

THE HEALTH BENEFITS OF Sit/Stand Workstations

‘Sitting for long periods increases the risk of diabetes, heart disease and death, researchers suggest’ BBC News reports.

The news is based on the findings of a review which summarised the results of all the observational studies that had looked at the association between the time spent sitting or lying down whilst awake (sedentary behaviour) and the risk of diabetes, cardiovascular disease, and death due to cardiovascular disease (such as heart attack) or any cause.

The link between worsening health outcomes and time spent sitting first became apparent in the 1950s when researchers found that London bus drivers were twice as likely to have heart attacks as their bus conductor colleagues.

The researchers were concerned that, due to changes in lifestyle and employment, the health problems associated with sedentary behaviour are likely to have worsened. They cite the findings of a 2011 study showing that the average adult now spends 50-60% of their day in sedentary pursuits.

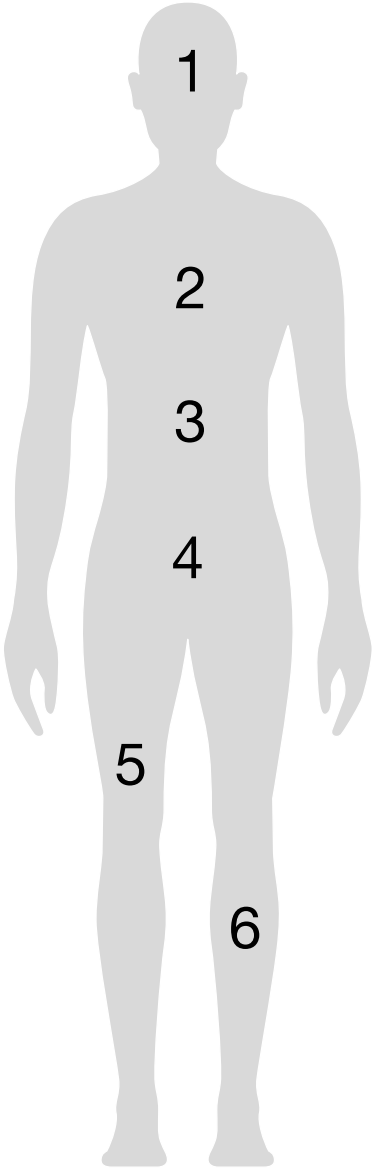
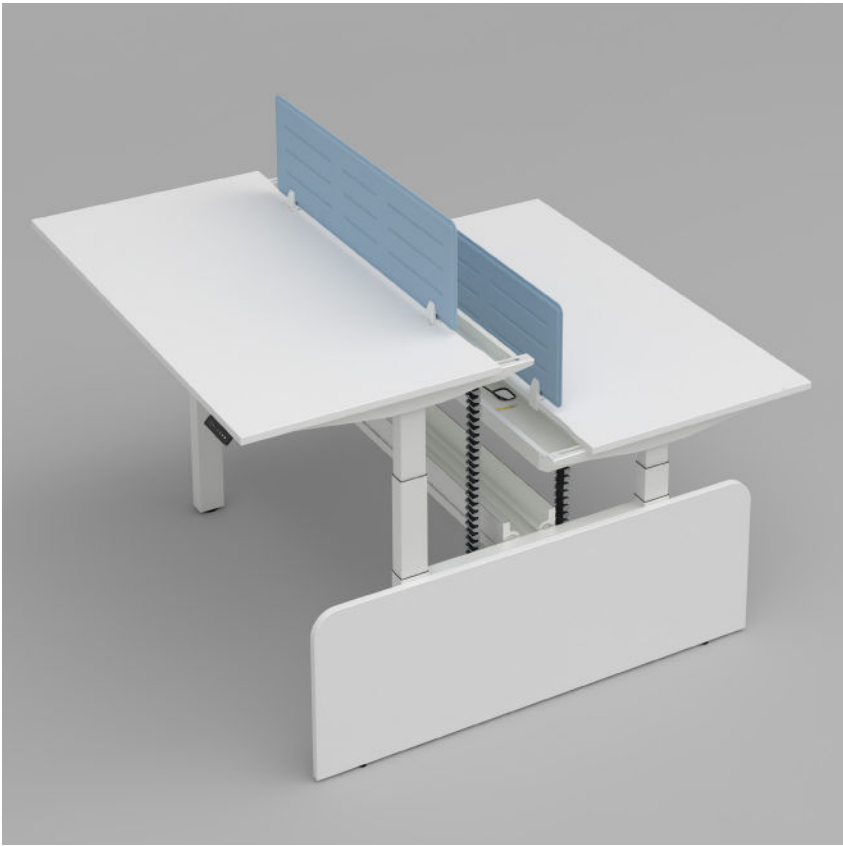
The main findings of the study were that, compared to the shortest time spent sedentary, the longest time spent sedentary was associated with a:

- 112% Increase in risk of diabetes
- 147% Increase in cardiovascular events
- 90% Increase in death due to cardiovascular events
- 49% Increase in death due to any cause

The study was carried out by researchers from Loughborough University and the University of Leicester. The primary author is being funded for a PhD in the Department of Cardiovascular Sciences, University of Leicester.

The study was published in the peer-reviewed medical journal Diabetologia. The research was well-reported by the BBC, Daily Mail and Daily Express.

Source: NHS News 10. October 2012



1. Brain Activity

Brain function slows due to lack of fresh blood and oxygen being pumped around your body, resulting in lack of brain and mood enhancing chemicals required to stay alert. Tiredness starts.



2. Heart Disease

Muscles burn less fat and blood flows slower during sitting. This allows fatty acids to easily clog the heart. High blood pressure and elevated cholesterol are increased, leading to cardiovascular disease.



3. Back Problems

Sitting does not allow nutrients and fresh blood to enter the soft spongy discs between vertebrae, resulting in hard support tendons and ligaments. Weight is also distributed unevenly between vertebrae causing spine problems.



4. Inner Health Stats

Calorie burning drops by 1 per minute. Enzymes that break down fat drop 90%. Good cholesterol drops 20%. Insulin effectiveness drops 24% and risk of diabetes rises.



5. Muscle Problems

Sitting allows electrical activity in the leg muscles to shut off meaning the Limp Glutes found around your buttocks become accustomed to no use. This lowers your ability to maintain a powerful stride.

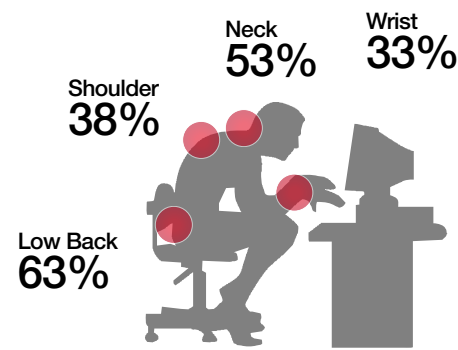


6. Poor Circulation

Sitting for long periods slows blood circulation. This causes fluid to pool in the legs. This problem can cause swollen ankles, varicose veins and dangerous blood clots known as Deep Vein Thrombosis.



Most Common Pain Areas



Aim to stand up every 20 minutes

“New science shows very persuasively that standing up about every 20 minutes, even for only a minute or two, reduces your risks of developing diabetes and heart disease.

By standing up, you cause the big muscles in your legs and back to contract, which leads to an increase in certain enzymes that break up fat in the blood stream. You don’t have to jog in place or do jumping jacks. Just stand. A very pleasant additional benefit is that standing up every 20 to 30 minutes also seems to prompt the body to burn calories, so you don’t gain as much weight from sitting at the office most of the day.

If you can stand up every 20 minutes — even if you do nothing else — you change how your body responds physiologically.”

Gretchen Reynolds
Writes the Phys Ed column for the New York Times.

Heart Rate*



Seated average beats per minute



Standing average beats per minute

Calorie (kcal) Expenditure*



Seated average 2.5kcal per minute



Standing average 3.3kcal per minute

*Source: University of Chester

Blood Glucose*
The concentration of blood in sugar



Peak (Highest) 152 minutes after lunch started.
Trough (Lowest) 258 minutes after lunch started.
Seated peak to trough 106 minutes.



Peak (Highest) 84 minutes after lunch started.
Trough (Lowest) 144 minutes after lunch started.
Standing peak to trough 60 minutes.

Our solution to you

PROGRESS PLUS Workstations

Key Features:

650mm -1280mm electric height adjustment.
Single, Double and 120 Degree workstations available.
Multiple widths available (1200, 1400, 1600 & 1800mm).



During a survey of people using sit/stand workstation:



For more information please call us or alternatively visit our website

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