

The beat goes on

For Valentine's Day, a Mount Sinai cardiologist makes sure your heart's in the right place

► THE SPECIALIST: JONATHAN L. HALPERIN, DIRECTOR OF CLINICAL CARDIOLOGY SERVICES

With 28 years in cardiology under his belt, Dr. Jonathan Halperin doesn't mind describing himself as a "techno-peasant," which he explains by saying, "I don't touch any sharp objects. I'm involved in the diagnosis and management of patients with cardiac problems." The father of two college-age children, Halperin lives on the upper West Side with his wife, a surgeon.

► THE BIG STORY

With almost 80 million Americans suffering from some sort of cardiovascular disease, February has been pronounced American Heart Month by the American Heart Association. In honor of Valentine's Day tomorrow, make sure your loved ones have the gift of health.

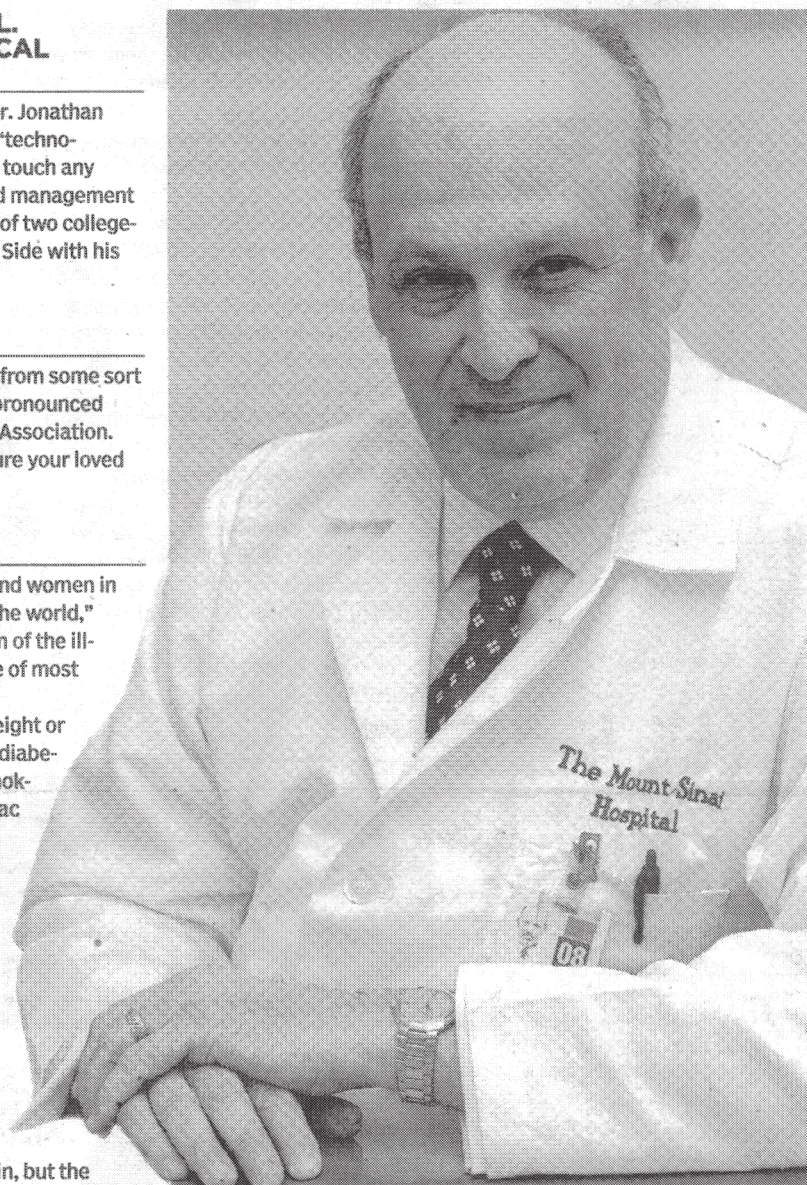
► WHO'S AT RISK

"Heart disease is the leading killer of men and women in America and in industrialized nations around the world," Halperin states flatly. "The most common form of the illness is atherosclerosis, which is the root cause of most heart attacks and strokes."

The main risk factors include "being overweight or sedentary; having elevated blood cholesterol, diabetes or high blood pressure; being a tobacco smoker, and, finally, having a family history of cardiac disease," according to Halperin.

Perhaps the most dangerous myth is that women don't need to worry about heart disease. "It turns out that gender is not a factor," explains Halperin.

Heart disease affects the whole spectrum of society, but some groups are at particular risk. African-Americans are prone to high blood pressure, and thus at higher-than-average risk. People from the Indian subcontinent have unusually high rates of coronary atherosclerosis at a young age. Heart disease "doesn't start overnight," says Halperin, but the symptoms usually manifest themselves in people between the ages of 50 and 80.



Dr. Jonathan L. Halperin, director of clinical cardiology services at Mount Sinai, says heart disease is the leading killer of men and women in America and in industrialized countries worldwide.

step is taking a look at the arteries themselves. "Today, we can image arteries less invasively with CT scans and intravenous injections of X-ray dye," explains Halperin, "taking pictures without the need to put a catheter into the heart."

There are four main approaches to therapy for coronary artery disease.

- 1) Medication: medicines that are designed to improve blood supply to the heart, or make the heart function more efficiently by requiring less oxygen.
- 2) Secondary prevention: long-term treatment using medications, diet and exercise.
- 3) Catheter-based interventions: using balloons and stents to remove blockages.
- 4) Bypass surgery: grafting arteries or veins from elsewhere in the patient's body to the coronary arteries to improve blood supply to the heart.

► RESEARCH BREAKTHROUGHS

Doctors at Mount Sinai are doing research into a method called plaque characterization. "We're using MRIs to image the plaque on the arteries, so we can determine how prone the plaque is to fracture, become unstable and cause a heart attack," says Halperin. If successful, this research could help doctors prevent heart attacks in people who may show no prior symptoms.

► QUESTIONS FOR YOUR DOCTOR

Ask, "What are my numbers?" Halperin advises people to know their cholesterol level; the level of their LDL cholesterol (bad cholesterol); the level of their HDL cholesterol (good cholesterol), and their triglyceride level. "We are very effective at lowering LDL through exercise, diet and medication. If your numbers aren't right, we can usually make them right."

Knowing your blood pressure is essential, too. Halperin advises asking your doctor, "How far am I from my ideal level?" and "What else can I be doing to reduce my risk?"

Halperin urges patients to take precautions, but also to try to keep a sense of perspective. "Let's all relax here," he says. "After all, there's no risk-free way to live." ♦

► WHAT YOU CAN DO

Know your numbers

Have your blood pressure, blood sugar and cholesterol checked regularly, and keep the information someplace accessible.

Know your family history

Talk to relatives about the family's medical history. We can now analyze patients' DNA for specific genes that predispose them to specific diseases. It'll be increasingly helpful to put that in the context of the family history.

Diet

If you're overweight, aim to lose weight very gradually. Everyone should reduce the consumption of animal fats, which are high in cholesterol.

Exercise

Almost everyone can do some form of exercise. Just get started! It's good to separate exercise from the rest of your life — dedicate time to it. For cardiac health, repetitions are better than resistance.

► SIGNS AND SYMPTOMS

If you determine that you are at risk, then you should watch closely for key signs. "The cardinal symptom is chest discomfort that comes on with exercise and goes away when you rest," says Halperin. Pain, pressure or tightness in the chest, shortness of breath, dizziness or lightheadedness are common, but these symptoms can have other causes, too.

Another clear warning sign is a decline in your ability to exercise, especially accompanied by chest discomfort. "People who exercise regularly should improve regularly," explains Halperin, "so if you are able to do less, that could be a difference in your heart's blood supply, and that should mean a call to your doctor."

► TRADITIONAL TREATMENT

First, the doctor makes a diagnosis, a process of several steps. Usually this includes an electrocardiogram — a record of the heart's electrical activity, obtained by attaching wires to your arms, legs and chest. The next step is a stress test, which is often walking on the treadmill while the heart is monitored. The last

BY THE NUMBERS

The average age of a first heart attack for men is **66** years, according to the CDC.

This year, an estimated **1.2 million Americans** will have a new or recurrent coronary attack, according to the American Heart Association.

Almost **80 million Americans** have some form of cardiovascular disease, says the AHA.