

Made to Move



www.linak.com/deskline

LINAK 
WE IMPROVE YOUR LIFE

Made to move

Office environments may differ greatly, but the demands placed on the human body have striking similarities. We were not made to sit in one position all day. Like most other animals, our bodies were designed to move.

Fortunately, a number of tools have been developed to help us feel good and keep moving throughout the day. Propelled by LINAK® electric actuators, height adjustable desks allow you to pick a position that is right for you, anytime of the day, whatever the task. Follow your nature...push a button and make a move.



Made to move

Wellness in movement

Today 70% of the American workforce sits on the job. Due to sedentary lifestyles, lower back muscles have become one of the weakest areas of the body.

“There is no such thing as the correct sitting position. Sitting in even a good posture for more than twenty minutes will result in pain simply from the static loading on the muscles” (Heaton).² People need to get up from their chairs and move at least five minutes per hour.¹

When we stand upright, the pressure on the intervertebral discs of the lower back is fairly low, much lower than when we sit unsupported. However, standing uses about 20% more energy than sitting, so we get tired more quickly and look forward to sitting down.¹



Effects of Prolonged Standing

- Sore feet
- Swelling of the legs
- Varicose veins
- Static muscle fatigue
- Low back pain
- Stiffness in the neck and shoulders

Effects of Prolonged Sitting

- Discomfort in lower extremities
- Static muscle fatigue
- Increased spinal muscular activity and intradiscal pressure
- Increased muscle loading in the neck and shoulder muscles
- Decrease in muscle activity resulting in pain and/or spasms

Made to move

Wellness in movement

Prolonged static postures induce static muscle exertion, which inhibits blood flow. Consequently, the muscles get fatigue, which causes an antsy, anxious feeling that induces the need to exercise the muscles. ⁴

Restless?

Try to get up from your chair and move at least five minutes per hour to minimise getting restless.

The natural response to the antsy feeling from static muscle fatigue is to subconsciously fidget, which usually entails automatically shifting postures within the chair. However, these minor postural changes typically do not provide adequate increases in blood flow to relieve the fatigued muscles. ⁴

Static muscle fatigue is relieved only through muscle movement. Standing and walking increases the blood flow to fatigued muscles and re-energises them.



Made to move

Preventing injury

Office studies show over 30% of staff experience back pain and over 60% experience combinations of other pains in the neck, shoulders, arms and hands.

Alternating between two postures allows increased rest intervals of specific body parts and reduces the potential for risk factors commonly associated with MSD development. In addition, changing your posture provides the amount of movement necessary for the muscles to eliminate the lactic acid wastes that can cause pain.

One study indicated that the ability to vary working postures throughout the day in a well-designed workplace coupled with carefully tailored breaks and exercises can reduce back and other pains by over 80%.²



Made to move

Workplace wellness

Health and wellness

Reports indicate America's weight problem is rapidly overtaking cigarette smoking as the leading cause of preventable death.¹¹

To battle this obesity crisis and rising health care costs, companies are quickly shifting resources to include health and wellness initiatives.

A Mayo Clinic study shows you can burn an additional 340 calories a day if you spend just two hours of your work day standing instead of sitting. If you were to maintain your current lifestyle, this could equate to a one pound weight loss every ten days (burn an additional 3,500 calories to lose one pound).

In fact, recent research points to too much sitting as a major factor in the obesity crisis. According to scientists, when we sit the "enzymes that are responsible for burning fat just shut down." This can lead to retention of fat, lower HDL (good cholesterol), and the overall reduction in the metabolic rate.⁹

Over 60% describe themselves as sitting for hours immersed in the monitor.⁶

Stand up more throughout the day to feel better and shed some extra pounds.



Made to move

Workplace wellness

The solution they say can be as simple as standing up and moving around.

A new study, out of Australia, measuring activity in 168 subjects further supports these claims. Their study found those who took more breaks from sitting had lower waist circumferences, lower body mass indexes and lower levels of triglycerides and glucose in blood, regardless of how much moderate to vigorous exercise they did or did not do.¹²

Even when sitting in the “neutral posture,” the best position is the next position. Our bodies need movement and circulation to work efficiently.¹

Think your workforce will not be interested in health and wellness? A recent workplace study pointed out that exercise during the workday has a perceived impact on an employee’s frame of mind and ability to stay focused.¹⁰

- 85% - exercise gives them energy to stay awake
- 80% - exercise has or would have a positive impact on their overall well-being
- 78% - exercise has or would have a positive impact on their work productivity



Made to move

"Today's workplace demands individual solutions."

*-German designer,
Wolfgang Blume*

Perfect fit

As no one is average on more than two dimensions,³ it is difficult to accommodate a diverse workforce with a standard "one size fits all" desk.

Finding the right desk height allows you to work in your body's ideal neutral posture – the work posture where your body is the strongest and most efficient.

The right desk height helps eliminate discomfort caused by a "desk that does not fit" such as insufficient leg space and inaccurate keyboard/monitor heights. This also helps better accommodate a broad group of people with special needs such as people in the 5th and 95th percentile, bifocal wearers, and people with a physical disability.



Made to move

Love your desk

A modern, clean and up-to-date working environment is now, more than ever, an integral piece in recruiting and keeping talent.

In a Cornell study of height adjustable desks, there was almost a unanimous preference among participants for EHAW (electric height adjustable workstations), with three participants refusing to relinquish their EHAW during the study.

According to one participant, "It definitely changed the way I work."

This agrees with studies at both Curtin Australia and Miami Universities. In each of these studies, participants overwhelmingly chose alternating between sit and stand as the preferred posture^{4,8}

"The human being needs more than just a desk and fluorescent lighting. People need a pleasant atmosphere in which to work, where they have the opportunity to create their own space."

*-German designer,
Wolfgang Blume*



Made to move

Simply put, when people feel good, they can work as efficiently and productively as possible.⁵

Enhance productivity

Alternating between sit and stand positions gives employees more energy and reduces fatigue.

In a Miami University (Ohio) study, there was strong evidence that intermittent standing increases productivity with fewer and shorter breaks throughout the day.

Participants who did not alter their positions (non-standers) took an average of 47% more work breaks plus, the work break was 56% longer.

This study is consistent with other research including the Cornell University study where participants reported improvements in their personal work productivity.

A survey initiated by Microsoft® Hardware found that most employees link workspace design to productivity.⁷

Consider the following:

- Nearly half of office computer users indicated they were spending eight or more hours a day at a computer.
- Nine out of ten said the design setup of their workstation directly affects their ability to be most productive at work.
- Nearly two-thirds of office computer users tie the fatigue they experience during the week to working at the computer for long periods.
- Research shows individual performance increases by 25% when employees use an ergonomically designed workstation.



Made to move

Workplace flexibility

Many companies are implementing systems that change the way workers interface with their customers and fellow employees as well as their office equipment.

Having an adjustable desk permits employees to sit or stand alongside guests to view paperwork or a computer screen at a comfortable level.

Sitting is particularly desirable for tasks involving fine manipulative hand movements or precise foot control actions.

Standing is great when mobility or extended reaches are required.¹³ As an added bonus, when you stand you can keep meetings and “on the fly” interruptions shorter. One company managed to cut their meeting times in half by switching to standing meetings.¹⁴

Push a button and stand to greet your visitors. Not only is it polite, but standing cuts down the time of meetings and “on the fly” interruptions.



Made to move

Workplace flexibility

Make the most of your space. Adjustable desks are ideal for “hoteling” (unassigned work areas), desk sharing, multi-shift and revolving work forces. Further, they can help employees free up overbooked meeting rooms by scheduling stand up at desk meetings.

It is still taboo to sleep on the job, but if you are so inclined...push a button for an instant napping bungalow.

In case others ask: New research suggests, “taking a ‘power nap’ during the working day may well help us perform better.”¹⁵

IT and maintenance staff will appreciate the ease of which they can move the desk up to gain access to cabling and electronics. Not only will they be able to work on items under the desk more comfortably, they will seldom have to remove items from the worksurface to do so. Most electric adjustable desks can lift anywhere from 70 kg to 450 kg at the touch of a button.



References

- ¹ <http://www.spineuniverse.com>
- ² The Source Public Mgmt Journal, Nigel Heaton of Human Application
- ³ Ergonauts (www.ergonauts.com), Certification in Ergonomics Management Program
- ⁴ Dr. Marvin J. Dainoff. "The Effect of Ergonomic Worktools on Productivity In Today's Automated Workstation Design"; Center for Ergonomic Research, Miami University: Oxford, Ohio
- ⁵ Ergo Solutions Magazine, May 2003
- ⁶ "National Study Finds Computer Workers at Risk for Stress Injuries," by Michael Grossman
- ⁷ Ergoweb (www.ergoweb.com)
- ⁸ Dr. Alan Hedge "Effects of Electric Height Adjustable Worksurface on Self-Assessed Musculoskeletal Discomfort and Productivity in Computer Workers" Cornell University, Design and Environmental Analysis
- ⁹ ABC News: "A New Way to Control Weight?", Nov. 2007
Full research study by Marc Hamilton, University of Missouri-Columbia in Journal Diabetes (Nov. 07)
- ¹⁰ MMQB, Oct. 07, article on Workplace Index Survey on Nature of Work
- ¹¹ Washington Post - "Obesity passing smoking as top avoidable cause of death" by Rob Stein, March 2004
- ¹² Dan Harrison and Matthew Bennis, "Sitting Ducks", Feb. 2008, (www.smh.com.au)
- ¹³ Occupational Safety and Health Division of Singapore: "Guidelines on work in standing/ sitting positions"
- ¹⁴ "Take a Stand to Keep Meetings Short and Productive" by Rick Broida
- ¹⁵ "Power naps boost work performance" by Alison Motluk (www.newscientist.com)

Terms of use

The user is responsible for determining the suitability of LINAK products for a specific application. LINAK takes great care in providing accurate and up-to-date information on its products. However, due to continuous development in order to improve its products, LINAK products are subject to frequent modifications and changes without prior notice. Therefore, LINAK cannot guarantee the correct and actual status of said information on its products. While LINAK uses its best efforts to fulfil orders, LINAK cannot, for the same reasons as mentioned above, guarantee the availability of any particular product. Therefore, LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or other written material drawn up by LINAK.

All sales are subject to the Standard Terms of Sale and Delivery for LINAK. For a copy hereof, please contact LINAK.

LINAK® 
WE IMPROVE YOUR LIFE