

## Even More Reasons to Get a Move On

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“I’m 86 and have walked every day of my life. The public needs to wake up and move.”



“I’m 83 going on 84 years! I find that daily aerobics and walking are fine. But these regimens neglect the rest of the body, and I find the older you get the more attention they need.”

These are two of many comments from readers of my Jan. 12 column on the secrets of successful aging. At the risk of sounding like a broken record, a new series of studies prompts me to again review the myriad benefits to body, mind and longevity of regular physical activity for people of all ages.

Regular exercise is the only well-established fountain of youth, and it’s free. What, I’d like to know, will persuade the majority of Americans who remain sedentary to get off their duffs and give their bodies the workout they deserve? My hope is that every new testimonial to the value of exercise will win a few more converts until everyone is doing it.

In a [commentary](#) on the new studies, published Jan. 25 in The Archives of Internal Medicine, two geriatricians, Dr. Marco Pahor of the University of Florida and Dr. Jeff Williamson of Winston-Salem, N.C., pointed to “the power of higher levels of physical activity to aid in the prevention of late-life disability owing to either cognitive impairment or physical impairment, separately or together.”

“Physical inactivity,” they wrote, “is one of the strongest predictors of unsuccessful aging for older adults and is perhaps the root cause of many unnecessary and premature admissions to long-term care.”

They noted that it had long been “well established that higher quantities of physical activity have beneficial effects on numerous age-related conditions such as osteoarthritis, falls and hip fracture, cardiovascular disease, respiratory diseases, cancer, diabetes mellitus, osteoporosis, low fitness and obesity, and decreased functional capacity.”

One of the new studies adds mental deterioration, with exercise producing “a significantly reduced risk of cognitive impairment after two years for participants with moderate or high physical activity” who were older than 55 when the study began.

Most early studies demonstrating the benefits of exercise were done with men. Now a raft of recent studies has shown that active women reap comparable rewards.

### **Research-Based Evidence**

Sedentary skeptics are fond of saying that of course exercise is associated with good health as one ages; the people who exercise are healthy to begin with. But studies in which some participants are randomly assigned to a physical activity program and others to a placebo (like simply being advised to exercise) call their bluff. Even less exacting observational studies, like the Nurses’ Health Study, take into account the well-being of participants at enrollment.

Thus, in one of the new studies, Dr. Qi Sun of Harvard School of Public Health and co-authors reported that among the 13,535 nurses who were healthy when they joined the study in 1986, those who reported higher levels of activity in midlife were far more likely to still be healthy a decade or more later at age 70. The study found that physical activity increased the nurses’ chances of remaining healthy regardless of body weight, although those who were both lean and active had “the highest odds of successful survival.”

Taking the benefits of exercise one system at a time, here is what recent studies have shown, including several published in *The Archives of Internal Medicine* in December.

**Cancer.** In a review last year of 52 studies of exercise and colon cancer, researchers at Washington University School of Medicine in St. Louis concluded that people who were most active were 21 percent less likely to develop the disease than those who were least active, possibly because activity helps to move waste more quickly through the bowel.

The risk of breast cancer, too, is about 16 percent lower among physically active women, perhaps because exercise reduces tissue exposure to insulin-like growth factor, a known cancer promoter.

Indirectly, exercise may protect postmenopausal women against cancers of the endometrium, pancreas, colon and esophagus, as well as breast cancer, by helping them keep their weight down.

**Osteoporosis and fragility.** Weak bones and muscles increase the risk of falls and fractures and an inability to perform the tasks of daily life. Weight-bearing aerobic activities like brisk walking and weight training to increase muscle strength can reduce or even reverse bone loss. In one of the new studies, German researchers who randomly assigned women 65 and older to either an 18-month exercise regimen or a wellness program demonstrated that exercise

significantly increased bone density and reduced the risk of falls. And at any age, even in people over 100, weight training improves the size and quality of muscles, thus increasing the ability to function independently.

**Cardiovascular disease.** Aerobic exercise has long been established as an invaluable protector of the heart and blood vessels. It increases the heart's ability to work hard, lowers blood pressure and raises blood levels of HDL-cholesterol, which acts as a cleansing agent in arteries. As a result, active individuals of all ages have lower rates of heart attacks and strokes. Though early studies were conducted only among men, in a 2002 study published in *The New England Journal of Medicine*, Dr. JoAnn E. Manson and colleagues found that among 73,743 initially healthy women ages 50 to 79, walking briskly for 30 minutes a day five days a week, as well as more vigorous exercise, substantially reduced the risk of heart attacks and other cardiovascular events.

In another study, women who walked at least one hour a day were 40 percent less likely to suffer a stroke than women who walked less than an hour a week.

**Diabetes.** Moderate activity has been shown to lower the risk of developing diabetes even in women of normal weight. A 16-year study of 68,907 initially healthy female nurses found that those who were sedentary had twice the risk of developing diabetes, and those who were both sedentary and obese had 16 times the risk when compared with normal-weight women who were active.

Another study that randomly assigned 3,234 prediabetic men and women to modest physical activity (at least 150 minutes a week) found exercise to be more effective than the drug metformin at preventing full-blown diabetes.

**Dementia.** As the population continues to age, perhaps the greatest health benefit of regular physical activity will turn out to be its ability to prevent or delay the loss of cognitive functions. The new study of 3,485 healthy men and women older than 55 found that those who were physically active three or more times a week were least likely to become cognitively impaired. One study conducted in Australia and published in September 2008 in *The Journal of the American Medical Association* randomly assigned 170 volunteers who reported memory problems to a six-month program of physical activity or health education. A year and a half later, the exercise group showed "a modest improvement in cognition." Various other studies have confirmed the value of exercise in helping older people maintain useful short-term

memory, enabling them to plan, schedule and multitask, as well as store information and use it effectively.