

## - Exercise

# HEALTH

## GET UP, STAND UP

*Prolonged periods of time sitting or lying down may be shortening your life – what can you do to reverse its negative effects?*

Based on decades-long observations of centenarians, author Dan Buettner (*The Blue Zones Secrets for Living Longer*) conjectures that people live longer when they get up and move around after sitting for 20 minutes. Now, a new study published in the *Journal of the American Heart Association* (JAHA) has found older women who sat for 11.7 hours or more per day increase their risk of death by 30%, regardless of exercise. Study co-author Steve Nguyen from the University of California examined measurements of sitting and daily activity collected from hip devices worn by 6,489 women, aged 63 to 99, who were followed for eight years. This data was collected as part of an ongoing national project known as the Women's Health Initiative (WHI), which began in 1991. Nguyen's paper is the first to apply a validated algorithm called CHAP to examine total sitting time and length of sitting bouts in relation to the risk of death. "Sedentary behaviour is defined as any waking behaviour involving sitting or reclining with low energy expenditure," explains Nguyen. It is a health risk because it reduces muscle contractions, blood flow and glucose metabolism. Unfortunately, exercise cannot undo these negative effects. According to the study, whether women participated in low or high amounts of moderate-to-vigorous intensity physical activity, they showed the same heightened risk if they sat for long hours.

"If I take a brisk long walk for an hour but sit the rest of the day, I'm still accruing all the negative effects on my metabolism," said study lead Professor Andrea LaCroix. Based on the research, Professor LaCroix makes the following recommendation: "The risk starts climbing when you're sitting about 11 hours per day, combined with the longer you sit in a single session. For example, sitting more than 30 minutes at a time is associated with higher risk than sitting only 10 minutes at a time. Most people aren't going to get up six times an hour, but maybe people could get up once an hour, or every 20 minutes or so. They don't have to go anywhere, they can just stand for a little while.

"We've created this world in which it's so fascinating to sit and do things. You can be engrossed by TV or scroll on your Instagram for hours. But sitting all the time isn't the way we were meant to be as humans."