

Walking often and far reduces risks in heart patients

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An exercise program that burns a lot of calories reduced cardiac risk factors better than standard cardiac rehabilitation in overweight coronary patients, researchers report in *Circulation: Journal of the American Heart Association*.

"The higher-caloric [exercise](#), consisting of almost daily long-distance walking, resulted in double the weight loss and a greater fat mass loss than standard cardiac rehabilitation exercise," said Philip A. Ades, M.D., lead author of the study and professor of medicine and director of cardiac rehabilitation and prevention at the University of Vermont College of Medicine in Burlington. "And probably most importantly, these patients improved their insulin sensitivity to a greater degree."

The high-calorie expenditure regime was not more intensive than rehabilitation, but longer duration at lower intensity on more days.

In a first-of-its-kind study, researchers randomized 74 overweight cardiac rehabilitation patients (average age 64, 20 percent women) to either a high-caloric expenditure exercise regimen intended to burn 3,000 to 3,500 calories a week or a standard rehab therapy burning 700 to 800 calories weekly.

After five months, compared to the group doing traditional rehabilitation, patients in the high-calorie-burning group had:

- significantly greater improvement in 10 heart risk factors, including [insulin sensitivity](#) (a hallmark of the metabolic syndrome), total cholesterol and the total cholesterol/good cholesterol ratio, blood pressure, and cardio-respiratory fitness; and
- a greater average reduction in weight (18 vs. 8 pounds), body fat, (13 vs. 6 pounds) and waistlines (2.7 vs. 2 inches).

Researchers said all of these changes were statistically significant.

"Cardiac rehab has essentially remained the same since the 1970s because it has a mortality benefit," Ades said. "But it doesn't burn many calories and things have changed. Eighty percent of our rehabilitation patients are now overweight and many of them are becoming diabetic. It's a different time in terms of what we need to do in cardiac rehab."

Excessive weight increases the risk of heart attacks and is associated with an increase in other heart risks factors, including high cholesterol, hypertension and diabetes.

High-calorie-expenditure exercise consisted of walking for 45 to 60 minutes a day at a moderate pace - a lower speed than standard therapy - for five to six days a week. Standard rehabilitation involved walking, biking or rowing for 25 to 40 minutes at a brisker pace three times a week.

While standard rehabilitation has benefit, the high-calorie-burning exercise increased the benefit, which is crucial with the increasing prevalence of obesity, researchers noted.

The study's message is "walk often and walk far."

However, Ades said cardiac patients require supervision by medical staff.

"Since they were walking at a lower intensity, we were comfortable with them doing it on their own," Ades said. "We suspect that the general applicability of the high-caloric expenditure exercise programs in cardiac rehabilitation will be broad, although staff and patients will need to be comfortable with performing much of the five- to six-day-per-week exercise program away from the highly monitored rehab facility."

The two groups were similar at baseline in age, gender, body weight and fat distribution.

After five months, the patients were left more on their own to continue their exercise programs, which most did.

"If you start patients in this program with the proper support, and you start getting positive results, it is surprising to me how well it is accepted," Ades said. "The amount of exercise wasn't the problem; and the fact that they were losing weight supported the behavior change."

One year after entering the study, both groups had regained a few pounds from their five-month weights, an average of 2.9 pounds for the high-exercise group and two pounds for the low-exercise [patients](#), not a significant difference between the two. However, weight and body fat remained significantly lower in both groups.

Researchers are following the participants to determine whether high-calorie exercise improves the incidence of death and disability.

Source: American Heart Association ([news](#) : [web](#))

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