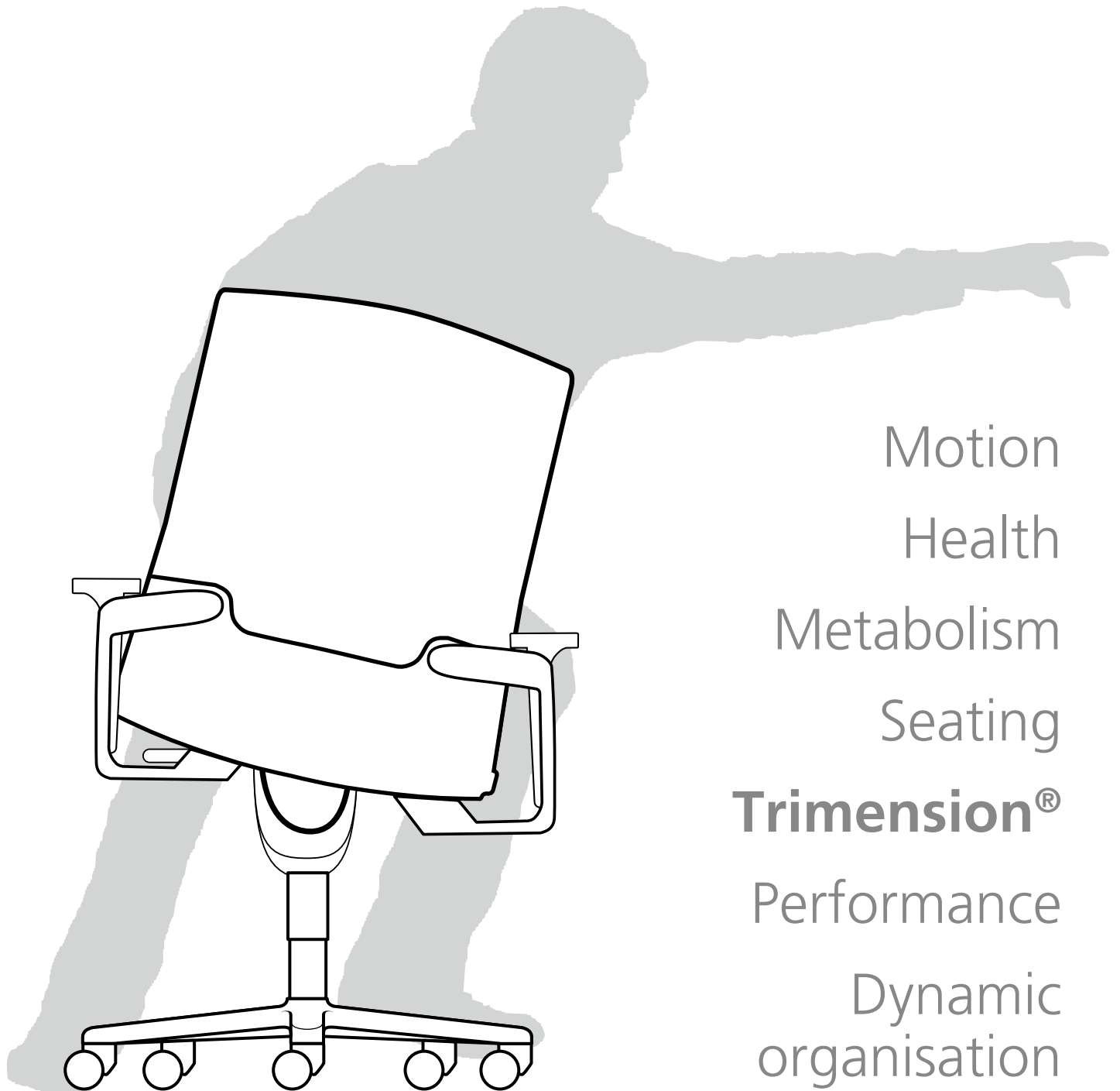


Office for motion

Facets of new ergonomics



Motion

Health

Metabolism

Seating

Trimension®

Performance

Dynamic
organisation

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Overcoming the impasse!

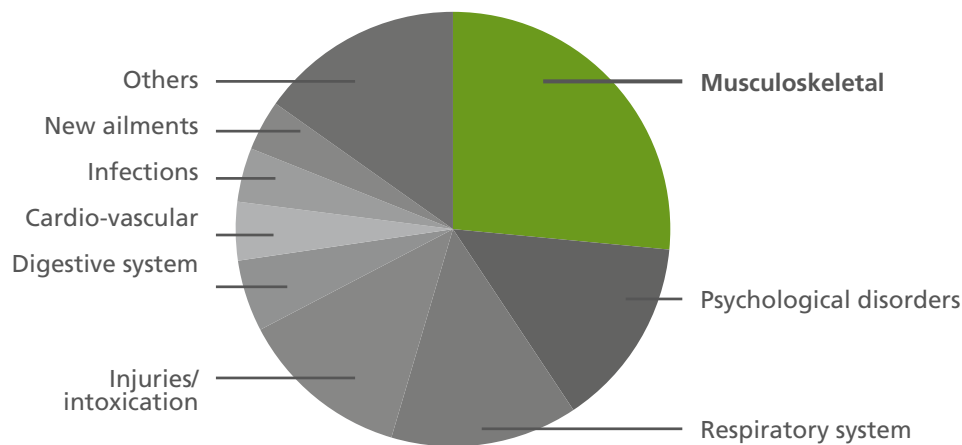
For 150 years ergonomics has sought to adapt workspaces to people in order to maintain performance and safeguard health. Paradoxically however, the quest to avoid ailments and to enhance productivity has cut any kind of physical activity in the office to a minimum. Everything is close to hand and our bodies are supported by cumbersome office chairs with multiple adjustments. Working environments are also handily condensed to computer screens. Instead of rummaging for folders, lugging files about

and delivering office post, the only exercise taken is confined to typing on a keyboard and moving a mouse to get office work done. And what's the upshot? The imbalance between performance and physical fitness is growing, days lost to sickness are soaring and people are taking longer to recover. At the same time, the knowledge economy is placing office work at the heart of added value. As former objects, employees are turning into the subjects of business success. So isn't it high time we cast a critical

eye on ergonomic strategies that are clearly leading to an impasse? Because based on current health-research findings, brand-new approaches can be developed today that spawn health-boosting, motivating and efficient office spaces.

We hope this publication is a useful contribution and will spark debate on the issues and prompt action to be taken – which after all speaks louder than words.

The most frequent types of ailments



Sick days per 100 insurance holders – Germany 2011

Source: BKK Confederation of German Health Insurers

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The backache epidemic

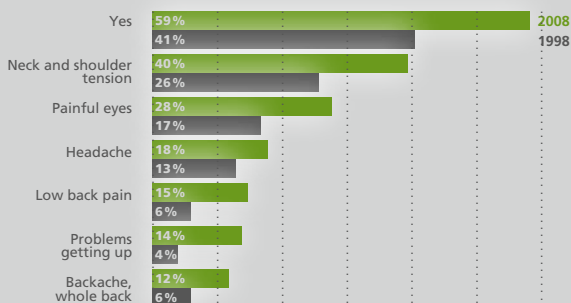
The rise in back pain is a global phenomenon. Which is why the World Health Organisation declared the "Bone and Joint Decade 2000-2010" in January 2000. Because muscle and joint ailments are the second most common cause of working days lost to sickness – with no sign of this trend abating. This negative development also applies to offices. The number of ailments, particularly where people work at computers, has risen sharply. The figure's jumped by over 44 per cent in ten years – and virtually all these complaints are associated with sitting still for long periods at desks. Although physical work is less and less common, muscular and skeletal complaints are going up. There's also been an upsurge in the number of days lost to sickness due to depressive illnesses. These occupy second place behind

muscular and skeletal complaints. Some stress researchers believe the combination of a pressurised environment with too little physical activity is disastrous and has a detrimental effect on the metabolism. In stressful situations, hormones and neurotransmitters are emitted to put the body on alert, to focus all its senses and to ensure it performs at its maximum capability. On the other hand, all bodily functions not immediately required are held in check. These include recuperative and digestive processes and the capacity for cognitive thought. The problem is that if this condition is combined with a dearth of physical activity, stress hormones take longer to dissipate and constant major disruptions to the metabolism arise. Workloads, pressure to perform, personal availability, sensory overload from multiple media

channels and a range of other disruptions in offices have burgeoned. In many environments, these factors have led to perpetual stress levels.

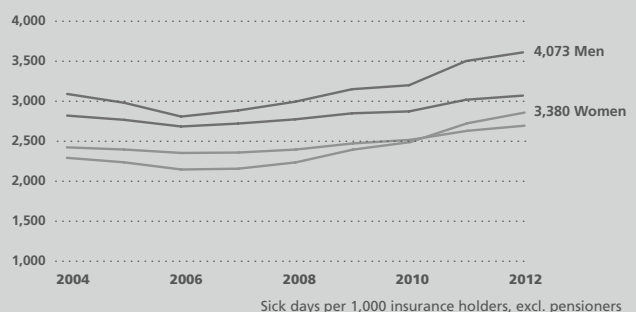
At the same time (especially in stressful situations) office workers very often sit at their desks staring at computer screens and natural physical responses to conquer stress are lacking. As a consequence, one reason given by new theories for the sharp increase in depressive illnesses is that relentless stress, not just as a result of constantly overtaxing our bodies (for example as with professional sports players), but also due to a lack of physical activity, can weaken the immune system and cause the body's natural regulatory mechanisms to topple.

Complaints due to computer usage



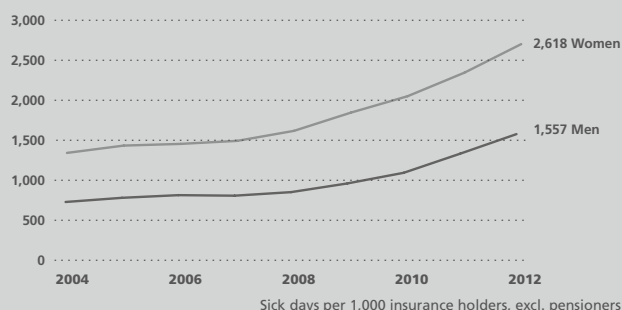
Virtually all complaints result directly from a lack of physical activity while sitting.

Sick days due to musculoskeletal complaints



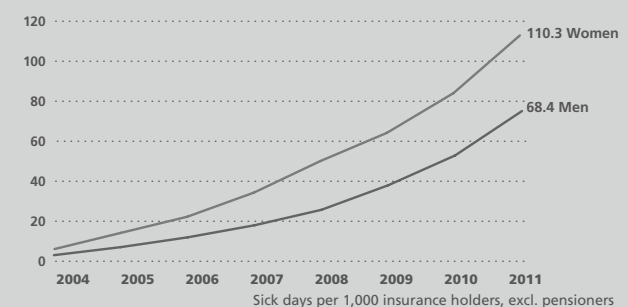
Despite less physical work, working days lost due to musculoskeletal complaints is constantly increasing in both men and women.

Increase in sick days since 2005



After a sharp decline until 2005, sick days had increased by over 27 per cent by 2012.

Sick days due to burnout

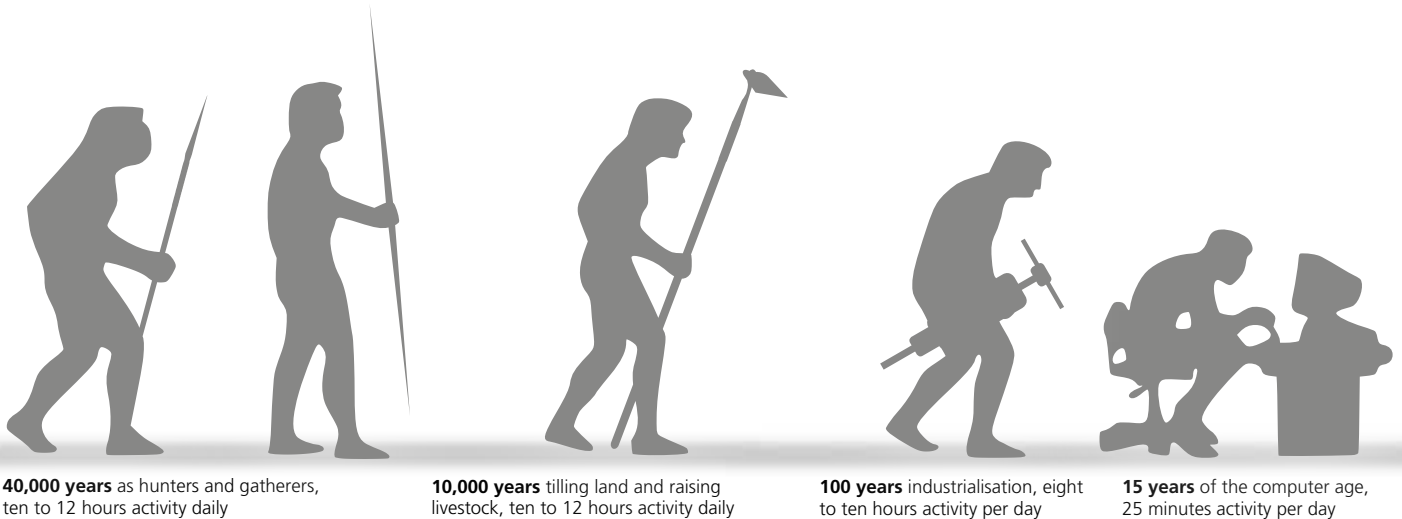


There has been a dramatic rise in mental illnesses, particularly burnout, with women more significantly affected than men.

Source: BKK Confederation of German Health Insurers

The biological background

Surveys indicate that 80 per cent of office workers apologise for not sitting correctly – so are people the problem or the rule? Human behaviour can't be changed in the long term by standards and regulations if it clashes with their biological makeup. And all appeals, warnings or incentives are futile if the natural inclination isn't there. Therefore, it's vital to accept our biological disposition as the basis for a new understanding of ergonomics.



The process of sitting in particular shows just how strongly biology governs our behaviour. Despite all warnings and findings to the contrary, adults sit down whenever and wherever they have the opportunity, whether they're tall or short, fat or thin, young or old.

It's only children that actually have a natural inner urge to be on the go, so that physical skills develop properly in the growth phase.

After that period the biological principle of energy efficiency dominates. People only become physically active when it's a question of self-defence. In the past, calories used to be in short supply and had to be burned up carefully. Consequently, the natural impulse to save physical energy played a key role in shaping civilisations' progress. Everything that facilitates life, by

reducing the physical activity required, gains a firm foothold with the majority of the population. Examples include remote controls and using escalators or lifts. And that's exactly where the problem lies...

A walker by nature...

...because to date, the approx. 50,000-year-old history of human beings has been shaped by demanding physical activity which included hunting and gathering, fleeing from danger, fighting, dancing, tilling the soil and selling ourselves for work... And we do all that on two legs. Evolutionary researchers believe that our upright posture is responsible for man's special developmental history. Our distinct sense of balance, the enormous flexibility of our backs and

above all the dexterity of our hands have opened up the path for us to develop tools. Therefore, nature has created the perfect conditions for human beings to get about on two legs and based all their biological processes on this fact. Even 100 years ago, men were physically active for eight to ten hours a day on average. It wasn't until mass motorisation and (to an even greater extent) the emergence of computers over the last 20 years that this figure has now plummeted to 25 minutes a day. However, living and surviving with so little physical activity is not part of the blueprint and the natural regulatory system of human beings.

...with muscles as the metabolic powerhouse

One of the keys to physical and mental health lies in stimulation of the muscles, our principle metabolic organs. Because it sends stimuli, the metabolism requires movement, which our muscles are responsible for. As long as they are stimulated accordingly, around 60 million stimulus receptors in the body register and report the cells' need for nutrients. Therefore a distinction is made between non-pennate and pennate muscles. The first are – like biceps – linear and the latter need stimulation from different directions. Only very few muscles act on their own. The complex way we move is a result of muscles interacting in large muscle loops and vice versa. Increasing complexity of movement means that more muscles are stimulated – and therefore supplied with nutrients. But the efficiency principle applies in this case too. Everything that isn't used and moved regularly is not supplied adequately any more. Which is why we turn in our sleep about 40 to 60 times per night. In the long term, one-sided pressure and a lack of metabolic stimuli lead first to too much acidity, then to inflammation and subsequently to cells dying off prematurely.

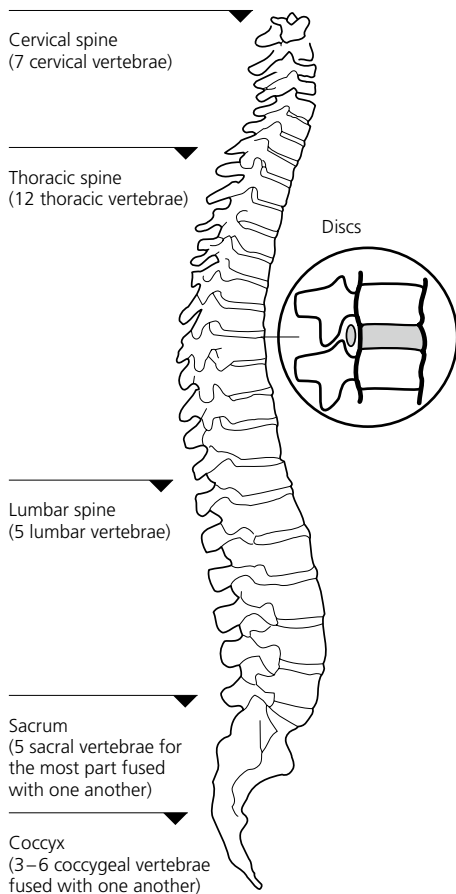
that move against one another and which are designed like small joints and positioned between the discs. Similarly to a sponge, it is nurtured by applying and relaxing mechanical loads. Its strength and flexibility is guaranteed by the muscles deep in the back, through small muscles that are applied directly to the vertebrae. They lend the spine its stability and flexibility. Without any muscles, the spine would probably break if it had to carry a load of five kilos. In other words, the problem doesn't lie in a weak spine, but in today's lifestyle that neglects the body's natural regulatory and supply systems.

A vicious circle of inactivity

Until around 20 years ago, constant extreme or one-sided strain placed on the body was considered the chief reason for back pain and degenerative damage to muscles and the skeleton. In some professions they still are today, even where top athletes are concerned. Treatment followed suit by prescribing relaxation and avoidance tactics to ensure that joints and cartilage recovered, accompanied by passive therapies such as massages or issuing pain killers. Today it's assumed that over 80 per cent of back pain is the direct cause of a lack of physical exercise. The muscles atrophy, joints and the spine are destabilised and pain increases. Treatment that is passive and seeks to remove all strain from the body becomes a part of the problem. Avoidance tactics and the type of treatment foster the cycle of pain. The result is chronic pain that can have a negative impact on life permanently.

The spine – a design miracle

In conjunction with back pain, the spine is cited as being poorly designed and the source of all evil. In reality it's a masterpiece and guarantees our ability to walk upright. It's supple, very strong, stable, but still flexible and above all protects the spinal cord and the nervous system – as long as it's looked after and given what it needs. Its secret is that it consists of vertebrae



“Physical activity’s a vital need”

An interview with Professor Ingo Froböse

Former top athlete, Professor Ingo Froböse, is one of the most renowned advocates of an integrated approach to promoting healthy practices. As professor at the German Sport University Cologne and Head of the Centre for Health, he’s a specialist in prevention and rehabilitation. In addition to activities as a researcher and lecturer, he’s also a scientific adviser to the German Bundestag and a number of different health insurance companies and social services. For more information contact: www.ingo-froboese.de or www.dshs-koeln.de

Gyms and spas are booming and corporate health management is gaining importance – but health complaints, particularly in office-related work, are on the increase. From a scientific standpoint, why is that?

The main reason lies in muscular and skeletal complaints. Backs are affected particularly frequently. Over the past few years, the number of mental illnesses is also noticeably on the increase too. Reasons are the rising number of changes in the immediate surroundings and stress at work. But above all, it’s the rapid pace of communications that’s putting pressure on the people affected.

In addition to muscular and skeletal complaints and mental illness, obesity is also increasingly dramatically – in children and young people already. On the other hand, the fixation with being thin is also much talked about with regard to girls and young women. Is there a template for how people’s disposition and their habits regarding physical activity and diet should interact?

As is so often the case, the solution to the problem lies somewhere in the middle. Energy supply and consumption must be equally matched. A happy medium is absolutely fundamental. But there’s no catch-all solution. Equilibrium is very personal and depends on the genetic predis-

position of the individual, as well as the metabolic rate. There’s often a significant imbalance. The problem’s not that we should eat more, in fact the contrary. We also now have extensive knowledge about diet. The problem is burning calories. We burn a lot fewer calories than we should. But in the long term that’s another problem looming on the horizon. Because the low level of calories we burn has a negative effect on our metabolic rate. This is then comparable with an engine that gets smaller and then starts to stall. We’re then trapped in a vicious circle.

“It’s better to be a bit chubby and fit than slim and unfit” – in many articles you suggest that activation and stimulation are the keys to fitness and a feeling of well-being. From a former top athlete we would have expected you to call for more sport – what’s the difference?

One thing I have realised is that top-level sport is not a universal panacea for all ills. Because 85 per cent of people are not attracted by the range of sport available today at all. Important is the fitness of the body as a whole and not just one part of it. It’s not beneficial at all if a vaulter can only jump and a sprinter can only sprint. All systems in a state of harmony is the key. That’s what I believe is most important.

Why in your experience do even health insurance companies find it difficult to implement concepts that encourage more physical activity in their own offices? Who do we have to approach and persuade in order to achieve the long-due volte-face?

Often it’s your own backyard that you clear up last. And the same goes for health insurance companies. They indeed discovered the benefits of corporate health-boosting programmes. But not necessarily for their own gain, but as a marketing concept. The importance of these programmes is vastly underestimated by health insurance companies. As a result, they don’t practise what they preach.

And to answer the second question, physical activity is an issue that applies to

all areas of society. As a result, you can only achieve these changes if all parties involved have a stake in them. What’s required are clear-cut role models and top sport is the very place they shouldn’t be drawn from. I also believe that in order to develop a joint strategy, working groups are required that go above and beyond the limits posed by government ministries. Taxes should be deployed to fund the programmes and not health insurance companies’ revenue. Finally, I believe that a major campaign, comparable with AIDS campaigns, is imperative. This is the way to create a new communications strategy.

Do you think that taking a quantum leap or small steps make more sense as regards generating changes in attitude? What role could furnishings, organisation and buildings play in the process?

First of all, small steps and big leaps are not a contradiction in terms. They can both be juxtaposed. Numerous small steps have already been taken. What’s currently missing is the link in between. An overall strategy and a concept need to be put in place. Workplaces, homes and lifestyles play a key role as backdrops. One thing I have learnt is that in order to encourage people to engage in and with physical activity you have to approach them in their current environment.

And finally, what are you working on at the moment? What are your goals?

As a researcher, over the last few years I’ve been looking at minimal levels of activity. In other words, how little activity is needed to cover the basic requirement for physical activity? I hopefully know all there is to know now about managing training. Researching minimal levels of activity is now my goal. In other words it’s a question of telling people at some point to what extent, and perhaps even at what time of day, they should engage in physical activity. Personally that won’t be very much, but for the majority of people quite a lot. I hope that when I retire I’ll know the answer to this question.

Paradigm shift – new principles of health workspace design

New principles in designing office environments could be promoting diversity instead of standardisation, encouraging a wider instead of a smaller sphere of operation, stimulating instead of kerbing the senses, increasing instead of decreasing motivation, offering a dynamic and not a static environment and nurturing social interaction rather preventing it. In the interests of furnishing concepts, types of organisation and room structures that truly place people at centre stage for the first time in business history. When we're talking about an integrated approach to triggering physical activity, the journey's the reward!

Dynamic replaces static ergonomics!

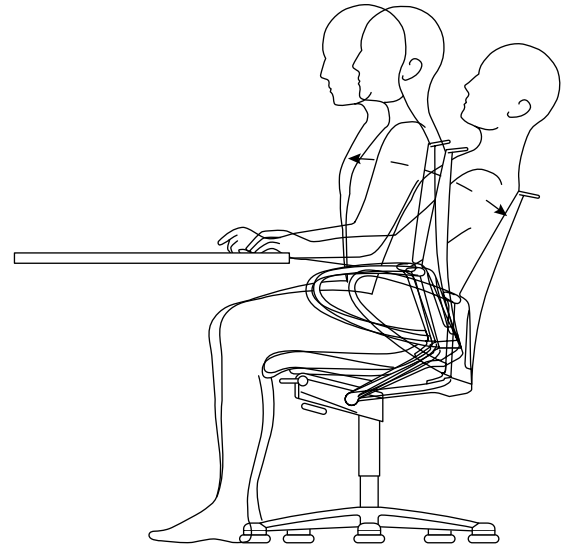
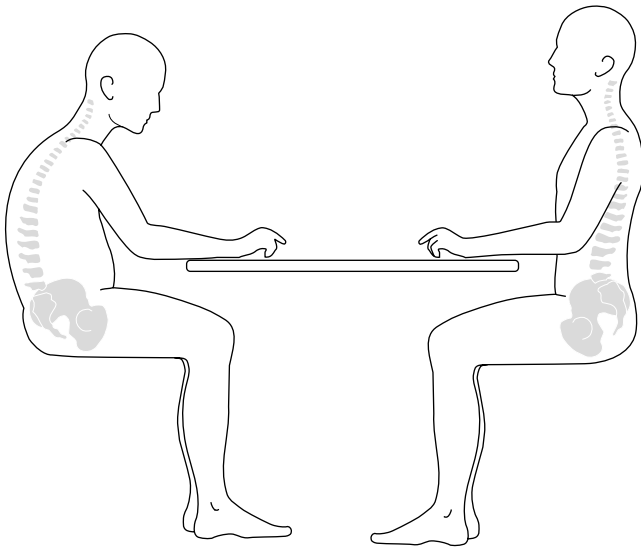
The development from the industrial to the service economy is still shaped by ideas of efficiency during industrialisation in the 19th and 20th century. The widespread pattern of cockpit organisation, where everything is close by, is based on performance criteria of an office factory that are derived from Taylorism. But is the replication of mostly similar, collaborative activities (typical for the way a factory is organised) really one of the core processes fit for offices of the future? Is the speed at which data is entered really the benchmark for assessing the quality of office work? What criteria apply today for good office work? In this backdrop, isn't it increasingly about following arguments, the ability to analyse, responsibility for our own actions, creativity and soft skills?

Motivation's the name of the game!

The key importance of physical activity for people has long since been recognised in various areas of our private and working lives. For example, in hospitals patients are encouraged to move about as quickly as possible after operations in order to activate the cardiovascular system. The health and spa industries are just some of the growth sectors and major campaigns are targeted at getting a large proportion of the population to take physical exercise. And in the office? Here our bodies are not taxed physically enough, working environments have shrunk in size and cut-backs in physical activity define organisational and planning strategies. Although placing less strain on our bodies has led to a chronic lack of physical activity. But if the body no longer has any stimuli, life also ceases. A living organism is based on the principle of stimuli and response. A lack of thirst means there's no need to drink, a lack of hunger means there's no need to eat, a lack of sexual stimulation means there's no need to reproduce and no stimulus means there's no need to move and no cell metabolism.

Activity into the workplace, not after hours!

Nowadays, digitisation has maximised the compact nature of working environments. The desk is the desktop, post is sent to the mailroom by a mouse click, filing is done by hitting a symbol, duplication is carried out through mailing lists, social contacts are by e-mail or chat room... The prices paid are damage to individuals' health, business losses, as well as the risk of healthcare and social systems collapsing. Company health management departments aim to counteract this state of affairs by offering fitness programmes during breaks and after work. But because the biological drive to take exercise is missing, the numbers of people taking part and the success gained is usually frustratingly low after a short period of time. Wouldn't it be much more logical to integrate physical activity into day-to-day lives than to try to compensate for the lack of it outside working hours?



Sitting – as bodies want to and can

There's no such thing as sitting correctly or incorrectly, but only naturally. Any postures that the body can adopt without causing any pain are correct and important. Therefore, the office chair should offer enough space for different postures – from sitting up straight to lounging about, to squatting or sitting across the seat.

Adjustments should be limited to a minimum so as not to impede with changes in posture. Chairs that offer

tailored adjustment options for different postures and intuitively simple changes to the backrest, armrest, backrest height or seat depth, strike the right balance between automatic stimulation to move about and the ability to choose personal comfort preferences.

Chairs should have synchronous-adjustment mechanisms (co-ordinated movement of the seat and backrest) which allow natural and unwitting interactions between the body and

the chair. Small shifts of weight will already lead to changes in posture and a range of motion.

With a distinct, understated aesthetic, the design should reflect the natural nature of sitting.

Sitting naturally

The obvious option is to start encouraging physical activity in places where people spend long periods of time working virtually statically, for example when operating computers at their desks. In offices it isn't possible to do without the benefits of digitalisation. By the same token, companies need to ensure that while sitting down people's metabolisms are stimulated and activated. Not just to maintain physical fitness, but also to boost mental agility.

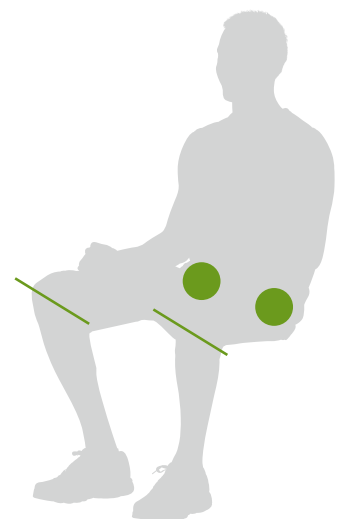
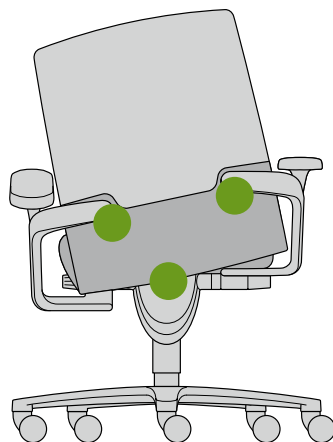
The philosophy of prosthetics: a dead end

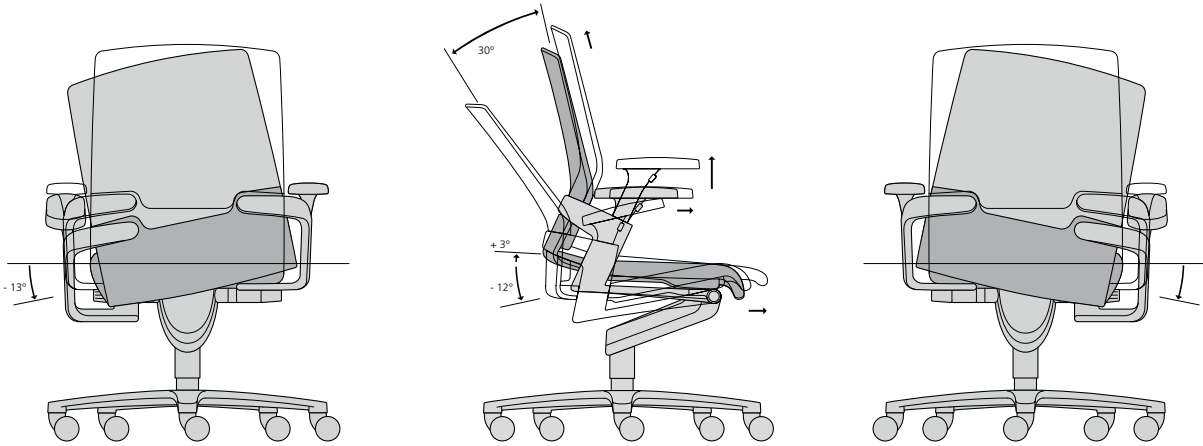
For a long time, ergonomists have agreed that the best posture to adopt while sitting is always the next one. But at the same time the concept of the "correct" posture is also pursued. With numerous adjustment options, marketing strategies proclaim perfect customised adjustments and minimal strain as possible on bodies – a contradiction in itself. A corset makes muscles weaker and prevents any stimuli for the body to move. And any effort required to change posture is thwarted. The medical aesthetics of these so-called "health-boosting" chairs is also counter-productive. They can lead to more neurological stress responses which by turn affect the metabolism and muscle tone. Fears about sitting incorrectly then become self-fulfilling prophecies. Sitting is however a standard component of our biological options concerning posture – and therefore just as natural as any other posture as well, as long as it's repeatedly altered.

Trimension® – teaching seating to walk

But is the previous standard of motion, applied to two-dimensional dynamic sitting postures with bending and stretching the torso while seated, enough if people spend six, eight or more hours at their desks in front of their computers? The biomechanical analysis of the body shows that it's primarily the three-dimensional movements of the hips that activate the muscles and skeleton. The hips are considered the body's powerhouse. So doesn't it make sense to integrate this flexibility into seating and teach seating how to walk? However, the previous three-dimensional systems such as exercise balls, or sprung chairs that deliberately wobble have not proved suitable for longer periods of working, or only to a limited

extent. They can quickly tire and unnerve people and lead to muscle tension. This is particularly the case with individuals who don't take regular exercise and only have limited awareness of their bodies. Therefore, the body should be in its natural equilibrium whatever the posture. The goal is to activate and stimulate the body, but not put it through a course of training and overtax it. To produce a three-dimensional and supported form of motion, Trimension® was developed in close association with the health and sports science sectors. Trimension® is a synchronous adjustment mechanism that allows two-dimensional bending and stretching of the torso and sideways movements of the hips.





Authenticated anatomical seating

Initial trials with Trimension were very promising. But how would the average person react to this new form of motion? What would they think about this new form of seating? And does the level of flexibility offered tally with the joints' natural scope of motion? This was why ON® was the first office chair to be fitted with Trimension. It underwent scientific lab analyses by the Centre for Health at German Sport University Cologne to examine how it adapted to bodies and how it was received by people using it. The analyses looked at the range of motion, comfort (pressure behaviour), activation of the muscles (complexity of the movements), the interaction be-

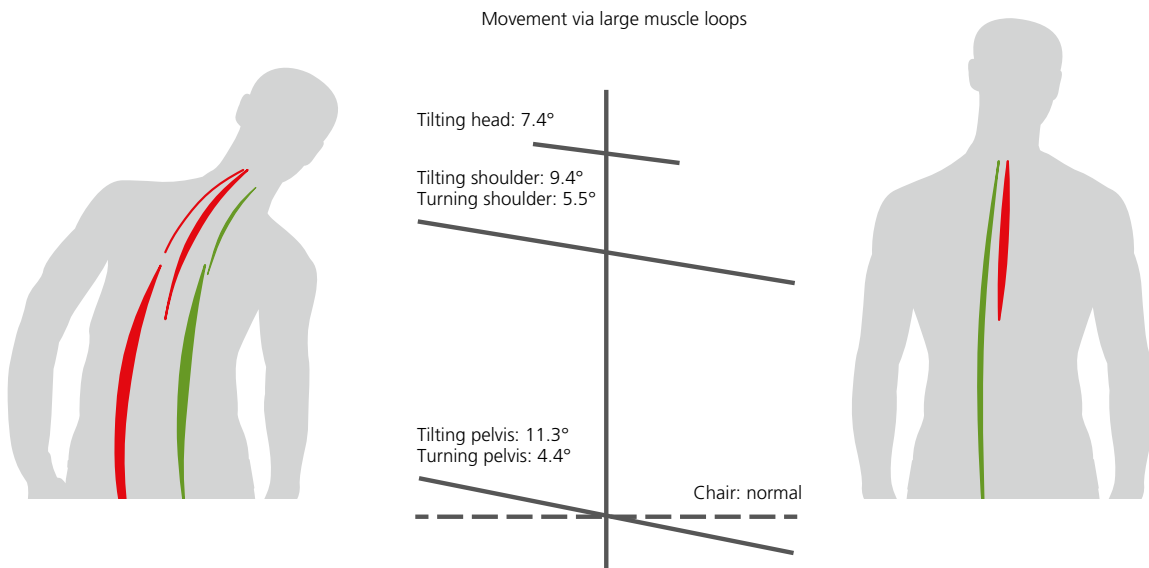
tween people and the chairs (creation of stimuli) and the subjective feeling of well-being. The results:

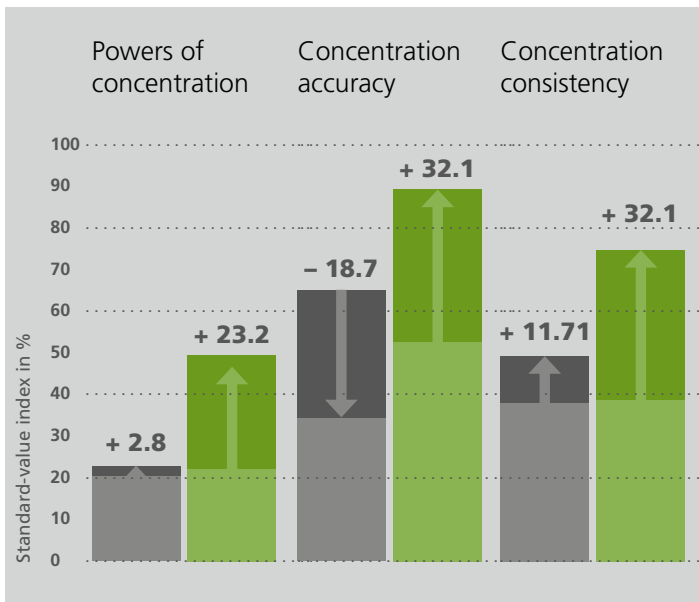
- Trimension fosters a range of three-dimensional movements (extending, flexing and lateral flexion of the body, as well as rotation of the pelvis) which natural range.
- Comfort while sitting doesn't produce any pressure peaks anywhere, regardless of the movement concerned.
- The muscles are activated in large muscle loops, from the ankle to the neck vertebrae.
- The stimuli emitted to change posture are balanced. Trimension encourages the person to move and

reacts to changes in weight and posture however minimal.

- Virtually all the test persons also found the greater scope of motion to be very pleasant and wanted this type of office chair themselves.

The lab study on the biomechanical impact of a new office-chair system is available to download at: <http://www.wilkhahn.com/on/>





Development of powers of concentration on the part of the control group (grey) with conventional office chairs and the trial group (green) with three-dimensional ON chairs over a period of three months.



1 = Totally disagree 5 = Agree totally

Source: Centre for Health at the German Sport University Cologne

More activity equals better productivity

Analyses of schoolchildren and senior citizens demonstrate close links between physical activity and mental performance. The intriguing question is: does more activity at desks also mean that people concentrate better? The Centre for Health has looked in detail at the impact of Trimension®

on performance and health. A comparative field study was carried out on 80 test persons in the offices of an insurance company. After the first measurements had been taken, the trial group received (n=40) ON office chairs. After three months, concentration performance was tested again.

The results are unequivocal. The group on the three-dimensional office chairs had increased significantly over all concentration criteria (speed, accuracy and consistency). The control group on the other hand stayed at the level first measured.

Small-scale activity with a large-scale effect

Researchers have long since agreed that minor, varied and frequent movements hugely benefit health. At the same time, analyses from Australia show that a constant lack of physical activity at work can't be compensated for by sporting activities in leisure time. Which is why, compared with conventional office chairs, three-dimensional dynamic seating is objectively an enormous advance from a health standpoint. This benefit is also confirmed by the subjective perception of the trial group. Some 58 per cent of people said that on reflection the chair had improved their feeling

of well-being, 29 per cent of people were undecided and only 12 per cent believed that the chair had probably not been responsible for an improved feeling of well-being. Nobody rejected this possibility completely, while on the other hand eight per cent were completely convinced by its health-boosting effect.

In other words: three-dimensional dynamic seating is used, it increases the feeling of well-being and improves performance. Even if a very conservative estimate is given for the ensuing rise in productivity, the chair's pos-

sibly higher price will therefore pay for itself in a short space of time already. This factor is quite apart from the medium-term effects such as the expected drop in days lost to sickness.

A comparative field study on user behaviour, concentration performance and the feeling of well-being is available to download at <http://www.wilkhahn.com/on/>

“New working scenarios, new seating”

“Market momentum requires brisk corporate development, based on organisational methods and room layouts to match. So mentally and physically flexible employees are vital who can handle frequent changes of job and workspaces, the variety of people they deal with and talk to across previous departmental confines.

We help by providing first-class dynamic seating that fosters movement, to personally organised workspace layouts and meeting backdrops.

We also have a whole host of different room types like the project lab, or the eco lounge that offers wholefood and a natural feeling of well-being”.



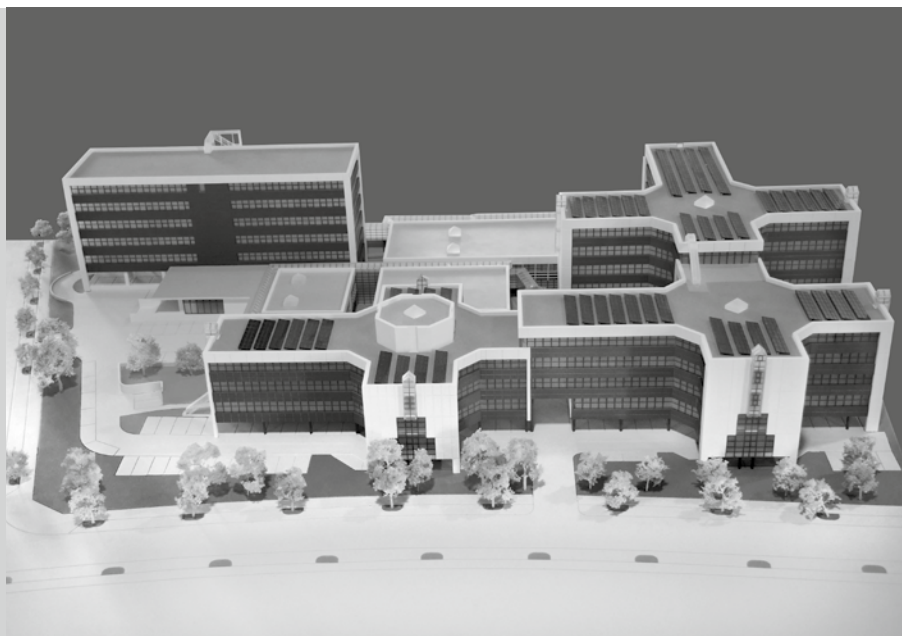
Matthias Walther, Director of Central Services, Haufe-Lexware Services GmbH & Co.KG

Haufe Group’s premises in Freiburg now encompass six new and purchased neighbouring buildings to accommodate a workforce of around 800 currently. In the past, the company had a traditional departmental structure. Today, over 50 per cent of the staff works in alternating project teams and at different locations within the Group. The goal is for this figure to climb to 80 per cent. An astonishing 65 meeting, seminar and communications spaces indicate just how important direct personal interaction in the same workspace is to well-oiled project organisation. The top storey

of the latest building was converted into an ultra-modern communications area, equipped with state-of-the-art modern media equipment and interactive furniture. Other features comprise semi-public niches, lounge zones and small kitchens spread all over the premises which encourage people to meet up on a formal and informal basis. The open-space areas in the inner courtyard were also given a make-over, so that people can work or relax there when the weather’s fine. In an organisational change process, chairs are especially important and have dedicated owners. Therefore,

they turn into anchors when people work partially in departments and partially in alternating project groups. So it’s unsurprising that a few years ago the office-chair selection procedure was carefully organised to include staff from many different areas. Criteria applied involved top-quality ergonomics, an appealing design, good value and suitability at all levels of the hierarchy. After several testing sessions, the majority favoured Wilkhahn’s new three-dimensional seating concept. Today the company has over 400 ON chairs which all workspaces are to switch to successively.

With brands like Haufe, Haufe Akademie and Lexware, the Haufe Group has evolved from a successful publishing house to a specialist in digital and web-based offerings. It also provides legal, business and fiscal training, as well as consulting services. The Group’s headquarters are situated in Freiburg, Germany, with branches at home and abroad. In German-speaking countries it’s considered one of the leading solution providers of expert information and portals, (cloud-computing) applications, eProcurement, online communities, specialist software, as well as development in human resources and organisational terms. Haufe brand solutions are applied successfully in over 75,000 firms, including several DAX companies. The Group has a workforce of over 1,300 and is pursuing an international growth strategy propelled by today’s portfolio of services and products.



Away from desk-based physical activity to whole workspaces

But encouraging physical activity should not just be limited to sitting at desks. Height-adjustable desks offer the opportunity to work while standing up (standing-sitting dynamics). However this does require a certain amount of deliberate action and the cognitive drive to change posture, which is why this function is not used in practice by many. To integrate more physical activity into office work, general re-organisation of office spaces is a more effective solution.

Temporary standing instead of constant sitting

It all starts by restructuring working processes to provide for a change between sedentary and standing activities. Whether it's a question of placing the wastepaper basket in the corner of the room, or the phone on a lectern, the most important task is to stimulate people to get up. But this doesn't just apply to people working at desks. Meetings and conferences often drag on – and mostly on seating that encourages virtually no movement at all. Anyone switching from sitting-down

to standing-up meetings kills two birds with one stone. The change of posture is good for the body and work is more productive during standing-up meetings. However, because standing up for long periods of time is even more tiring than sitting down for a long time, fully flexible one-legged leaning aids at lecterns or high tables combine intuitive keep-fit exercises with relaxing the body. As an analysis of "Stitz" proved, temporary use of a dynamic leaning aid counteracts

problems with balance and improves muscular co-ordination. The more frequently Stitz was used in addition to an office chair, the better the development of the test persons' measurement figures.

See Ingo Froböse for example: case study of the impact of a Stitz/standing-sitting workspace on selected co-ordination skills, Cologne 2006.



Dynamic, participation-driven furnishing concepts

Seminars, training and project-work backdrops go a step further by urging people to become involved in their designs. Physical activity increases the chances of people participating actively in their workplaces. Because the input and long-term impression gained is likely to be greater if more

senses are stimulated. Foldable, transportable tables, pinboards, flipcharts and stackable chairs are the ideal tools that are set up by the people themselves. As a result, the warm-up phase, or period when people actually deal with the issue, is speeded up considerably. Another welcome side

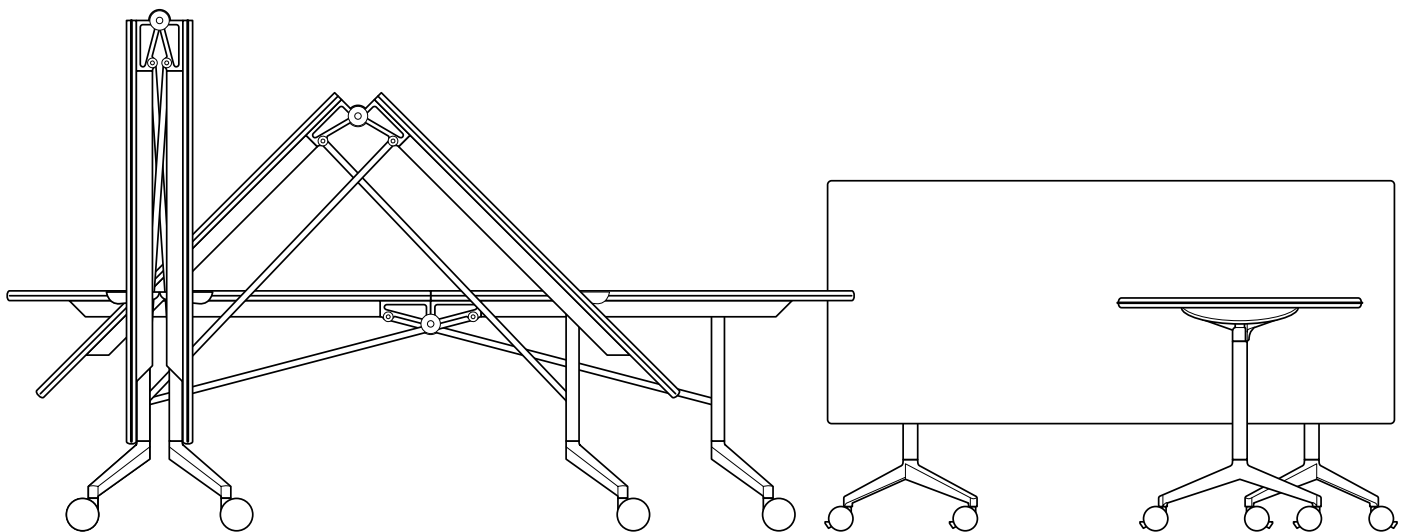
effect is better space usage because the room's more versatile. Consequently, usage is more frequent and extra manpower's not required for alterations. Similarly to dynamic seating, significant efficiency improvements in this case go hand in hand with health aspects.

Flexible office types encourage activity and socialising

Flexibility and dynamism are embraced in modern office forms like the activity-based workplace. This concept originally circulated in the 1990s in the Netherlands and is currently a hot topic at major companies the world over. Office processes are no longer simply centred around static spaces that employees are tied to. Depending on the task and activity involved,

office buildings offer different environments. They accommodate spaces for think-tanks, conference-call meetings, lounges, cafés, bistros, libraries, hyperconnected project rooms spread over several areas (sometimes across the Globe) and places for people to relax and recharge their batteries in. At the same time, this movement concept also supports personal inter-

action in the company – and therefore not just health, but also social cohesion and informal opportunities to share expertise. The more often rooms and environments are changed and the more varied these changes are, the more effectively all the senses are stimulated.



Tips and tricks

Integrating posture changes into the organisation of workspace processes is more effective than offering extra fitness programmes in breaks and after work. Costly time-consuming initiatives aren't the order of the day. Quite the opposite in fact. Small changes can have a major impact too... Perhaps you have your own ideas about how to encourage physical activity in the workplace? Then write to us, so that other people can benefit from your expertise: office-for-motion@wilkhahn.de

Use an office chair at your desk that inspires as diverse a range of movement as possible. Never tilt the backrest in a permanent position, but adjust the counter pressure so that the slightest of shifts in weight is sufficient to allow you to move and change posture.

Spread the equipment and materials you need about. Position equipment and materials so that you occasionally have to get up. Don't put the phone on the desk, but on the sideboard. Don't place the wastepaper basket underneath the desk but at a distance in the corner of the room and don't deal with your post at your desk, but at the lectern.

The shortest route in the building is not the best one, but the longest. This allows you to take exercise, reinforces the sense of being a com-

munity and ability to share expertise if you stop to say hello to other departments on the way.

Don't book the nearest conference room for meetings, but the one further away.

Change the odd meeting held sitting down to one held while standing up. As a result, people will participate more keenly, meeting times will be shorter and efficiency greater.

Banish ready-to-use rooms to the past. Invite people on training courses and in workshops to set the room up themselves.

Put equipment in a central place. Single printers on desks are not just a convenient option, but are also harmful to health due to heat, noise and emissions of fine dust. Joint printers are much more economical,

ensure people have to get up to use them and actually meet one another.

If possible, spread computer-based work out, for example by creating dedicated spaces for Internet research.

Take the stairs and not the lift. Climbing stairs boosts and gets your muscles and circulation going. If you restrict usage of lifts to people who have to use them, then voluntary physical activity is encouraged all the more.

Develop a culture of physical activity. At desks or in meetings, ensure that people don't sit still for too long. Getting up, stretching and walking a few steps works miracles – and might even inject some energy into those long, drawn-out meetings.