

Computer use and eye care

| Eye problems | Causes | Improvement measures |
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| <ul style="list-style-type: none"> ● Eye strain ● Blurred vision ● Slow in focusing ● Double vision ● Headaches | <ol style="list-style-type: none"> 1. Blurred letters on the screen. 2. Reflection of ceiling light, or glare from windows. 3. Ciliary muscle strain caused by looking at a near screen for too long. 4. Frequent change of focus as eyes move to and fro between screen and document causes ciliary muscle strain. 5. Frequent adjustment and accommodation is needed as eyes move to and fro between document with 'black letters on white background' and screen with 'white letters on dark background'. 6. Symptoms such as eye strain, blurred vision, slow in focusing, double vision, headaches appear when the ciliary muscles are tired and cannot focus properly. | <ol style="list-style-type: none"> 1. Use lampshade to divert ceiling light downwards to avoid glare. 2. To avoid reflection and glare from the screen, do not place the screen by the window and do not sit with your back facing the window. Consider using curtains to prevent too much light coming in from outside. 3. To avoid reflection and glare from the table, use table and countertops with non-reflective matt surfaces. 4. Choose dark letters and light background on the screen to enhance contrast, and use a filter to reduce the brightness. 5. Regularly wipe the screen with tissue paper or dry cloth to remove dust that affect the clarity. 6. Place the screen slightly below eye level so that the eyes are looking slightly downwards. 7. Document and the screen should be at the same distance, around 40-60 centimeters, to the eyes. This saves the eyes from frequent accommodation. 8. Use accessory light for the document if needed. 9. Take 5-10 minutes rest after using the computer for 30-40 minutes. |
| <ul style="list-style-type: none"> ● Itchy eyes ● Red eyes ● Watery eyes | <ol style="list-style-type: none"> 1. Heat generated and dispersed from the back of the computer monitor accelerates tear evaporation. 2. Air-conditioning in computer room dries up the air and accelerate tear evaporation. 3. Over concentration on near screen reduces blinking frequency, which leads to inadequate tear replacement and makes the eyes itchy and red. 4. On the other hand, dryness and itchiness of eyes can stimulate excessive tear production, causing watery eyes. | <ol style="list-style-type: none"> 1. Avoid placing the back of the monitor too close to wall, otherwise the heat will be reflected towards your eyes. 2. Avoid air-conditioning or setting the temperature too low, as long as the computer is not damaged. 3. Intentionally increase the frequency of blinking so that tears can be swept over the eyes for lubrication and moisture. 4. Use artificial tear to lubricate the eyes if needed. |

Correct posture and set up for computer use

- A. Look down slightly towards the screen with an angle of 15-20 degree to minimize the reflection of ceiling light.
- B. Maintain a distance of around 40-60 centimeters to the screen to prevent strain of the ciliary muscles of the eyes.
- C. Keep upper arm and forearm at 90 degrees to prevent muscle strain.
- D. Choose a chair with adjustable back-rest to keep spine straight.
- E. Choose a seat with rounded or rolled edge, to keep posture stable.
- F. Choose a chair with adjustable height and keep the height at around 34-52 centimeters so that the eyes can look slightly downwards at the screen.
- G. Use a chair with wheels to facilitate movement while working.
- H. Use foot-rest to support feet if needed.
- I. Keep some space between the table and the knees to allow room for leg movement.
- J. Use wrist-rest or pad to support the wrists.
- K. Hold wrist at an angle less than 10 degrees to reduce strain.
- L. Turn and tilt the screen to adjust for different working environment.
- M. Place screen directly in front of the body to keep the eyes looking forward.
- N. Use an adjustable stand for document. Keep document and the screen at a distance of around 40-60 centimeters from the eyes.
- O. Choose a table with adjustable height to fit with the height of the chair.

