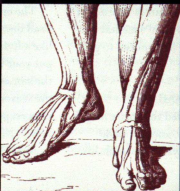
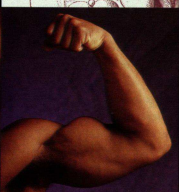
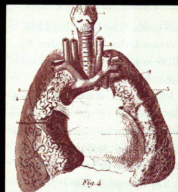


Studies IN Fitness



WALK YOUR DOG EVERY DAY, whether you have a dog or not. So said Paul Dudley White, President Dwight D. Eisenhower's personal physician, more than 40 years ago.

It's still excellent advice, but you'd be even better off if you and your imaginary dog went jogging, the most efficient form of exercise for both calorie burning and cardiovascular health. That's according to research by Tom R. Thomas, director of MU's exercise physiology program and a professor of food science and human nutrition. He compared six of the most common forms of solitary exercise in America: jogging, ski simulation (think NordicTrac here), shuffle skiing, rowing machines, stationary bicycles and step machines.

Thomas found jogging to be superior to all the other modes not only in caloric expenditure, but also in the use of fat calories during exercise. Ski simulation came in second in this study funded by NordicTrac, and the others came in together at third. Indeed, jogging burned calories 15 percent better than ski simulation, 20 percent better than the other machines and 30 percent better than good old walking. This was true even though exercisers maintained a similar heart rate—on the high side of moderate—no matter which machine they used.

In real life, when people work at their own comfortable rate of exertion, the differences in caloric burn between machines becomes even more dramatic. Thomas' study showed that people jogging at their own pace burned twice the calories per mile as the people who walked at their own pace.

FAT MATTERS

Most of us are likely to exercise—if at all—to get rid of the unfashionable fat that tends to pile up on our thighs and bellies. If that's your only concern, crank your workouts up to a high intensity, Thomas says. But what he cares about is

clearing fat out of the bloodstream. For that, moderate exercise is better. "It seems to be much more beneficial to burn fat during exercise because it affects the lipoprotein handling system more dynamically," he says. The more fat you burn during exercise, the greater potential for elevating the good cholesterol, or HDL.

Daily exercise helps clear triglycerides—yet another form of fat—from

MORNING EXERCISE STIMULATES
ENZYMES THAT GOBBLE UP THE
FAT YOU EAT AT DINNER.

your bloodstream, Thomas says. The effect seems to have a several-hour delay, meaning that if you exercise in the morning, you stimulate enzymes that gobble up the fat you eat at dinner from your bloodstream. You should exercise every day, he says, because this effect needs a daily jump start.

LOSING SADDLEBAGS

It should come to no woman's surprise that it is harder for her to lose weight than it is for the man in her life. Men tend to hold their extra weight in their belly, where it burns off easier, Thomas says. But the down side is that men's fat also appears to travel more easily into the bloodstream, putting them at greater risk for cardiovascular disease.

"Women's fat stores tend to be more permanent," Thomas says. Female obesity is more in the hips and thighs, and this seems to make them less susceptible to cardiovascular disease. That's great for our hearts, but it still makes our jeans fit funny.

So OK, even if you'll never look like a supermodel or run the Boston Marathon, research has proved again and again that heart-pumping exercise is better for your health and looks than just sitting around. "All of the current evidence is exciting

because it shows that a very little amount of activity can have substantial benefits in cardiovascular risk," Thomas says. "Even walking a little bit a few times a day can have a tremendous impact on the health of your heart."

LIGHTEN UP

Exercise and weight loss can be even more important for people with arthritis than for others, says Marion Minor, associate professor of physical therapy. "When you're heavier, you put more biomechanical stress on the joints," Minor says.

Minor's research has proved that people with arthritis can exercise. For a long time, they were told to rest and avoid strenuous activity, but that led to more stiffness and pain, loss of range of motion and weight gain, which meant the person could do even fewer things, which led to a spiral of reduced activity, depression and disability.

Minor has found that people with arthritis can exercise vigorously enough to produce a conditioning effect. In a study of water aerobics and walking, exercisers improved their cardiovascular fitness by about 20 percent. Plus, they reported less discomfort, more strength and flexibility, and less depression. "When they exercise in a well-rounded conditioning program, they get stronger, they're able to do more and they don't fatigue as quickly," Minor says. "They also report a more satisfying social life, in part because they're taking the time to go out and play with other people."

START NOW

It doesn't take much to reap the benefits of exercise; just a desire to get off the couch and get moving. "Do a little bit at a time, but make a permanent commitment," Thomas says. "We greatly underestimate subtle differences as we choose to exercise every day or add a little abdominal fat every day. You say, 'Gee, I only lost a pound this month,' but over a lifetime it has great effect." ❁