



### ERGONOMICS

The word ergonomics is derived from the Greek words “ergon” for work and “nomos” for laws; ergonomics is the optimizing of the experience between human beings, and the designed objects and environments with which they interact. It is the relationship of humans with machines, in particular body posture in relation to engineering, and includes features such as chair design, tool design, positioning of dials, room layout, and computer interface which correspond to a healthy body form.

#### Body Positioning

Neutral body positioning is a comfortable working posture in which your joints are naturally aligned. Working with the body in a neutral position reduces stress and strain on the muscles, tendons, and skeletal system and reduces your risk of developing a musculoskeletal disorder (MSD). Maintain neutral body postures while working at a computer workstation by paying attention to the following considerations:

- Hands, wrists, and forearms are straight, in-line, and roughly parallel to the floor.
- Head is level, or bent slightly forward, forward facing, and balanced. Generally, it is in line with the torso.
- Shoulders are relaxed and upper arms hang normally at the side of the body.
- Elbows stay in close to the body and are bent between 90 and 120 degrees.
- Feet are fully supported by floor or footrest.
- Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly.
- Thighs and hips are supported by a well-padded seat and generally parallel to the floor.
- Knees are about the same height as the hips with the feet slightly forward.



Regardless of how good your working posture is, working in the same posture or sitting still for prolonged periods is not healthy. You should change your working position frequently throughout the day in the following ways:

- Make small adjustments to your chair.
- Stretch your fingers, hands, arms, and torso.
- Stand up and walk around for a few minutes periodically taking breaks from computer work. Set a time to pop up periodically to remind you to take a mini-break.



#### Environment

Appropriately placing lighting and selecting the right level of illumination can enhance your ability to see monitor images. If lighting is excessive, or causes glare on the monitor screen, you may develop eyestrain or headaches; and you may have to work in awkward postures to view the screen. Ventilation and humidity levels in the office work environments may affect comfort and productivity.

- Arrange your office to minimize glare from overhead lights, desk lamps, and windows.
- Maintain appropriate air circulation.

#### Keyboards

Proper selection and arrangement of the computer keyboard helps reduce exposure to awkward postures, repetition, and contact stress.

- Put the keyboard directly in front of you.
- Your shoulders should be relaxed and your elbows close to your body.
- Your wrists should be straight and in-line with your forearms.



#### Monitors

Choosing a suitable monitor and placing it in an appropriate position helps reduce exposure to forceful exertions, awkward postures, and overhead glare. This helps prevent possible health effects such as excessive fatigue, eyestrain, and neck and back pain.

- Put the monitor directly in front of you and at least 20 inches away.
- Place the monitor so the top line of the screen is at or below eye level.

#### Mouse and Pointers

Pointing devices such as a mouse or pointer now come in many sizes, shapes, and configurations. In addition to the conventional mouse, there are trackballs, touch pads, finger tip joysticks, and pucks, to name a few. Selection and placement of a mouse/pointer is an important factor in creating a safe computer workstation.

- Keep the mouse/pointer close to the keyboard. Usually to the right or left side of the keyboard works best.
- Alternate hands with which you operate the mouse/pointer.
- Use keyboard short cuts to reduce extended use of the mouse/pointer.

## Palm and Wrist Supports

Proper arrangement of the keyboard and mouse help create a comfortable and productive workstation. Wrist or palm rests can also increase your comfort. Proper use of wrist rests has been shown to reduce muscle activity and to facilitate neutral wrist angles, so consider using a wrist rest to maintain straight wrist postures and to minimize contact stress during typing and mouse activities.



## Telephones

Telephones are key workstation components. However, excessive telephone use can cause the user to assume awkward postures.

- Use a speaker phone or head set for long conversations or during typing or mouse activities.
- Keep the telephone close enough to avoid repeated reaching.

## REDUCING STRESS – ANXIETY MANAGEMENT

It's obvious that we live in a complicated world full of technological advances. Life is far more complicated, and stressful, than just a generation ago, and excessive stress has many negative health connotations, placing a heavy strain on the body and accelerating the aging process. With technology and the conveniences of modern life, we live in a stressful world. Additionally, our workplace has become an area full of technology and greater demands for productivity. This places increasing amounts of stress upon everyone. Some stress is normal and natural but many of us have too much stress.



**Exercise** is one of the best natural cures for stress, but unfortunately as stress levels increase many of us decrease exercise due to time constraints. Exercise causes the release of endorphins which have a healthy healing effect on both the mind and body, and helps to protect against the negative effects of stress.

Appropriate exercise varies by individual, but some exercise, any exercise, is far better than none. For some of us, simply walking at lunch is enough, while others may want more formal exercise such as aerobics classes, Yoga, or working out with a personal trainer. Exercise helps tame stress, period.

**Anxiety management** is a lot easier than some people realize. There are ways to help you cope with these common ailments.



1. **Write it down**-Keep a journal of how you are feeling and make sure to keep track of the time of day it is whenever you feel overly anxious or stressed out. Sometimes putting it all on paper will help you see what is causing the stress and then you can decide how to avoid stressful situations in the future.

2. **Evaluate your worries.** Analyzing your stressor is another great way to reduce stress. Doing this allows you to decide whether or not the problem you are dealing with is as big as you think it is. Sometimes when you have a chance to take a moment and analyze the situation you can decide which problems to tackle and how to properly deal with the issue.
3. **Trying to take on too much?** Are you the type of person who can't say no? When you try to take on too much, your body is not only fatigued, but is not performing at its best. Your mind may also feel drained. Only take on a certain number of tasks at once and try to learn ways to better manage your time.
4. **Self affirmation.** This is a wonderful stress reduction technique that has been used for centuries. Staying positive will boost your confidence and allow you to move forth.
5. **Do some deep breathing exercises.** When your body feels stressed out it automatically tenses up and this affects breathing. Try doing some deep breathing: close your eyes, and take slow, deep breaths—utilizing your diaphragm. This will bring instant relief to your mind and body.
6. **Do some exercises.** Walk or jog, or do various stretching and aerobic exercises. This will have a relaxing effect on your whole body, will keep you in better physical shape, will help you keep your weight under control, and all this in turn, will boost your mood and self-confidence.
7. **Envision calm surroundings.** When you feel overly stressed, take time out and visualize an event or place that made you feel calm. It can be a favorite beach vacation spot, lavish green gardens, or the mountains: this taking of a mini-break will help to put you in a relaxed state of mind.
8. **Make your own schedule for worrying.** Many anxiety sufferers worry excessively about future events that might never happen - there's no reason to worry about something that you have no control over. So, let go of the little worries that block your ability to see life more clearly.



If you find yourself stressed at work, you must take immediate action to let go of that stress. Find a quiet place to get away to try and utilize techniques to allow you to let go of the stress. Work to change your attitude about stress. Remember, your life and health are important and should be a priority.

Relax, listen to music, and concentrate on your breathing. These techniques will help you let go of your workplace stress.