

Exercise intensity and duration linked to improved outcomes for heart failure patients

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The level of exercise is linked with the reduction of hospitalization and death in patients with chronic heart failure, according to a Henry Ford Hospital study.

Researchers measured the duration and intensity of [exercise](#) and found that increasing these parameters improved patients' quality of life and [exercise capacity](#), and lessened their risk for hospitalization and death.

For example, [patients](#) who walk at 2 mph for 25 minutes two days a week likely lowers their estimated risk of hospitalization or death by about 10 percent, while patients who walks at 2.5 mph for 25 minutes five days a week likely lowers their estimated risk of hospitalization or death by about 25 percent.

"This study shows that while a little exercise is good for health failure patients, a little more looks to be even better," says Steven Keteyian, Ph.D., the study's lead author and program director of Preventive Cardiology at Henry Ford. "We believe these outcomes give us a better understanding of how much exercise is needed for patients to lessen their chance of hospitalization or death."

The study will be presented Sunday at the American College of Cardiology's 58th Annual Scientific Session in Orlando. It was funded by the National Heart, Lung and Blood Institute.

The new findings represent a subanalysis of the [Heart Failure](#) and A

Controlled Trial Investigating Outcomes of exercise traiNing (HF-ACTION) study, which reported in November 2008 that working out on a stationary bicycle or walking on a treadmill just 25 to 30 minutes most days of the week is enough to modestly lower the risk of hospitalization or death for patients with heart failure.

The Henry Ford study looked at the possible link between exercise intensity and exercise duration and clinical events. It focused on 960 patients enrolled in the original study with moderate-to-severe chronic heart failure who were randomly assigned to either guideline-based therapy alone or guideline-based therapy plus supervised and then home-based exercise.

Patients were asked to ride a bicycle or walk on the treadmill for 30-40 minutes, three days a week under supervision, for a goal of 36 sessions. After 18 supervised sessions, patients were provided with a heart rate monitor and a treadmill or stationary bicycle, and were asked to exercise an additional two days per week at home.

When the supervised training phase was completed, patients were asked to exercise five days per week at home for the remainder of their 36 sessions. Exercise intensity was set at 60 percent to 70 percent of heart rate reserve, a moderate-intensity program.

Source: Henry Ford Health System

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