

Why it pays to use a standing desk

Britain has one of the highest percentages of obese adults in Europe, leading experts to search for solutions. Obvious ones have been mooted: eating less, moving more, and encouraging children to become more active.

Increasingly, over the past couple of years, standing desks have also been cited as a possible remedy. The thinking behind it is logical: when you stand up, you burn more calories than when seated, potentially alleviating the pressure on those clogged arteries. Studies have propped up the theory: to name just one example, research found that those who stay seated for eight hours a day have a higher risk of premature death.

While the truth is perhaps not quite so simple (eight straight hours on your pins poses its own problems), every physio I've spoken to – too many, due to back issues – has recommended spending at least part of my working day standing.

The physical benefits of standing desks (which typically allow users to alternate between sitting and standing) have been fairly vigorously investigated. But what about the mental aspect?

A new survey, released this week, is the first to address whether access to a standing desk can boost cognitive functions. And it seems the answer is yes.

The Telegraph

Professor Vincent Walsh, of UCL's Institute of Cognitive Neuroscience, conducted a series of experiments at the behest of Posturite, a leading manufacturer of ergonomic office equipment, which is launching a new standing desk called Opløft. "I've never taken any interest in standing desks before, and it wasn't my idea at all," Walsh told The Telegraph.

Walsh devised a series of tests for 15 office workers to undergo within a five-day spell, in an attempt to determine whether results improved when office workers could use standing desks. Despite his impartiality ("We don't really care what the results are," he stresses), Walsh was surprised by some of the results. The employees were twice as competent in decision-making skills, while language-based problem skills improved by 64pc. Concentration and vigilance also rose, as did creativity.

They became better workers, in other words.

The tests were all commonly used experiments taken online, and designed to negate improvement via practice. One of the most striking results, according to Walsh, was in decision making. In the balloon test, the team were shown balloons that represent a monetary value. Each click ups the balloon's value, though the balloon can burst at any point – you can keep your money or greedily seek more, it's about pushing boundaries.

"There's a lot of real world relevance in that task," Walsh explains. "It's a good prediction of whether people do well on diets in the new year, for example, or how they'll do on drug rehabilitation programmes, or giving up smoking."

The Telegraph

"People often do get better, but what was interesting is that people got better throughout the week, and you don't usually see that. Usually, people get better once and then plateau. That was interesting."

In creativity and language tests, there were also marked improvements. For example, in the Remote Associates Test, a "very good test" that is used to determine creative potential, they got better when standing. In verbal fluency and positivity there was also a rise. In a concentration test, the employees got both faster and more accurate. "It's usually a trade off, that when you get faster you get less accurate. That wasn't the case here," says Walsh.

However, there wasn't amelioration across the board. In a happiness task, in which the participants had to see happy or sad faces and associate them with words, it was "neither one way nor the other." The other that failed to register an improvement was memory.

Standing desks | For and against

For:

Standing desks, according to a study at UCL, can help boost a number of cognitive functions, including concentration, decision making, creativity and verbal fluency.

In 2018, a study in the *European Journal of Preventive Cardiology* found that "the substitution of sitting with standing could be a potential solution for a sedentary lifestyle to prevent weight gain in the long term."

In 2014, a report found that intermittent standing at work improves fatigue and helps back pain sufferers relieve their symptoms.

Against:

Standing desks aren't necessarily the answer to all our problems, though they may well be part of the answer to some problems.

As Professor Mark Whiteley, a vascular expert, told the Telegraph: "The whole muscular skeletal system works well when it's moving. It doesn't matter whether you have an office full of workers sitting or standing, if they're mostly static then health issues will occur."

Prolonged standing, according to Whiteley, puts significant pressure on veins, so for varicose vein sufferers a standing desk could be dangerous and lead to leg ulcers.

A 2017 study in the *American Journal of Epidemiology* found that employees who spent most of the day on their feet had double the risk of heart disease as those who mostly sat.

There is also evidence that, for the back, prolonged standing is as bad as prolonged sitting.

The Telegraph

Walsh doesn't offer an explanation for the improvement – he is more interested in how they improved, rather than why. When I ask if standing itself helps the brain function, his answer is distant: "I can't say anything about the ergonomics of standing up and sitting down, because I don't know anything about ergonomics."

Walsh does, however, offer an intriguing hypothesis that may prick the ears of business leaders and overworked employees alike. "Giving people in an office environment a taste of autonomy – they can stand up and sit down whenever they want – I think that's what's behind this."

There is plenty of scientific evidence to support this view, including research from the [University of Birmingham](#) in 2017, which found that workers with high levels of autonomy have higher wellbeing levels, and a [University of Basel](#) report that found "trust-based working time" models to boost productivity.

The results, to Walsh, don't necessarily prove anything yet (though the tests used are well-established and backed by plenty of data, there were only 15 participants). While he wasn't expecting improvements, he was "fairly surprised" by what he saw. "It makes me think it wasn't a complete waste of time. It's worth having a look at."

And would he advise getting a standing desk? "People seemed to get better, and if it's related to the desks, then it's a good idea."