Neutral posture at your workstation helps prevent injury
In order to understand the best way to set up a computer workstation, you first need to understand neutral posture. This is a comfortable working posture in which your joints are naturally aligned and your risk of developing a musculoskeletal disorder is reduced.

Change postures frequently
Regardless of how good your posture may be, sitting still for long periods of time isn't healthy. You should make small adjustments to your posture about every 15 minutes by changing the height of your chair slightly or leaning back a little further into the backrest. Larger changes in posture are also important. Stand up and stretch or walk around for one or two minutes every hour.

Practice neutral posture while seated
The following are the important components of neutral posture while seated:

1. Keep your head level or tilted slightly downward. Place your work in front of you so that you are looking straight ahead.

2. Sit with your shoulders relaxed, not elevated, hunched or rotated forward.

3. Keep your elbows close to your sides and bent at about a 90° angle, not extended out in front of your body.

4. Use the chair's backrest to support your lower back, or lumbar curve.

5. Sit with your entire upper body upright or leaning slightly back.

6. Keep your wrists straight while you work, not bent up, down or to the side.

7. Sit with your knees at the same level or slightly below the level of your hips. There should be no pressure points along the backs of your thighs or at the backs of your knees.

8. Place your feet slightly out in front of your knees and make sure they are comfortably supported, either by the floor or by a footrest.

Pay attention to overall posture
Although the components of neutral posture are listed individually above, it is really the posture of your body as a whole that is important. Having just one part of your body out of neutral can affect the rest of your posture. Try sitting with your feet hooked under your chair. You will notice that this tends to pull you forward in your seat, away from your chair's backrest. Now place your feet out in front of you and you will notice that it is much easier to lean back into the chair. Similarly, if you place your monitor too low on your desk, this will also tend to make you lean forward to view it. Practice adjusting your workstation to achieve a neutral posture for your whole body. It may help to have a co-worker take a look at you while you work and give you feedback on your posture.
Ergonomics Tip

Avoiding eye strain at the computer

If you experience symptoms of visual discomfort, or eye strain, at the computer you are not alone; it's the most common complaint among computer users. The following will help you understand the causes of discomfort and what you can do about it:

Lack of blinking

A common complaint among computer users, especially those who wear contacts, are dry or itchy eyes. This is mainly due to the fact that we tend to blink only one-fifth as much when looking at a computer monitor when compared with reading from paper. Combined with the low humidity levels found in many offices, this results in a drying and irritation of the eyes. If you experience dry eyes, try lowering your monitor so that you are looking slightly down (see the Monitor height section below) in order to promote blinking. Make sure that exhaust fans from equipment and from the building's ventilation system aren't blowing directly on you. If dryness and irritation persist, see your eye care specialist.

Close work

Your eyes are adapted for distance vision; they are most relaxed when you are "staring off into space." However, most of the work that you do in the office, whether it's reading from papers or the computer monitor, is done relatively close to your eyes, and this can cause eye strain. This is because small muscles within your eyes have to work to turn your eyes inward and change the shape of the lenses to focus for near vision. When these muscles fatigue you can experience symptoms of tired, sore eyes the same way that your back muscles will feel tired and sore if you sit for too long in the same position.

Visual angle

When you look down, your eyes have a natural tendency to turn inwards and focus for near vision, since objects that are lower in your field of vision tend to be closer to you. The opposite is true of looking straight ahead or upwards - your eyes tend to turn outwards and focus at a distance, and you will have to work harder to focus on close objects with your head in this position. This is why, when reading from a book or a newspaper, we tend to hold it below eye level. If you read from a monitor or document that is located at eye level or higher, it can contribute to eye strain.

Proper monitor height and distance to prevent eye strain.

Place the monitor at least 18” from your eyes, but close enough so that you can easily read the text without squinting or leaning forward. Adjust the height of the monitor so that the top of the screen is about 10 to 20 degrees below your horizontal line of sight, and tilt it up about 10 to 20 degrees so that the screen remains perpendicular to your gaze. If you wear bifocals, trifocals or progressive lenses you may have to locate the monitor even lower to keep your head level.

Symptoms of eye strain

- Dry or itchy eyes
- Tired eyes
- Sore eyes
- Blurred or double vision
- Headaches
Organizing your work area

The way you organize your work affects your body's position and the amount of reaching that you have to do. Long reaches to pick up heavy objects or items that you use frequently can contribute to discomfort and injury. This is because reaching puts your body in an awkward position and stretches your muscles beyond their normal limits, making them vulnerable to pulls and strains.

An important concept to think about is how far you can reach without straining your body (reach zones). You can determine your easy reach zone by moving just your hands and forearms with your elbows at your sides and your shoulders relaxed. For most people, this is an area about 16" to 18" in front of their body. The other zone you need to consider is your maximum reach zone, which is how far you can reach just by moving your arm at the shoulder, without leaning forward. For most people this is an area about 26" to 34" in front of their body.

Keep these items in your easy reach zone:
- Frequently used items
- Items that require finger dexterity to use (keyboard, mouse, telephone)
- Items that require hand force to use (stapler, 3-hole punch, staple remover)
- Heavy objects (large binders, manuals, telephone books)

Try to keep items that you use less frequently within your maximum reach zone. Stand up to reach items that are above your shoulder height or beyond your maximum reach zone.

Customizing your work area

Depending on what your job requires, you might have a different layout than your co-workers. For example, a receptionist might need to have the telephone within easy reach, while an accountant might need to have the calculator closer than the telephone.

You are the best judge of how to arrange your work area, since you know what you use the most often. If you take the time to bring everything into its appropriate reach zone, you'll not only be more comfortable as you work, but also more efficient.