



ProfTech

Workplace Solutions

| Office Ergonomics | The Essential Guide To A Happy Workplace

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Introduction

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Growing up, we hear that our bodies start to fail and pain begins to set as we get older. Muscle and joint pain have been accepted as part of the body's natural aging process, but what if age isn't the only culprit? Most people who work the traditional 9-5 job Monday-Friday are seated in front of computers nearly the entire time they are in the office. That's an average of 9.3 hours per day, the longest the people have averaged sitting in our human history¹. Human beings were born to stand, to pursue prey, to move. These aches and pains are not the result of aging alone, but the direct consequence of stationary lifestyle. Incorporating ergonomics into the workplace is the ultimate solution to maintaining modern work, progress, and human health.

What Is Ergonomics?

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“Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.” International Ergonomics Association²

Ergonomics is the brilliant combination of engineering geared toward human anatomy, taking into account that no two bodies are the same, particularly when it comes to the furniture and objects people interact with—a 5'2" woman will have very different ergonomic requirements than a 6'2" man. A properly designed ergonomic chair, for example, can and will meet the needs of these two different individuals, allowing both of them to obtain proper posture and bodily alignment. This is the goal of ergonomics in the workplace: to maintain human health and prevent bodily injury that results from extensive sedentary lifestyle.

Lack of Ergonomics In The Workplace: Injuries³

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Without proper ergonomic furniture, the body falls out of alignment, causing strain on the musculoskeletal system. When this strain is not corrected and is experienced over an extended period of time, musculoskeletal disorders (MSDs) are highly likely to result. MSDs are injuries to the muscles, tendons, ligaments, joints, cartilage, and the nervous system. Continued incorrect posture most affects the arms, shoulders, and back of an individual, which is why so many adults experience severe and continuous neck and back pain.

Make no mistake, however, the large muscle groups are not the only ones at risk from deskwork. Small, repetitive movements, such as typing can cause arthritis and carpal tunnel syndrome, tenosynovitis, or trigger finger. Computer monitors and screens can cause eyestrain. Reaching for the telephone can cause shoulder and neck strain, and cradling a phone between the ear and shoulder brings out the worst in both muscle strain and poor posture for your spine.

Every factor of deskwork has a resulting negative effect on the human body, and the resulting injuries take a direct toll on how a business functions⁴.



**34% of lost workdays
on worker's compensation**



**\$20 billion a year on
direct costs**



**\$1 out of every \$3 spent
on worker's compensation**

The fact is that these injuries and their subsequent cost for employers are **preventable** simply by incorporating ergonomic furniture into the workplace.

Benefits of Ergonomics⁵⁶

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Reduced Absenteeism

When employees are unhealthy, suffering from MSDs or otherwise, the chances of them missing work due to resulting pain, discomfort, and the inability to work properly are increased. On the other hand, when ergonomics are employed in the office, the risk of contracting work-related injuries is decreased. When employees are healthy, they are unlikely to be absent from work.



Increased Morale & Productivity

When people are happy and healthy, their moods are generally more optimistic and cheery. Ergonomics properly used in the workplace keeps MSDs at bay, removing painful factors from a person's work routine. Better health means better attitude, and a better attitude at work means an increase in productivity.



Increased Savings

As mentioned above, ergonomic furniture and supplies are investments, but they are ones where the odds are unmistakably in everyone's favor: employees don't sacrifice their health to a desk and employers reap the benefits of their increased productivity. Instead of employers paying worker's compensation for injuries, an investment in ergonomic furniture and supplies improves a business' overall bottom line.

OSHA Government Standards⁷

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Occupational Safety and Health Administration (OSHA) has recognized the importance of ergonomics and their benefits to employees in the workplace. In lieu of the administration's observances and research it has determined that "employers are responsible for providing a safe and healthful workspace for their workers, [and] the number and severity of MSDs can be substantially reduced by applying ergonomic principles." On the heels of this statement, in 2000, OSHA implemented Ergonomic Program Standards to combat Musculoskeletal Disorders (MSDs) that result from the daily routine in the workplace.

Ergonomic programs implemented by employers must meet the following criteria to be successful:

1. Management Leadership and Employee Participation

The role of management is to maintain the importance of ergonomics in the office. The voluntary reporting of signs and symptoms of MSDs by ensures the effectiveness of the government standard.

2. Hazard Information

Employees are made aware of the basic signs and symptoms of MSDs so they can report it early and get treatment.

3. Job Hazard Analysis and Control

Job factors are evaluated to gauge their contribution to MSD or its symptom. Job factors found at fault are then adjusted or eliminated entirely.

4. Training

Training affords management and employees the ability and skills necessary to identify MSD and its hazards throughout the workplace.

5. MSD Management

Should a work-related case of MSD occur, management of it is essential to reducing its severity. This means allowing the person to be treated early and given the temporary work restrictions necessary during the recovering period.

Ergonomic Furniture for An Ergonomic Office

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The best ergonomic office is one that has taken the employees' health into consideration at every turn. Chairs and sit-stand workstations are the number one line of defense against MSDs and other afflictions caused by sitting excessively, but there are other factors that can be ergonomically arranged for the best benefit.

Office Chair

Ergonomic chairs are the most fundamental and basic items an employer can give workers in the office. If a sit-stand workstation (see below) is out of budget, ergonomic chairs are the number one line of defense against MSDs. Ergonomic chairs are designed to accommodate all body types, making them an invaluable investment to employees' health and productions. The seat of an ergonomic chair can be adjusted so that a person's feet are flat on the floor, and the knees are relatively in line with the hips⁸. A good ergonomic chair the following characteristics: ⁹



Sit-Stand Workstations

Excessive sedentary lifestyle has also direct correlations to increasing the likelihood of contracting type 2 diabetes, cancer, and cancer-related deaths¹⁰. It also increases the likelihood of obesity, cardiovascular disease, heart attack, and a nearly 50% increase of death from any cause¹¹. Investing in sit-stand workstations give employees the opportunity to stand while working without taking up any extra space in the office. This revolutionary concept combats all the risk factors of sedentary lifestyle, often eliminating them, without disrupting work progress. They are proven to reduce lower blood sugar levels, heart disease, reduce back pain, better mood and energy levels, and even help a person live longer¹².



Ergonomic Furniture for An Ergonomic Office

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Monitor & Keyboard¹³

Once a person has their best posture at a desk, the placements of the monitor and keyboard are essential to maintaining further ergonomic standards. The monitor should be placed arm's length away, so it is neither too close to strain the eyes, nor too far away to crane the neck. If you have more than one monitor, they should be placed side-by-side at the same arm's length distance. The keyboard should be placed 1-2 inches above the thigh, meaning that the most ergonomic keyboard will likely be on a pullout tray. Ideally, the keyboard will slope down and away from the person, following the direction of the thighs. To use your mouse, make sure that it is shoulder distance away from your keyboard.



Telephone¹⁴

Telephone use is common for all people in office settings. The telephone should be positioned so that it can be picked up easily without reaching, causing strain on the neck and shoulders. Especially if an individual spends an extended amount of time each day talking on the phone, a headset should be used. Without headsets, employees have a tendency to cradle a phone between their neck and shoulder, the angle of which is horrible for the spine. Headsets eliminate this issue, allowing an individual to continue work with correct posture, free from neck pain and spinal injury.



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