

Office Ergonomics: Work Smart, Feel Great

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Workplace ergonomics plays a crucial role in designing a work environment that supports both health and productivity. There is a significant relationship between the design of work systems and the productivity and safety of workers. Ergonomics is the science of work that examines the interactions between people and other components within a system. It involves applying theories, principles, data, and methods to design processes or environments that enhance human well-being and improve overall system performance (Silva et al., 2024). Moreover, a well-designed workspace helps employees stay comfortable and focused, which means fewer mistakes and better work. It also helps prevent injuries, so people take fewer sick days. This saves money for the company and keeps everyone healthier and more productive. (Adiga, 2023).

Sitting at a desk for extended periods can have serious effects on physical health, leading to discomfort, fatigue, and even chronic pain. Research has shown that prolonged sitting contributes to poor posture, muscle stiffness, and an increased risk of conditions such as back pain, neck strain, and carpal tunnel syndrome (Parry & Straker, 2013). Additionally, extended sedentary behavior has been linked to a higher likelihood of developing cardiovascular diseases and metabolic disorders, even in individuals who engage in regular exercise (Lurati, 2018). Adjusting the chair to allow feet to rest flat on the floor, positioning the monitor at eye level, and maintaining wrists in a neutral position while typing can help prevent musculoskeletal discomfort. Although modern manufacturing technologies have reduced manual handling and physical strain, workers continue to experience discomfort from awkward postures, largely due to the growing number of tasks that involve manual documentation, highlighting persistent ergonomic issues (Hasanain, 2024).

Essential Ergonomic Tips

1. Maintain Proper Posture

Proper sitting posture is crucial for reducing strain on your body and preventing long-term discomfort. Optimal posture can be supported by keeping the back straight, relaxing the shoulders, and placing the feet flat on the floor. For better posture, the knees should be bent at a 90-degree angle and aligned with the hips, while the lower back should be supported by the chair to maintain the spine's natural curve. Avoiding slouching is essential, as it can lead to muscle fatigue, poor circulation, and increased pressure on the spine. Consistently applying these practices can improve comfort, productivity, and overall spinal health (Mayo Clinic, 2021).

2. Optimize Your Desk and Chair Setup

Adjusting the chair height to align the elbows with the desk helps keeping the body properly aligned and minimizes strain on the shoulders and wrists. Placement your monitor at eye level, approximately an arm's length away, helps prevent neck strain and promotes a neutral head position. Using an adjustable chair with lumbar support ensures that the natural curve of your lower back is maintained, providing necessary support and reducing the risk of back discomfort. Implementing these ergonomic adjustments can enhance comfort, prevent musculoskeletal strain, and improve workplace productivity (Mayo Clinic, 2021).

3. Position Your Keyboard and Mouse Correctly

Maintaining proper keyboard and mouse positioning is essential for reducing the risk of musculoskeletal disorders and enhancing relief during computer use. Positioning your keyboard and mouse close to your body ensures that your elbows remain at a comfortable 90-degree angle, minimizing strain on the shoulders and wrists. Frequent overreaching for input devices can lead to overextension, increasing the likelihood of discomfort or injury. Utilizing a wrist rest can provide additional support, promote a neutral wrist posture and distribute pressure evenly across the forearm and wrist. However, it is important to use wrist rests correctly, as improper usage may introduce contact stress (Canadian Centre for Occupational Health and Safety [CCOHS], 2021). Implementing these ergonomic practices can significantly improve comfort and reduce the risk of repetitive strain injuries during computer tasks.

4. Take Regular Breaks

Sitting for prolonged periods can lead to stiffness, decreased circulation, and an increased risk of musculoskeletal discomfort. Prolonged sedentary behavior can lead to reduced blood circulation, which may contribute to muscle and joint fatigue or discomfort. To counteract these effects, it is recommended to stand up, stretch, or take a short walk every 30 to 60 minutes. These movements promote blood circulation, reduce muscle tension, and help maintain overall flexibility. Simple exercises such as neck rolls, shoulder shrugs, and wrist stretches can also alleviate tension and prevent strain. Incorporating these habits into your daily routine can enhance comfort, boost productivity, and support long-term health (Mayo Clinic, 2021).

Conclusion

A well-organized workspace enhances comfort, reduces the risk of work-related injuries, and improves focus and productivity. When your workstation is set up correctly, it promotes better posture, minimizes strain on the body, and helps prevent common issues such as back pain, eye strain, and fatigue. Poor ergonomics can lead to discomfort, decreased efficiency, and even long-term health concerns such as musculoskeletal disorders. However, by making simple ergonomic adjustments, you can create an environment that supports both your physical well-being and your work performance.

Begin by ensuring that the chair, desk, and computer setup support proper posture. The chair should offer adequate lumbar support, and feet should rest flat on the floor or on a footrest. The computer monitor is best positioned at eye level and approximately an arm's length away to minimize neck strain. The keyboard and mouse should be placed within easy reach to encourage a relaxed posture and reduce strain on the wrists. In addition to workstation adjustments, incorporating regular movement into the daily routine is important. Prolonged sitting may lead to stiffness and reduced circulation. Short breaks every 30 to 60 minutes to stand, stretch, or walk can help improve blood flow and relieve muscle tension. Simple exercises such as neck rolls and shoulder shrugs may also help reduce strain and promote a sense of refreshment. Office ergonomics isn't just about comfort, it's about taking care of your long-term health. Implement these simple tips to create a workspace that supports your body and boosts productivity. Working smart means feeling great!

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