

# Welness News Network

# Your Source for Health & Wellness Information

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## **Better Ergonomics for Better Health**

Presented by:

### Introduction

Ergonomics is the study of the relationship between three things:

- 1. A worker
- 2. The work that needs to be done
- 3. The environment in which the work is accomplished

Your chiropractor encourages you to think about your ergonomic needs and how they impact the health of your body. Poor ergonomics can lead to repetitive strain injuries, lower back pain and headaches.

# How to Implement Ergonomics at Work<sup>1-3</sup>

**Workstation set-up** - When setting up your work area you should consider...

- Amount of time your required to stay in static sitting or standing positions
- Accessibility of important items relative to your position
- Lighting conditions
- Air quality and circulation
- Background noise

**Sitting and chair design** - Many jobs require us to sit for several hours per day. Here are some tips to reduce strain:

- Feet should rest flat on the floor. If necessary, use a footrest
- Legs should remain uncrossed
- A small gap should remain between the back of your knees and the front of your seat
- Knees should be at or below the level of your hips
- Backrests should be adjustable to support your lower back and midback
- Armrests should be positioned so your forearms remain parallel to the ground

**Standing and posture** -If your job requires you to stand for long periods, you can minimize stress by adopting these ergonomic strategies:

- Place one foot higher than the other using a foot stool
- Stand on a stable, shock absorbing surface
- Use comfortable footwear that is biomechanically supportive
- Minimize bending or stooping by using work surfaces that are the proper height
- Bend your knees slightly to take some stress off your joints

#### **QUESTION:**

The three components of ergonomics include all except for ...

- A) The worker
- B) The worker's salary
- C) The workplace
- D) The work

#### **ANSWER:**

B) The worker's salary

#### **QUESTION:**

Important ergonomic considerations include:

- A) Workstation height relative to the worker
- B) Sitting and standing posture
- C) Lighting and noise control
- D) Handle-angles of work tools
- E) All of the above

#### **ANSWER:**

e) All of the above

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**Tool design** - If you use hand tools to perform repetitive tasks, the handles of the tools should be designed so you can perform the activities with a relatively straight wrist.

**Bending and lifting** - Know how to use proper lifting techniques...

- "Keep your nose between your toes." By keeping your nose centered on the body, you can minimize twisting-related injuries, especially disc trauma
- Maintain a neutral, vertical spine when retrieving objects from locations below your waist. By bending the knees instead of the waist, you can use the strength of the large muscles in your legs to reduce strain on your lower back

### Common Workplace Injuries Related to Ergonomics:

**Sprains and strains -** These account for 43% of the 1.3 million injuries and illnesses in private industry that required recuperation away from work.<sup>4</sup> These injuries are commonly caused by lifting, bending or twisting movements. Lower back pain can also be started by poor sitting or standing postures, which cause strain in the muscles supporting these positions.

Carpal tunnel syndrome - This is a repetitive strain injury involving the hand and wrist. It's most often caused by repetitive activities using the smaller muscles of the hand and forearm. The symptoms of carpal tunnel syndrome include: pain; numbness or tingling in the first 3 fingers, including the thumb; weakness in the hand that makes holding objects difficult.

Headaches - The most common trigger for headaches in the workplace is usually occupational stress associated with excessive workloads, unrealistic expectations for performance and conflict. However, environmental and ergonomic issues can also make you prone to workplace headaches. These factors may include improper lighting, poor sitting or standing posture, glare or eyestrain from using a poor computer screen, toxins in the work environment (air quality) and noise pollution.

According to some experts, one of the main triggers for stress and strain in the workplace is static posture. As a general rule of thumb, do not stay in one position for any longer than 20 minutes without moving around. Take regular stretching breaks to keep your joints and muscles mobile, flexible and functional.

If you experience any of the painful effects of stress and strain, remember to check with the musculoskeletal specialist - your chiropractor!



# Quote to Inspire "To wish to be well is a part of becoming well" - Seneca References and Sources: 1. Work Ergonomics: Minimize Back Injuries. 2. The Canadian Chiropractic Association. Back Facts: Workplace Ergonomics. 3. American Chiropractic Association. Tips to Maintain Good Posture. 4. US Bureau of Labor Statistics Division of Information Services.

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