

Just for the Health of Pilots

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On Exercise and Heart Disease

A heart attack (myocardial infarction) can ruin your whole day. Heart disease is the leading cause of morbidity and mortality in the United States, accounting for 50 percent of deaths each year. This amounts to about 1.5 million heart attacks, of which 500,000 are fatal.

Cardiovascular disease is a disease of lifestyle, and therefore largely preventable.

In the past 15 years, deaths from heart attacks have been reduced 25 percent and from strokes by 50 percent. These dramatic decreases have been attributed to exercising (the fitness movement), reduced fat in our diets, control of hypertension, and decreased smoking. Our stressful, almost-mad lifestyle, unfortunately, has not changed much.

Women pilots and pilots' wives, take note: Women have been getting short shrift from cardiovascular diagnosis and prevention programs for many years. Medical research into heart attacks has been mostly directed at men. We all know that men are at greater risk for coronary heart disease than women?

Not so. After the protective effects of estrogen drop after menopause, women are just as likely as men to have heart attacks. The American Heart Association has stressed that heart disease is an equal-opportunity killer. But, studies at emergency departments have shown that women with chest discomfort were nowhere as likely as men to get a thorough workup for heart attack.

Also, cholesterol-lowering programs are largely neglected in women, although high cholesterol is just as big a danger, maybe more, for women. They get a fraction of the bypass surgery and angioplasties compared with men. Women are beginning to raise hell about this, and rightly so.

Some good news for women that can be helpful to men also: In the April 1997 Journal of the American Medical Association, an article reported a direct relationship between physical activity and lowered mortality in postmenopausal women.

Translated: Women who were physically active lived longer. And, the ones who exercised most lived longest.

Dozens of studies show unquestionably that exercise

is the number-one weapon (assuming you don't smoke) in preventing heart disease. There is no reason to "vapor lock" at 30, 40, or 50 if you can lead a healthful, happy, productive life for many more years. We should try to die young at a very old age. Exercise gives us the feeling of relaxation and well-being. We feel better about ourselves.

What is the best exercise? Walking wins as the gold standard. Cost? A good pair of comfortable walking shoes. Less trauma to joints. Practically no risk of injury unless you are bitten by a dog or hit by a car. Saves on gas. Good way to burn calories. Can enjoy at any age.

What is absolutely the best piece of exercise equipment? A dog that enjoys a long walk every day. Also, patting your dog will reduce your blood pressure (really—it's a fact).

Walking should be part of any aerobic exercise program, but experiment and find an activity that you enjoy and will stay with. Jogging, hiking, swimming, bicycling, treadmill, stair climbers, rowing machines...you name it. "If exercise isn't fun, it won't get done." Home exercise equipment allows you to watch TV for a half-hour or so to alleviate boredom. Whatever works. Add about 10 minutes a day of resistance or weight training to keep your muscles firm and strong.

So how much exercise do you really need? Pilots like numbers, so here is the conventional wisdom from the experts:

- An absolute minimum of 20 to 30 minutes a day of moderately vigorous exercise three to four times a week.
- The optimum is 30 to 45 minutes of moderately vigorous exercise most days. More than this will not make you any healthier, live longer, or do more to prevent a heart attack. You will burn more calories, and



you might need the extra exercise for competition, but most persons might actually be worse from the more strenuous exercise programs.

- I think putting mathematics into diet or exercise is both boring and futile. I never count calories or fat grams. I don't count my pulse after exercising. I don't weigh portions of food. Just learn principles and rules of thumb.
- After all, these good health habits should be continued for the rest of your life, and you don't want to be carrying a calculator or notepad around looking like a yuppie.

For instance, instead of counting your pulse to get your maximum effective heart rate, just use these three simple guidelines:

You are exercising strenuously enough if you breathe somewhat faster, sweat a little, and increase your heart rate some. Also, don't become out of breath or feel any pain or discomfort.

PEARLS

- “No pain, no gain” is all wrong—and dangerous.
- Don't weigh your protein portions of meat, poultry, or fish to make sure you have the recommended four ounces. A piece about the size of a credit card is just

right. Forget about the thickness.

- Calories and fat grams? Just learn which foods are loaded with fat and calories (and salt), and avoid them as much as you can.
- Identify the good foods and eat more of them; identify the bad foods and eat less of them.
- Don't use scales to measure weight control; a mirror is best. See how your clothes fit. See how you feel about yourself.
- Most energy-burning tables assume the male weighs about 150 pounds and the female 120 pounds. So, make adjustments according to your weight.
- I round off all figures and calculate that I burn about five to six calories per minute when I walk.
- A good estimate is that you burn about 100 calories a mile.
- Exercise physiologists recommend you work up to either a 20-minute mile (3 mph) or a 15-minute mile (4 mph).

Sometimes I walk more slowly because I like the scenery of the park. At least, I am out there.

Exercise is the best treatment for anxiety, anger, fatigue, tension, and depression. It is safe, and it is free.

Yours for good health and safe flying,

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Note: The views and recommendations made in this article are those of the author and not necessarily those of the Federal Aviation Administration.