

# Why Bad Jobs Mean More Heart Risk Worse Heart Function Linked to Low-Status Work

June 6, 2005 -- Bad jobs often mean bad hearts, researchers report. The findings have nothing to do with whether or not one is a good person. They have everything to do with health.

Study after study shows that people with low-status jobs have more heart disease than people who do higher-status work. Now Harry Hemingway, MRCP, and colleagues at England's University College London Medical School say they know why.

The culprit: low heart-rate-variability. A healthy person's heart beats faster or slower according to the body's need. But people whose

heartbeats don't change very much have a higher risk of heart attack and sudden death.

Hemingway and colleagues find that people in low-status jobs tend to have low heart rate variability.

Why? A person with a low-status job -- especially a job in which he or she has little control -- is more likely to smoke, get too little exercise, drink alcohol, and to have a poor diet.

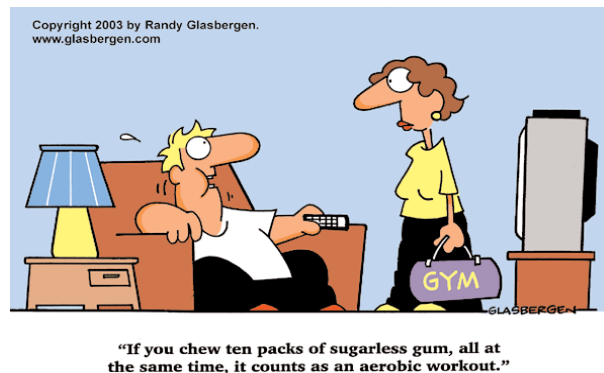
Components of metabolic syndrome -- a group of factors that puts a person at high risk of diabetes and heart disease -- were found to be associated with lower heart rate

variability. The researchers say that disturbances in heart rate variability may be involved in mediating some of the excess heart disease risk associated with low social positions.

Hemingway and colleagues would like to see studies of whether giving people more control over their work might reduce their heart risk.

For questions call mmpc Cardiology at 616-974-4567.

The findings appear in the June 14 issue of Circulation.



## Summer Breezes Smoothie

- 1 cup yogurt, plain nonfat
- 6 medium strawberries
- 1 cup pineapple, crushed, canned in juice
- 1 medium banana
- 1 tsp vanilla extract
- 4 ice cubes

1. Place all ingredients in a blender and purée until smooth.
2. Serve in a frosted glass.

Makes 3 servings - Serving size: 1 cup

Each serving provides: Calories 121, Fat less than 1 g, Saturated fat less than 1 g, Cholesterol 1 mg, Sodium 64 mg

Source: "Heart-Healthy Home Cooking: African American Style" from the National Institutes of Health



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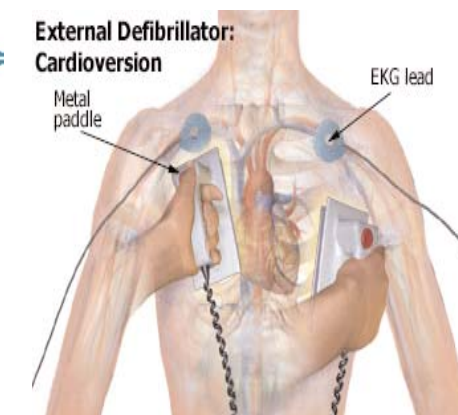
Please fax your referrals to  
616-974-4569.

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## Cardioversion

Cardioversion is a procedure that converts certain types of abnormal heart rhythms (arrhythmias) to normal ones. There are two types of cardioversion, internal and external. External cardioversion may be performed in an emergency situation (e.g. with a defibrillator) or in a non-emergency situation. The most common type of non-emergency external cardioversion uses mild electrical shocks that are carefully timed to stop an arrhythmia and restore a normal heartbeat. Alternatively, cardioversion may also be accomplished with medications.



Of the many different types of arrhythmias, the most common types that are treated by cardioversion are as follows:

**Atrial fibrillation** - This occurs when the heart's natural pacemaker (sinoatrial node) in the upper-right chamber of the heart (right atrium) sends rapidly firing electrical signals that cause the atria to quiver, rather than contract normally. The result is an abnormally fast and highly irregular heartbeat.

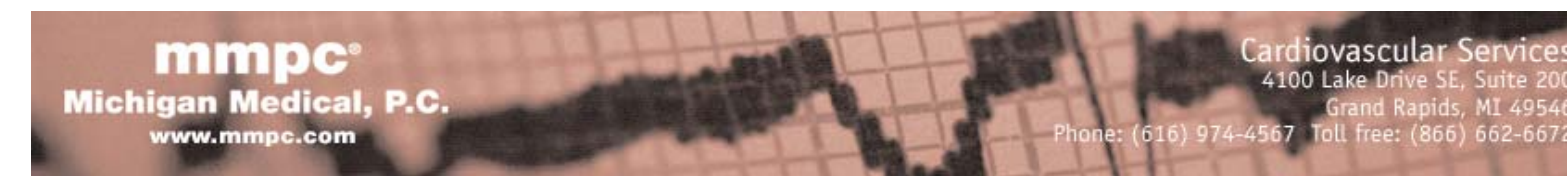
**Ventricular tachycardia** - An abnormally fast heartbeat caused by electrical signals that begin in the ventricles instead of in the atria (where they normally begin). Left untreated, ventricular tachycardia can lead to a dangerous condition called ventricular fibrillation.

Cardioversion has limited success in people with long-standing atrial fibrillation (a year or longer) or with some other types of heart problems (e.g., hypertrophic cardiomyopathy).

Both are used to correct an arrhythmia. Cardioversion tends to correct arrhythmias that are not immediately life-threatening. Defibrillation is used to treat arrhythmias that are life-threatening (e.g., ventricular fibrillation).

### Cardioversion vs. defibrillation

Defibrillation is a type of cardioversion that is usually performed in emergency situations. The term "cardioversion" is usually reserved for non-emergency situations. A comparison between cardioversion and defibrillation is shown on page two.



# Cardioversion vs. defibrillation

SIMILARITIES	DIFFERENCES
In the case of electrical cardioversion, both use the same equipment to deliver a shock to the chest.	Cardioversion requires the shock to be delivered at just the right time, and with much lower electricity levels. Defibrillation is usually performed as an emergency procedure to reestablish a heartbeat. It is not timed to the heartbeat, but delivered randomly.
Both may be used in an emergency.	Cardioversion is often a pre-scheduled, nonemergency procedure in which the person is under general <b>anesthesia</b> .
Both are used to correct an <b>arrhythmia</b> .	Cardioversion tends to correct arrhythmias that are not immediately life-threatening. Defibrillation is used to treat arrhythmias that are life-threatening (e.g., <b>ventricular fibrillation</b> ).

## Body For Life

Body-for-Life is an intense exercise and nutrition program based on the premise that you're more likely to stick with a diet and workout if you see results quickly. Indeed, founder Bill Phillips makes this promise: Follow his program for 12 weeks and you'll have the best body you've ever had. The program is challenging. It involves training with weights for 45 minutes three days a week, then alternating with aerobic exercise for at least 20 minutes three days a week.

The diet involves eating six small meals each day for six days a week, drawing from a list of healthy foods such as vegeta-

bles, brown rice, poultry, and fish. On the seventh day, you rest -- free to eat anything you want and take a day off from the rigorous workout. Open the best-selling Body-for-Life book and you'll see before-and-after photos of people who went from flab to fab. They don't just look slimmer. They look terrific. Their fab abs and chiseled muscles in the "after" photos are in stark contrast to the "before" pictures that look, well, like most of us. But remember, strenuous exercise virtually every day is the key to

this program. Odds are, your body would improve significantly with such workouts, even if you weren't also dieting.

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"I try to eat healthy. I never sprinkle salt on ice cream, I only eat decaffeinated pizza, and my beer is 100% fat free."

If you have questions about weight loss or nutritional needs you can call mmpc Center for Health Excellence at 616-974-4400.

## Welcome Our Newest Staff Members



### Lori Kahny, Medical Assistant

Lori joins our Cardiovascular division as a clinical/clerical assistant. She has worked in a clinical setting in the dental and medical profession prior to finishing her medical assistant degree. Her recent career experience was in OB/GYN. Lori's interests are biking, shopping, travel and spending time with her family. Her son Aaron is 18 years old and her daughter Johanna will be starting 8th grade in the fall. Welcome Lori!



### Kathryn Zagel, PA-C

Kathryn is a nationally certified Physician Assistant. She received her Master's degree in Physician Assistant studies from Grand Valley State University; with a special focus and training in internal medicine, geriatrics and oncology. Kathryn also has a Master's degree in Management from Aquinas College. Kathryn will be working with and under the supervision of Dr. Wolyn both in the office and hospital setting. Kathryn's hobbies are boating, tennis, skiing and spending time with friends and family. Her son David is 13 years old and in the 7th grade. Her husband Ron owns Jonathan Stevens Mattress. Welcome Kathryn!

## Did you know?

-All of our Exercise Physiologists are ACLS, (Advanced Cardiac Life Support) certified.

-We are now doing echocardiogram and stress echo at the Waverly site in Holland.

-Test results and office consultations can be viewed under transcription in Medical Manager.

-Dr. Wolyn goes to Byron Center site twice a month on a Friday.

-mmpc is creating a new website where you can access information about our Cardiology services. Look for it at [www.mmpc.com](http://www.mmpc.com) later this summer!

## Exercise, Stress Management Boost Heart Health

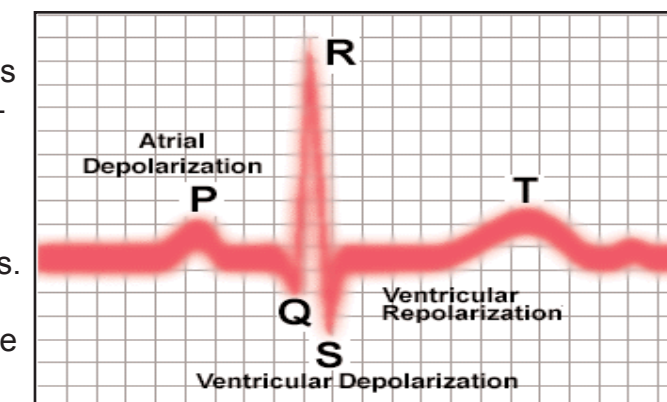
HealthDay News -- Cutting down on stress and boosting aerobic fitness fights both heart disease and depression, a new study finds.

Reporting in the April 6 issue of the Journal of the American Medical Association, researchers at Duke University Medical Center tracked the mental and physical health of 92 men and 42 women, aged 40 to 84, with stable ischemic heart disease and exercise-induced myocardial ischemia -- decreased blood flow to the heart muscle.

The study participants received either their routine medical care; usual care plus supervised aerobic exercise for 35 minutes three times a week for 16 weeks; or usual care and weekly 1.5-hour stress management training for 16 weeks.

Patients in the exercise and stress-management groups had lower average depression scores and reduced distress scores compared with the patients who received only usual care, the researchers report. The exercise and stress-management patients also had more favorable improvements in certain cardiovascular risk factors.

"Results of this randomized, controlled trial demonstrate that behavioral treatments provide added benefits" to heart disease patients already receiving standard medical care, the study authors wrote. The longer-term effects of exercise and stress management still need to be evaluated in a larger study, they add. But they believe that, based on these findings, exercise and de-stressing "offer considerable promise" to patients threatened by heart disease. If you have questions please call mmpc Cardiology office at 616-974-4567.



MSN health and fitness 2005.