

Why You Should Take a Walk at Work

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Vascular dysfunction from sitting at work could be reversed with short walks

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(dailyRx News) Here's another reason to take a quick break at work: Getting up from your desk and strolling around the office could help your vascular health.

A small new study found that breaking up prolonged hours of sitting at work with brief walks could improve vascular health.

"It's easy for all of us to be consumed by work and lose track of time, subjecting ourselves to prolonged periods of inactivity," said lead study author Jaume Padilla, PhD, an assistant professor of nutrition and exercise physiology at the University of Missouri School of Medicine, in a press release. "However, our study found that when you sit for six straight hours, or the

majority of an eight-hour work day, blood flow to your legs is greatly reduced. We also found that just 10 minutes of walking after sitting for an extended time reversed the detrimental consequences."

Past research has tied too much sitting time to all kinds of health problems, including heart disease. The current study found that brief walks might offset some of sitting's ill effects on circulatory health.

"Studies have shown that sitting less can lead to better metabolic and cardiovascular health," Dr. Padilla said. "However, more research is needed to determine if repeated periods of reduced vascular function with prolonged sitting lead to long-term vascular complications."

For this study, Dr. Padilla and colleagues studied 11 young men. These researchers tested the study patients' blood flow in a lower-leg artery — called the popliteal — before and after sitting for several hours and after taking a 10-minute walk.

Study patients had reduced blood flow after sitting for a prolonged period. But after taking a short walk, blood flow improved.

"When you have decreased blood flow, the friction of the flowing blood on the artery wall, called shear stress, is also reduced," Dr. Padilla

said. "Moderate levels of shear stress are good for arterial health, whereas low levels of shear stress appear to be detrimental and reduce the ability of the artery to dilate. Dilation is a sign of vascular health. The more the artery can dilate and respond to stimuli, the healthier it is."

David Winter, MD, chief clinical officer, president and chairman of the board of Baylor Health Care System's HealthTexas Provider Network, told dailyRx News that "The fact that prolonged sitting diminishes blood flow in the legs is not surprising. Whether or not this leads to atherosclerosis [artery disease], as was a consideration, is unclear and there are many other important risk factors that play a role in that disease state. Nonetheless, a 10-minute walk is beneficial in a variety of ways. A standing desk is another way to accomplish similar goals."

Dr. Padilla and team said taking intermittent walking breaks at work could help offset the health damage of sitting.

This study was published Sept. 28 in the journal *Experimental Physiology*. The National Institutes of Health and a grant from the American Physiological Society funded this research. Dr. Padilla and team disclosed no conflicts of interest.

