

# Making office workers healthier:

A public health intervention making office workers use their height-adjustable office desks more, conducted for LINAK®

Together with /KL.7, one of the leading behavioural design agencies in Europe, LINAK® set out to investigate design, and test solutions that could help close the intention/action gap - having a height-adjustable office desks, but not using it or only using it to a small extent.

## Inactive behaviour is a risk for our health

The majority in developed countries are sitting down most of the day while working, when watching television, when eating, when transporting ourselves, etc. We spend up to 12 hours a day sitting, many of these hours during work (van der Ploeg, Chey, Korda, Banks, & Bauman, 2012). This heavy physical inactivity, also known as “sedentary behaviour”, has negative effects on our health. Studies have found a direct link between physical inactivity and health issues such as diabetes mellitus, an increased risk of certain types of cancer, cardiovascular disease, obesity as well as an overall increased mortality (van Uffelen, et al., 2010) (van Uffelen, et al., 2010; Schmid & Leitzmann, 2014). Further, studies indicate that the health risks of physical inactivity at work cannot be changed “just” by being active in leisure time (Hamilton et al., 2008) (Schmid & Leitzmann, 2014). In short, the human body was evolved to move – not to sit.

## Height adjustable office desks: healthy but forgot to be used

To minimise sedentary behaviour at work, height-adjustable desks are on the rise in more and more office environments. Office workers that are mainly desk based should at

## least spend 2 hours/day of standing and light activity during work hours for achieving the greatest health risk reduction of physical inactivity (Buckley, et al., 2015).

However, while more and more office workers are equipped with height-adjustable desks to gain a healthier lifestyle, not all of them actually use them. One common reason is that they simply forget to use it during their workday. Typically, we use our limited executive mental functions for more – seemingly – urgent matters (Dolan & et. al., 2010). In psychological literature, this phenomenon is also known as the action/intention gap.

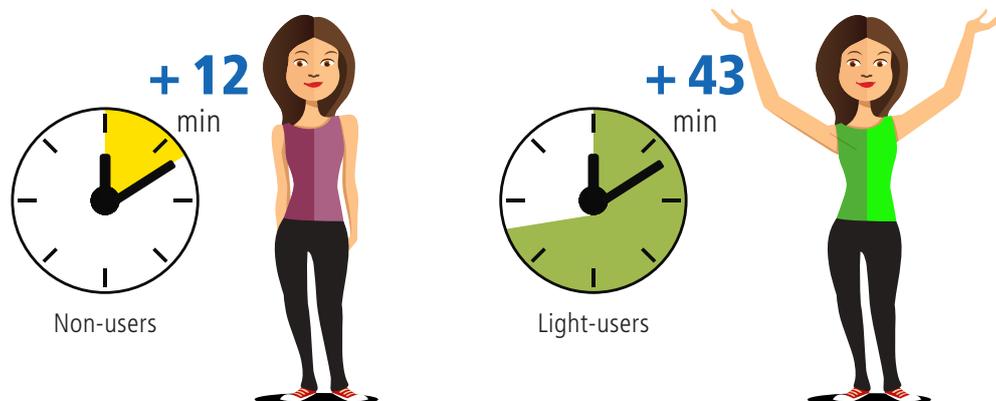
## Motivating average users to use their height-adjustable office desks

Most guidelines for height-adjustable desks give advice to “heavy users<sup>1</sup>”. The intention of this research was, however, to find a way to motivate and support “light users<sup>2</sup>” to use their height adjustable office desks - supporting the average office worker to obtain a more active working day.

## Method

Research suggests that interventions that target modifications in the working environment on the individual-level,

## Reminders work



Reminders increased the participants' standing time. The standing time of non-users increased by 12 min. Light-users doubled their standing time by adding 43 min per day to their base time, going from 36 min to 79 min of standing per day.

<sup>1</sup> Users that stand up more than 20 % of the total time registered

<sup>2</sup> Users that stand up 20 % or less of the total time registered

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produce the largest reduction in workplace sitting time (Dunstan, et al., 2013). Thus, LINAK A/S tested two reminder solutions in three different workplaces in Denmark for 2-3 weeks. Workplace 1 (27 participants) and workplace 2 (21 participants) received email reminders as intervention while workplace 3 (17 participants) received tactile and auditory reminders as intervention. Data was collected through software and hardware measuring if the desk was in a standing or in a sitting position, and if the person was at his/her desk.

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**“We spend up to 12 hours a day sitting, many of these hours during work (van der Ploeg, Chey, Korda, Banks, & Bauman, 2012).”**

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### Results

Because of interventions, light users' standing time increased from 7.6% (36.3 min/day) in the baseline during an eight-hour working day to 16.4% (78.9 min/day) during the intervention period. While there was no effect on heavy users, reminders had a positive effect on the office users that were not using their height-adjustable office desk at all – increasing their standing time to 12.3 min/day. In short, the interventions worked better, the less the office workers stood up in the baseline period.

### Conclusion

LINAK® A/S wanted to test if reminders would increase the odds of office workers using their height-adjustable office desks. Both interventions tested in the current pilot study showed promising effect on increasing standing time for office workers using their desk 20 % or less of the time to begin with. While it depends on individual factors to form a new habit – ranging from a few weeks to a few months – interventions appear to offer a promising tool for supporting office workers to increase the use their height adjustable office desks (Clear, 2014).

### More information

Contact your local LINAK office to receive the full report.

### References

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