.

Regular physical activity is associated with reduced risk of cancers, especially breast cancer.

Physically active individuals have a 30-40% lower risk of getting cancer than those that are inactive. Active women have 26-40% less chance of cancer related death than their inactive counterparts.

Many studies conclude that intense exercise and or walking can both reduce the risk of breast cancer. Many doctors recommend low-impact and non-strenuous exercise daily.

The American Cancer society recommends 150 minutes (2.5 hours) of exercise per week to lower overall cancer risk.

An activity/movement of 30 minutes i.e. walking daily can lower your risk by 3%

Exercise may lower chances of breast cancer risk by:

- Being at a healthy BMI; especially after menopause.
- Activity also lowers blood estrogen levels; that is reported to have lower incidence of breast cancer in active women vs. inactive
- Exercise is also known to boost the body's immunity which helps slow down or kill the growth of cancer cells.

Some exercises to increase activity levels:

- Walking
- Run/jog
- Yoga
- Pilates
- Tai chi
- Dancing



### Postmenopausal Breast Cancer and Physical Activity

Physical activity affects a diverse array of metabolic, hormonal, and immunologic pathways. Regular physical activity reduces body fatness and therefore has a beneficial effect on breast cancer risk, possibly through a reduction in circulating estrogen levels, insulin resistance and inflammation - all of which have been linked to postmenopausal breast cancer development. However, it is unclear whether physical activity that is not accompanied by weight loss has a significant impact on these pathways.

Physical activity improves insulin sensitivity and reduces fasting insulin levels, which are linked to higher breast cancer risk in humans. Exercise may also affect breast cancer risk through its effects on insulin-like growth factors (IGFs), because high levels of circulating IGF-1 are associated with increased risk of several cancers, including breast cancer. In addition, physical activity has been shown to have immunomodulatory effects in humans, improving innate and acquired immune response, and promoting tumor surveillance. Studies have also shown that aerobic exercise can decrease oxidative stress and enhance DNA repair mechanisms in humans and would therefore be expected to suppress carcinogenesis. Physically active individuals also tend to have higher sunlight exposure and consequently higher levels of vitamin D, which may modify cell proliferation.

EXERCISE (PHYSICAL ACTIVITY) AND BREAST CANCER RISK. Retrieved from <https://ww5.komen.org/BreastCancer/Table4Recreationalphysicalactivityandbreastcancerrisk.html>

Breast Cancer Prevention: Current Approaches and Future Directions. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5939980/>

Exercise and movement. Retrieved from <https://www.wcrf.org/dietandcancer/exposures/physical-activity>



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See calendar on other side to see what is going on this week

## HeRO Spotlight: MacDill Air Force Base Bike-It Program

COVID-19 may have changed a lot of ways in which we exercise, but don't forget...the outdoors are open. MacDill Health Promotion reinvigorated its successful Bike-It program by bolstering their bike inventory by over 60% adding another 10 bikes. By doing so, they are better able to directly expand the outreach to both the base population and MacDill's "at risk" HeRO Squadrons.

The Bike-It program is a service offered by the Health Promotion Flight that makes bicycles available for shared use to individuals with base access on a short term basis. Health Promotion offers cruisers and mountain bikes, as well as, helmets, lights and locks as needed. There is no rental fee to use this service.



**HEALTHY CYCLING**

**CARDIOVASCULAR**  
Cycling is associated with improved cardiovascular fitness, as well as a decrease in the risk of coronary heart disease.

**MUSCULAR**  
Riding a bike is great for toning and building your muscles in the lower half of the body.

**THINNER WAISTLINE**  
Burn calories, keep weight gain down, increase your metabolism even after you're done.

**INCREASED LIFE-SPAN**  
Cycling has been widely known to increase one's longevity due to leading such a healthy and fit lifestyle.

**COORDINATION**  
Moving both feet around in circles while steering with both your hands and your body's own weight is good practice for your coordination skills.

**MENTAL HEALTH**  
Physical activity of any kind has always been linked to an improved mental health due to both endorphins and dopamine levels being elevated during and after.

**IMMUNE SYSTEM**  
It's believed that cycling can help strengthen the immune system due to increased blood flow, oxygen intake and circulation of your body's inner activities.

Effect of the physical activities in leisure time and commuting to work on mental health: <http://www.sciencedirect.com/science/article/pii/S1566410307000171>

Being Fit Means a Day Pay, Not Off Weight Gain: <http://www.health.com/2010/02/25/being-weight-gain/>

Health benefits of cycling: a systematic review: <http://www.ncbi.nlm.nih.gov/pubmed/22024211>

**BIKESIZECHARTS**  
[www.bikesizecharts.com](http://www.bikesizecharts.com)

Got questions on other health issues related to sleep health, physical activity, tobacco, or nutrition? Share them with us and we will help you "Bust The Myths!" Send your questions to [usaf.jbsa.afmsa.mbx.hpo@mail.mil](mailto:usaf.jbsa.afmsa.mbx.hpo@mail.mil). Make sure to include in the subject line "Health Myth Buster." For more online health tips visit the Air Force Health Promotion webpage <https://www.airforcemedicine.af.mil/Resources/Health-Promotion/>



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### Community Events

HERE'S WHAT'S GOING ON WHERE YOU LIVE

Your Local Health Promotion Office



Contact:

Phone:

Email:

Monday	Tuesday	Wednesday	Thursday	Friday