

# Start fighting back against the ‘Sitting Disease’

**A**ll of us have felt tired at the end of the day or after a long road trip, but did you realize your exhaustion is not necessarily from work or being road weary.

Dr. James Levine, an endocrinologist with the Mayo Clinic has coined the name “The Sitting Disease.” There’s strong evidence that sitting all day not only gives you a sore back or a spare tire around your middle, but it can actually shorten your life.

Physiologically the human spine is not meant to stay seated for long periods of time. The slight S curve in our spine enables us to handle our upper body weight. When we sit the lower lumbar curve collapses and we form into a C. This hampers the abdominal and back musculature which normally supports your body. The body tends to slouch and your muscles grow weak, so that even when you do stand your posture is affected.

In addition, when you stand, your weight is distributed though your hips, knees and ankles. Sitting places all your weight on your pelvis and spine. This puts the highest pressure on your back discs and can cause damage and pain.

A study published in the American Heart Association’s Journal *Circulation* showed that each extra hour of TV watching per day was associated with an 18-percent increase in deaths from heart disease and an 11-percent increase in overall mortality. Watching TV for four or more hours a day increases your risk for cardiovascular disease by 80 percent. Surprisingly, the increase in cardiovascular risk and mortality wasn’t affected by individuals who performed vigorous exercise several times a week or who had healthy eating habits. The mere fact of sitting for hours at a time, regardless of regular gym workouts, increased the blood glucose, blood lipids and adiposity.

Standing causes your muscles to perform low-intensity activity. This activity allows the muscles to release enzymes (lipoprotein lipase), which convert fats and your LDL cholesterol (the bad stuff) into energy and HDL (the good stuff). When you sit, the muscles are relaxed and your enzyme activity decreases by 90 percent! This causes fat to develop in your bloodstream. Within two hours of sitting, your HDL drops by 20 percent.

What to do? If you work in front of a computer, it may seem especially difficult to fight back. However, a few simple ideas can make a big difference. Insert breaks into your long sedentary times. Get up, stretch and take a short walking break, even just around your office. Consider a standing, treadmill or bicycle desk. All of these can be made for less than \$100. At home, walk on an elliptical or treadmill while watching TV. You’ll feel better and may even lose weight without breaking a sweat.

— By Lynn Larson, nurse educator with the MicroFit and Wellness Assessment