

The Women's Sports Foundation Report Brief: Her Life Depends On It III & Women's Health and Physical Activity

An ever-evolving and growing body of research supports the important health conclusion that a physically active lifestyle lowers risk for a host of chronic illnesses that adversely affect women's lives, including heart disease, certain cancers, diabetes, obesity, osteoporosis, and Alzheimer's disease.

In May 2015, the Women's Sports Foundation launched its third edition of *Her Life Depends On It*, a comprehensive look at the links between participation in sport and physical activity and the health and well-being of American girls and women. The report is compiled from more than 1,500 studies examining women's athletics and health, and research shows that for girls and women, the pathway to living a strong and healthy life is paved in part by participation in sport and physical activity. Whether being armed to conquer the physical challenges of daily living or developing the mental fortitude to overcome life's obstacles and inner struggles, the more active girls and women are, the more prepared they are to reach their goals, handle what life presents to them, and draw upon their own power when necessary.

The following research highlights exactly how living an active life impacts both the physical and mental health of girls and women of all backgrounds.



Facts & Research Findings: Girls' and Women's Health

Cancer

Involvement in sport and physical activity, when combined with proper nutrition, sufficient sleep, and moderation in the use of alcohol, has been found to positively impact quality of life for girls and women. Among 65,838 postmenopausal women who were assessed according to American Cancer Society prevention guidelines (which consider diet, physical activity, body mass index (BMI), and alcohol consumption), women who took better care of themselves showed a 17% lower risk of any cancer, 22% lower risk of breast cancer, 52% lower risk of colorectal cancer, 27% lower risk of all-cause mortality, and 20% lower risk of cancer-specific mortality (Thomson et al., 2014).

Heart Disease

Heart disease has been identified as the leading cause of death among women in the United States (Cheng et al., 2012; Dickie et al., 2014; Mosca et al., 2014; Tielemans et al., 2013). Research shows that the more a person exercises or is engaged in sport and physical activity at low to moderate levels, and the earlier in life they start, the less likely they are to suffer a heart attack (Danielsen et al., 2013; Shibata et al., 2011). For women in the United States, this is especially important because cardiovascular disease poses the greatest threat to women's lives, a reality that is often unknown or misunderstood (Mosca et al., 2014). According to recent studies, women aged 65 and

above realize benefits in terms of cardiovascular health from engaging in physical activity like cleaning the house, doing laundry by hand, and working in the kitchen (Park et al., 2012).

Diabetes

One of the most identifiable factors linked to heart and related problems is diabetes. Parallel to the rise in obesity rates in the United States, rates of occurrence for diabetes have also risen, specifically extremely large, unprecedented increases in Type II diabetes among young children and adolescents. One-third of the 9.7 million American women who have diabetes are not aware that they have the illness (American Diabetes Association, 2014). More than 90% of the diabetes cases in women could be prevented by improving lifestyle factors including not smoking, eating healthily, maintaining a healthy weight, and engaging regularly in physical activity (Stampfer et al., 2000).

Obesity

Since the late 1970s, the average weight of the U.S. population has increased so that all people, including children, are now heavier than their counterparts were in prior decades, and the heaviest have become heavier (Ogden et al., 2014). Obesity and overweight—an imbalance between amount of food consumed and energy expended through physical activity—involve a complex set of biological and social factors (Stephens, Cobiac & Vermeer, 2014). In general, women and girls are less physically active than men and boys (Ladabaum et al., 2014). Further, girls who are more sedentary are more likely to be overweight than boys who are sedentary (Velde et al., 2007), urging the need to address the fewer opportunities for sport and physical activity participation for girls and issues of access to those opportunities.

Osteoporosis

From the days of childhood onward, women have weaker bones than men because of sex differences that affect bone strength and structure. More than 20% of women in the United States over the age of 50 are diagnosed with osteoporosis (loss of bone mass) (Kim et al., 2014). Physical inactivity during childhood is a risk factor for osteoporosis later in life (Szadek & Scharer, 2013), and obesity and overweight, along with loss of physical strength, can contribute to bone fracture risk by creating balance problems and increasing fall rates among women (Gonnelli, Cafarelli & Nuti, 2014; Hernlund et al., 2013).

Alzheimer's Disease and Dementia

Being physically active is associated with reduced risk for dementia, Alzheimer's disease (AD), and cognitive decline in later life. In general, the more physically active, the more likely a person would not experience cognitive decline later on in their life (Carvalho et al., 2014). There is further evidence



that for individuals who carry the AD gene, physical activity is even more important (Smith et al., 2013). For those with dementia, physical activity has been shown to improve mental functioning, while also ameliorating mood problems associated with dementia (depression, anxiety, sleep problems, and agitation) (Pitkala et al., 2012).

Mental Health

Sport and exercise scientists have known for years that regular participation in physical activity, whether dance or soccer or weight lifting or yoga, has the positive effect of elevating mood states as a result of two things. Chemicals produced as a result of exercising—such as endorphins—help manage stress and fatigue, make you feel good, and regulate sleep. Exercise also has the capacity to stimulate the creation of brain-derived neurotropic factor, which aids in the repair of neurons and the generation of new neurons (Warren, 2013).

Those psychological benefits are not reserved, however, for athletes. A number of studies have suggested that participation in sport is associated with psychological benefits and that it acts as a buffer against various sources of stress (Proctor & Boan-Lenzo, 2010) with athletes presenting an “iceberg profile,” meaning that they possess high levels of vigor along with low levels of anger, depression, tension, fatigue, and confusion (Morgan, 1980; Terry, 1995).

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The full report can be accessed online at:
www.WomensSportsFoundation.org/HerLifeDependsOnIt3

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