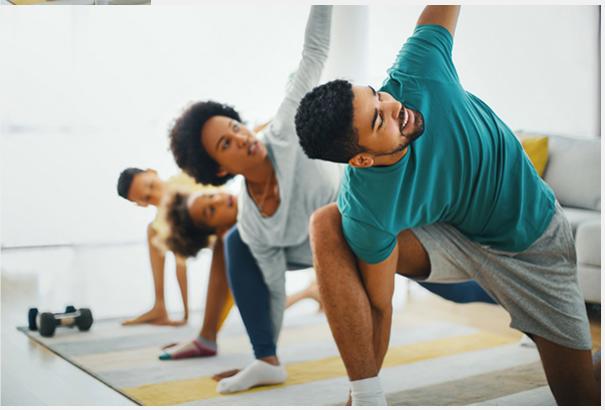
20 ways exercise benefits your health (part one)





As the weather warms up and gyms reopen, more Americans are shaking off lockdown and re-engaging with exercise. As you huff and puff your way back to optimal condition, here's a little inspiration to keep you motivated:

- 1) Cardiovascular: It's axiomatic that exercise strengthens cardiac muscle, optimizes blood pressure, and promotes circulation. A sedentary lifestyle is acknowledged as one of the five key risk factors—along with overweight, smoking, high blood pressure and elevated blood lipids—for heart disease. Exercise is one of the few ways we can raise our beneficial HDL cholesterol, while simultaneously lowering LDL and triglycerides. That's why "cardiac rehab" emphasizes supervised exercise as part of the road back for survivors of heart attacks.
- 2) Blood sugar: Contributing to exercise's heart benefits is its impact on insulin metabolism. Exercise sensitizes cells to insulin, reversing the trend toward metabolic syndrome and abnormal blood sugar. It's a key tool in the natural arsenal against diabetes. In one study, exercise cut the death risk in diabetic subjects by one-third. Maintaining muscle mass is a hedge against blood sugar fluctuations.
- 3) Brain: Studies show that exercise can significantly reduce the risk of developing dementia by about 30 percent. For Alzheimer's disease specifically, the risk was

reduced by 45 percent. Additionally, exercise may improve thinking skills in people as young as 20. This effect is mediated by increased production of brain-derived neural growth factor (BDNF)—a kind of "Miracle-Gro®[]" for synapses—by exercise.

- **4) Mood:** Exercise has acknowledged benefits for mood. Studies demonstrate that individuals who exercise have lower levels of anxiety and depression. This is due, in part, to the release of "feel-good" endorphins during workouts; other studies have documented salutary changes in brain neurotransmitters.
- **5)** Lung capacity: While lung function inexorably declines with age, exercise conditioning can preserve respiratory capacity.
- 6) Bone density: Weight-bearing exercise is associated with preservation of bone density. The precise mix of exercise to fend off or reverse osteoporosis hasn't precisely been worked out, but movement plus resistance training appears to help.
- **7) Balance:** Maintaining balance and coordination through specific exercises is an important aspect of life extension. Falls often herald progressive debilitation. **Balance training** is an under-appreciated mainstay of fracture prevention.
- 8) Inflammation: Aging is associated with progressive inflammation that damages arteries, joints, nerve cells, skin and other tissues in a process dubbed "inflammaging". It turns out that regular exercise prompts muscles to release signaling molecules that block the inflammatory cytokines that ordinarily increase with aging.
- **9) Cancer:** An active lifestyle is associated with lower risk of 13 types of cancer. Exercise has also been demonstrated to improve the prognosis of cancer patients after conventional treatment. It turns out that exercise boosts the function of T-cells that search out and destroy tumors.
- 10) Sexual performance: A 2016 review concluded that "physical activity and exercise interventions improve patient-reported erectile dysfunction, particularly aerobic exercise with moderate-to-vigorous intensity." And a study in the *Journal of Sexual Medicine* found that cardiovascular exercise was associated with improved sexual performance in both men and women.

These are just a few of the ways a regular exercise routine can benefit your health! Keep an eye out for next week's article where I'll be wrapping up with ten *more* ways that getting your body moving and your blood pumping can help keep you in good health for years to come!