



Good for the mind, but how about the body?

Yoga, known for its mental benefits, has substantial fitness benefits, too.

From an esoteric, Eastern discipline to a class in every neighborhood: over the past couple of decades, yoga has become a thoroughly American form of exercise. Contrary to stereotypes of yoga as a form of pampering for the well-off, it's made significant inroads into many community centers, senior centers, and local Ys. By some estimates, in fact, 75% of all American gyms now offer yoga classes. Even pro athletes are getting in on the game—Tom Brady of the New England Patriots says he heads to a studio when he's in Boston.

Yoga in its strictest form combines meditation with motion. It's a way to reduce stress and anxiety, which leads to a variety of mental and emotional benefits. But yoga is also a form of exercise. Is it *good* exercise, the kind that provides significant cardiovascular and other benefits? For a wide variety of people, the answer is yes.

Go gentle

Most yoga taught and practiced in this country is a form of hatha yoga, which involves moving into and out of classic poses along with controlled breathing. Yoga may be gaining in popularity partly because, within this basic structure, it's easily modified to suit differing physical abilities. For example, Iyengar (pronounced eye-en-gar) yoga—widely practiced in the United States—emphasizes precise physical alignment, with knowledgeable teachers adjusting everything from the position of your shoulders to the angle of your toes. It also makes extensive use of props (bolsters, blocks, or blankets) to help you move more

easily into each position. The gentleness of Iyengar yoga makes it a good form of activity for those with physical limitations, including the disabled and people who are older or don't exercise.

Current physical activity guidelines for older adults emphasize improving balance and flexibility in addition to strength and cardiovascular fitness. Taking a yoga class may help many people meet those guidelines. A recent study looked at the effects of a nine-week program of Iyengar yoga in 24 women between the ages of 59 and 76, none of whom had previous experience with yoga. They performed simple, classic Iyengar poses. At the end of the program, the women walked more quickly, with greater confidence, and had better balance and flexibility. Similarly gentle forms of yoga have been shown to benefit those with multiple sclerosis, osteoarthritis, and even cardiovascular disease or heart failure.

Can be hard work

Yoga can also help people reach other physical activity goals. Many yoga poses are weight-bearing, so in addition to helping with flexibility and balance, yoga will strengthen muscles and bones. Yoga also burns up calories. At a beginning level, it uses them at the same rate as walking slowly, but as people get more experienced, sessions tend to get more strenuous. Researchers have found that yoga accomplishes what many of us want from exercise: lower blood pressure, a slower pulse, better cholesterol readings.

A more vigorous form of yoga called Ashtanga offers greater aerobic benefits. It involves assuming a series of positions called sun salutations, one

after the other, in rapid, flowing movements (see illustration below). Vinyasa, flow, and power yoga are all names for yoga based on Ashtanga. Researchers at Columbia reported results last year comparing an hour of beginning Ashtanga yoga with walking on a treadmill for 20 minutes, first at a slow pace and then more briskly. The yoga session had an average effect on the volunteers' metabolic rates comparable to that of slow walking. However, the sun salutation part of the yoga session, which lasted for about 25 minutes, was a pretty good cardiovascular workout: it got the volunteers' hearts beating faster (55% of the maximum heart rate) and revved up their metabolic rates to the level that a moderately brisk walk would. The researchers pointed out that intermediate or advanced classes may provide more vigorous exercise.

Results from a different study published earlier this year compared yoga and aerobics practitioners to the sedentary. The blood pressure and heart rate readings were about the same in the yoga and aerobics groups, indicating a high level of fitness. Average blood pressure was 108/65 for the yoga group and 115/71 in the aerobic group, while the yogis' heart rate averaged 63 beats per minute, versus 60 beats per minute in the aerobic group.

Dr. Timothy McCall, medical editor at the magazine *Yoga Journal*, cautions against viewing yoga solely as a form of exercise. But he agrees that at high intensity, it can provide cardiovascular and other fitness benefits: "If you're jumping around for 15 minutes in sun salutations, sure—you certainly can get an aerobic workout." ♥

