

# Exercise Guidelines Published for People with HIV Over 50

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A combination of aerobic and resistance exercises, three times a week for at least six weeks, is recommended to improve cardiovascular, metabolic and muscle function in people living with HIV older than 50 years of age, according to suggested guidelines [published ahead of print](#) by the *Journal of the Association of Nurses in AIDS Care*.

A great deal has been written about the potential benefits of regular exercise, particularly for older individuals living with, or at risk for, various age-related health complications. Because people living with HIV appear to face a higher risk of certain age-related problems—notably increased rates of cardiovascular disease (CVD) and various metabolic health issues at younger ages—and may also be taking numerous medications, there has been interest in utilizing drug-free lifestyle changes to improve disease-free survival.

Anella Yahiaoui, a research assistant at the University of Washington, and her colleagues set out to develop exercise recommendations for people living with HIV, based on the quantity and quality of exercise-based research that has been conducted and published.

Much of the available HIV-specific research—12 studies were included in the analysis—focused on younger individuals and primarily demonstrated positive effects of aerobic and resistance exercise on symptoms of wasting syndrome, notably muscle size and strength. Data were limited with respect to the effects of exercise on today's most concerning age-related health complications among people living with HIV.

Yahiaoui's team therefore included data from studies exploring the benefits of exercise in frail HIV-negative adults over the age of 65 and HIV-negative adults over the age of 55 with metabolic syndrome—a group of risk factors, similar to those seen in HIV-positive people with lipodystrophy, that occur together and increase the risk for CVD, stroke and type 2 diabetes.

Among the HIV-negative study volunteers with metabolic syndrome, exercise was independently associated with improvements in lipid levels and markers of insulin resistance, compared with matched patients who did not exercise. Among frail patients, some studies showed benefits associated with aerobic and resistance exercise, whereas others did not.

Based on the review of published data, Yahiaoui and her colleagues were able to devise a handful

of key recommendations for people living with HIV over the age of 50. Aerobic exercise, for example, should be performed at least three times a week for 20 to 40 minutes, [aiming for a heart rate](#) between 50 and 90 percent of the maximum heart rate.

Resistance exercises—which includes weight lifting and calisthenics, such as pushups, pull-ups and sit-ups—should involve each major muscle group and be performed after an aerobic exercise has been completed, again at least three times a week. One or two sets of six to eight repetitions of each exercise, with 20 to 30 seconds between each set, is the recommended initial goal, eventually building up to three sets of ten repetitions of each exercise as endurance and strength improves.

Stretching, before and after exercising, is also recommended to prevent injuries.

There is, however, the possibility of too much of a good thing, the authors warn. Athletes who exercise frequently and strenuously are at an increased risk of various infections, which can potentially lead to serious health problems in people living with HIV. In turn, Yahiaoui's group cautions, exercise should not exceed 90 minutes of strenuous activity.

"Further research is warranted to study the benefits and risks of physical exercise in older HIV-infected patients," the authors conclude.