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Even More Reasons to Exercise

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There is plenty of evidence to motivate nurses to become more active in promoting women's health. More than 500,000 American women die from cardiovascular disease every year.¹ But only 8% of women consider heart disease and strokes to be their greatest health risks.¹ Exercise can help reduce almost all of the risk factors for cardiovascular disease.

The U.S. Surgeon General's 1996 report recommended a minimum of 30 minutes of physical activity of moderate intensity (such as brisk walking) on most, if not all, days of the week. This recommendation is supported by the Centers for Disease Control and Prevention and the American College of Sports Medicine.

But what nurses might not be aware of are the many other benefits associated with exercise. Read on for seven ways physical activity keeps us healthier.

1. Decreased risk of breast cancer

Predictors for the risk of invasive breast cancer among white (including Hispanic) and black women were studied as part of the Women's Contraceptive and Reproductive Experiences Study. More than 9,000 women participated in this case-control study. Researchers found an inverse association between physical activity and breast cancer among these women. The most frequently reported activities were walking, aerobics, and bicycling. An average of 1.3 hours of exercise per week beginning at age 10 was associated with nearly a 20% reduction in breast cancer risk.²

2. Maintained cognitive function in older adults

The Nurses' Health Study began in 1976 when 121,700 female RNs age 30 to 55 returned a questionnaire about their medical and health-related behaviors. Since that time the women have completed questionnaires every two years. Items on physical activity were added beginning in 1986. Almost 19,000 U.S. women, ages 70 to 81, from the Nurses' Health Study participated. The participants were divided into five quintiles based on their energy expenditure related to exercise. The women with higher levels of long-term physical activity had higher mean scores on all cognitive measures (including general cognition, verbal memory, category fluency, and attention). In addition, women in the highest quintile for activity had 20% lower odds of cognitive impairment at baseline than women in the lowest physical activity quintile.³

3. Reduction in obesity and insulin resistance

Caloric restriction remains the cornerstone for treating obesity. New research, however, has found that daily exercise without caloric restriction is associated with reductions in total fat, abdominal fat, visceral fat, and insulin resistance in women. A novel finding in this study was that

exercise without weight loss was associated with substantial reductions in total and abdominal fat. This provides compelling evidence that exercise that does not result in weight loss should be recognized as a strategy for reducing obesity and related comorbidity (such as heart disease).⁴

4. Improved metabolic profile

According to the National Cholesterol Education Program, an individual with Metabolic Syndrome has three or more of the following risk factors: increased waist circumference (men: > 102 cm; women: > 88 cm), high blood pressure (SBP > or = 130 or DBP > or = 85 mm Hg), high triglycerides (> or = 150 mg/dl), high blood glucose (> or = 100 mg/dl, and low HDL cholesterol (men: <40 mg/dl; women: < 50 mg/dl).

The HERITAGE Family Study was designed to investigate the contribution of exercise to the risk factors of cardiovascular disease, type 2 diabetes, and the metabolic syndrome. Results indicated that physical activity improved a cluster of risk factors simultaneously including those associated with Metabolic Syndrome.⁵

5. More energy

Women who exercise regularly report increased energy levels that enable them to do more. This is important because women often cite “no time” as a reason for not being more physically active.¹

6. Decreased inflammatory markers

Elevated inflammatory markers, such as C-reactive protein (CRP), have been linked to an increased risk of cardiovascular disease. CRP is an “acute phase” protein that rises in response to inflammatory processes, such as myocardial infarction, rheumatic fever, or bacterial infection. More than 4,000 people participated in the National Health and Nutrition Examination Survey to determine the effects of different types of exercise on inflammatory markers. Participants who regularly jogged or did aerobic dancing were found to have a significantly lower likelihood of elevated cardiovascular markers than those participating in swimming, cycling, calisthenics, and weight lifting.⁶

7. Minimized weight gain in middle age

More than 15,000 adults were recruited to the Vitamin and Lifestyle (VITAL) cohort study. Their participation in physical activities (including yoga) during a 10-year period was determined by a questionnaire. Participants reported their current weight and weights at ages 30 and 45. Yoga practice was associated with attenuated weight gain among normal weight and overweight middle-aged men and women. Researchers hypothesized that yoga's emphasis on body awareness and physical discipline promoted diet and exercise habits that curtailed weight gain.⁷

Many people do not exercise because they believe fitness is beyond their reach — physically, financially, or otherwise. But in most cases, a pair of walking shoes and 30 minutes of walking are all that are needed to begin an exercise program.

If exercise is a priority, people can learn to manage their time to make it part of a routine. In terms of personal health goals and as health care role models, nurses have nothing to lose — except excess weight and unhealthy risk factors — and everything to gain by including exercise in their daily regimen.

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References

1. American Heart Association. The heart-healthy benefits of physical activity. *Nurs Manage* 2002; 8, 11-12.
2. Bernstein L, Patel A, Ursin G, et al. Lifetime recreational exercise activity and breast cancer risk among black women and white women. *J Natl Cancer Inst.* 2005;97:1671-9.
3. Weuve J, Kang JH, Manson JE, Breteler MM, Ware JH, Grodstein F. Physical activity, including walking, and cognitive function in older women. *JAMA.* 2004;292:1454-61.
4. Ross R, Janssen I, Dawson J, et al. Exercise-induced reduction in obesity and insulin resistance in women: a

randomized controlled trial. *Obes Res.* 2004;12:789-798.

5. Katzmarzyk PT, Leon AS, Wilmore JH, et al. Targeting the metabolic syndrome with exercise: evidence from the HERITAGE family study. *Med Sci Sports Exerc.* 2003;35:1701-09.

6. King DE, Carek P, Mainous AG, Pearson WS. Inflammatory markers and exercise: differences related to exercise type. *Med Sci Sports Exerc.* 2003;35:575-81.

7. Kristal AR, Littman AJ, Benitez D, White E. Yoga practice is associated with attenuated weight gain in healthy middle-aged men and women. *Altern Ther Health Med.* 2005;11(4):28-33.

8. Morabia A, Costanza MC. Does walking 15 minutes per day keep the obesity epidemic away? Simulation of the efficacy of a populationwide campaign. *Amer J Pub Health.* 2004;94(3):437-40.

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