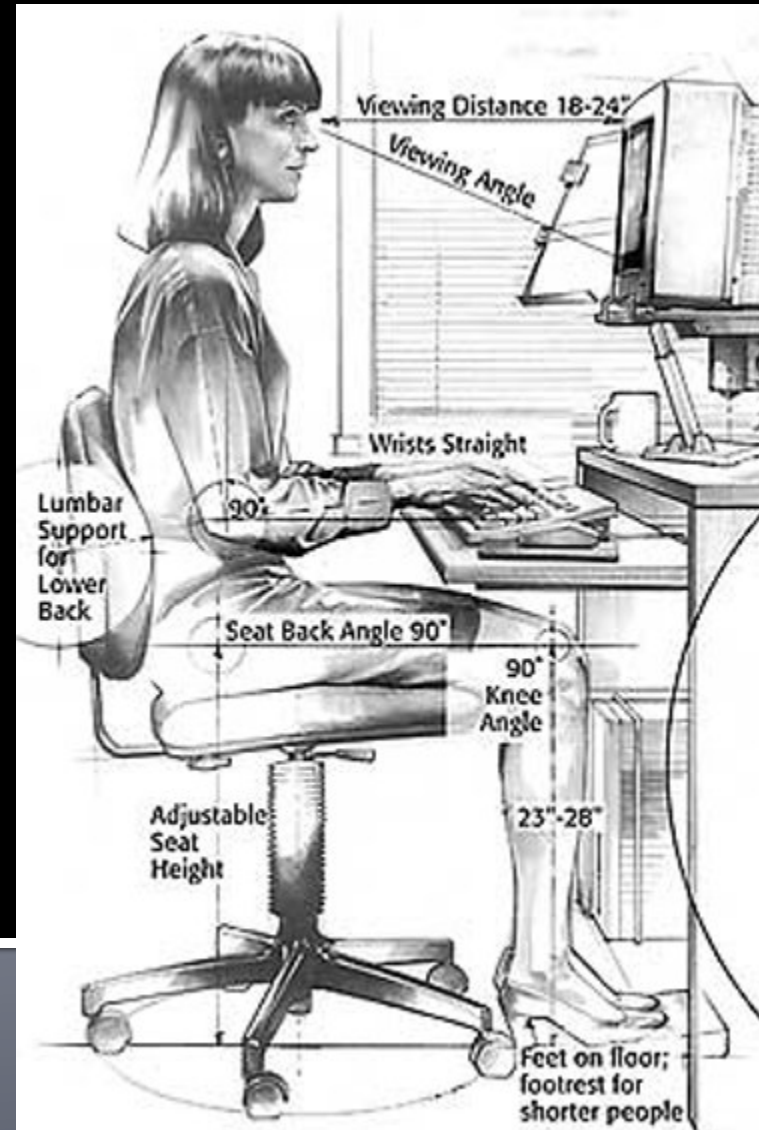


Computers and health



The Risks

- With the increase in computer use, a number of health and safety concerns related to vision and body aches and pains have arisen.
- Many problems with computer use are temporary and can be resolved by adopting simple corrective action.
- Most problems related to computer use are completely preventable.

However it is important to seek prompt medical attention if you do experience symptoms including:

- continual or recurring discomfort,
- aches and pains,
- throbbing (pulzujúca bolesť),
- tingling (brnenie),
- numbness (necitlivosť),
- burning sensation (pálenie),
- or stiffness (stuhnutosť).

Seek help even if symptoms occur when you are not working at your computer.

Laptop users

- Laptop computers can present particular problems due to small screens, keyboards and inbuilt pointing devices.
- Prolonged use of laptops should be avoided.
- If using a laptop as a main computer, it is advisable to use the laptop with a docking station.
- This allows an ordinary mouse, keyboard and monitor to be used with the laptop.

The main risks associated with using computers include:

- **Musculoskeletal problems.**
- **Eye strain and a greater awareness of existing eye problems.**

Musculoskeletal problems

These can range from general aches and pains to more serious problems and include:

- Upper limb disorders such as repetitive strain injury (RSI) tenosynovitis and carpal tunnel syndrome - by far the most important as it can quickly lead to permanent incapacity.
- Back and neck pain and discomfort.
- Tension stress headaches and related ailments.

Musculoskeletal problems

These types of problem can be caused by:

- Maintaining an unnatural or unhealthy posture while using the computer.
- Inadequate lower back support.
- Sitting in the same position for an extended period of time.
- An ergonomically poor workstation set up.

Eye strain

Computer users can experience a number of symptoms related to vision including:

- visual fatigue,
- blurred or double vision,
- burning and watering eyes,
- headaches and frequent changes in prescription glasses.

Eye problems are usually the result of visual fatigue or glare from bright windows or strong light sources, light reflecting off the display screen or poor display screen contrast.

Avoiding Musculoskeletal problems

- Taking regular breaks from working at your computer - a few minutes at least once an hour.
- Alternating work tasks.
- Regular stretching to relax your body.
- Using equipment such as footrests, wrist rests and document holders if you need to.
- Keeping your mouse and keyboard at the same level.
- Avoiding gripping your mouse too tightly - hold the mouse lightly and click gently.
- Familiarize yourself with keyboard shortcuts for applications you regularly use (to avoid overusing the mouse).

Monitors should:

- Swivel, tilt and elevate - if not use an adjustable stand, books or blocks adjust the height.
- Be positioned so the top line of the monitor is no higher than your eyes or no lower than 20° below the horizon of your eyes or field of vision.
- Be at the same level and beside the document holder if you use one.
- Be between 18 to 24 inches away from your face.

Keyboards should:

- Be detachable and adjustable (with legs to adjust angle).
- Allow your forearms to be parallel to the floor without raising your elbows.
- Allow your wrists to be in line with your forearms so your wrists does not need to be flexed up or down.
- Include enough space to rest your wrists or should include a padded detachable wrist rest (or you can use a separate gel wrist rest which should be at least 50 mm deep).
- Be placed directly in front of the monitor and at the same height as the mouse, track ball or touch pad.

Chairs should:

- Support the back - and have a vertically adjustable independent back rest that returns to its original position and has tilt adjustment to support the lower back.
- Allow chair height to be adjusted from a sitting position.
- Be adjusted so the back crease of the knee is slightly higher than the pan of the chair (use a suitable footrest where necessary).
- Be supported by a five prong caster base.
- Have removable and adjustable armrests.
- Have a contoured seat with breathable fabric and rounded edges to distribute the weight and should be adjustable to allow the seat pan to tilt forward or back.

Tables and desks should:

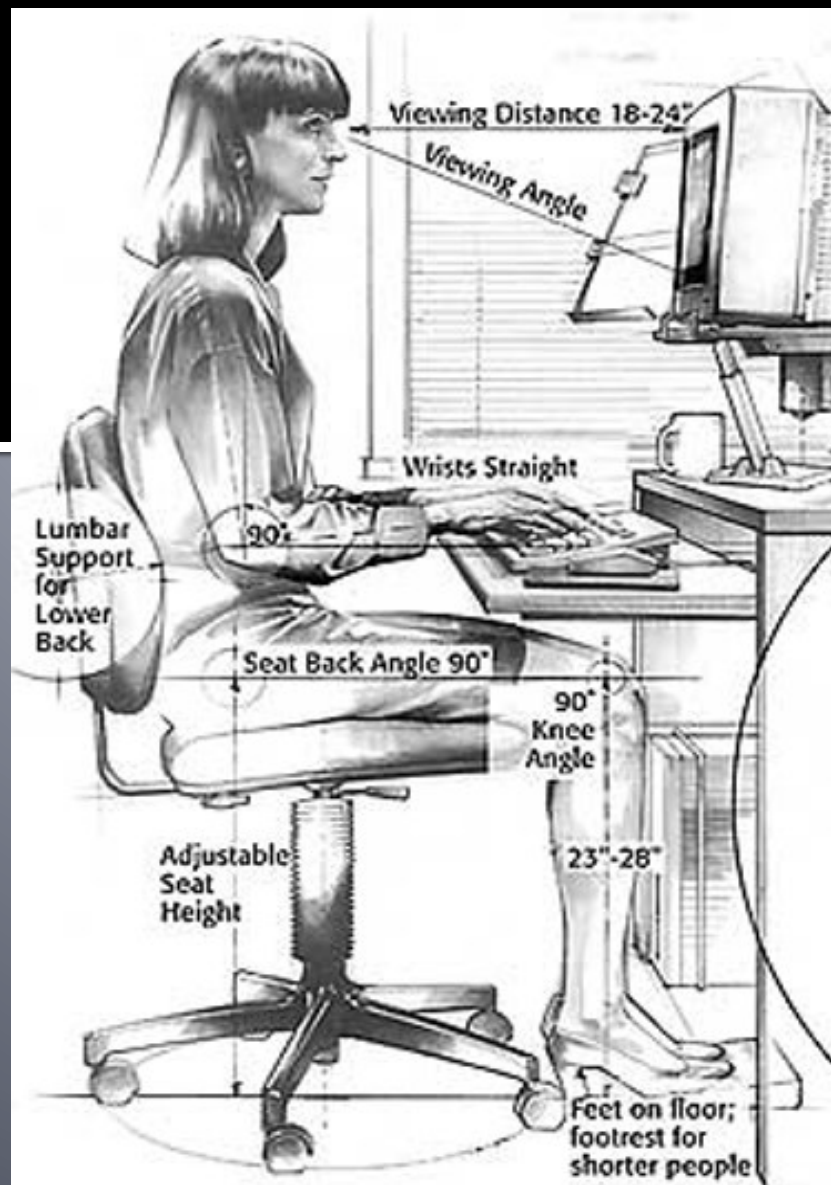
- Provide sufficient leg room and preferably be height adjustable.
- Have enough room to support the computer equipment and space for documents.
- Be at least 900 mm deep.
- Have rounded corners and edges.

Avoiding Eyestrain

- Exercising the eyes by periodically focusing on objects at varying distances.
- Blinking regularly.
- Keeping the air around you moist- for example using plants, open pans of water or a humidifier (spider plants are said to be particularly good for this and removing chemical vapors' from the air).
- Adjusting the screen height / seating so that when sitting comfortably your eyes are in line with the top of the monitor screen.
- Adjusting the brightness control on your monitor for comfort.
- Adjusting the contrast on your monitor to make the characters distinct from the background.

Avoiding Eyestrain (part 2)

- Adjusting the refresh rate of your monitor to stop it flickering.
- Positioning monitors to avoid glare (e.g. not directly in front of windows).
- Keeping your monitor the screen clean.
- Keeping the screen and document holder (if you use one) at the same distance from your eyes.
- Servicing, repairing or replacing monitors that flicker or have inadequate clarity.
- Regular eye testing - do this at least once every 2 years and more frequently if necessary - especially if you are experiencing eye problems related to using display equipment. Indicate the distance from your eyes to the monitor to your optician and talk to them regarding special lenses or the use of bifocals.



THANK YOU FOR YOUR
ATTENTION!