



MUH 104

OCCUPATIONAL HEALTH AND
SAFETY - II



HACETTEPE ÜNİVERSİTESİ

Uzaktan Eğitim Uygulama ve Araştırma Merkezi

Daha ileriye... En İyiyeye...

WORKING WITH DISPLAY SCREEN EQUIPMENT

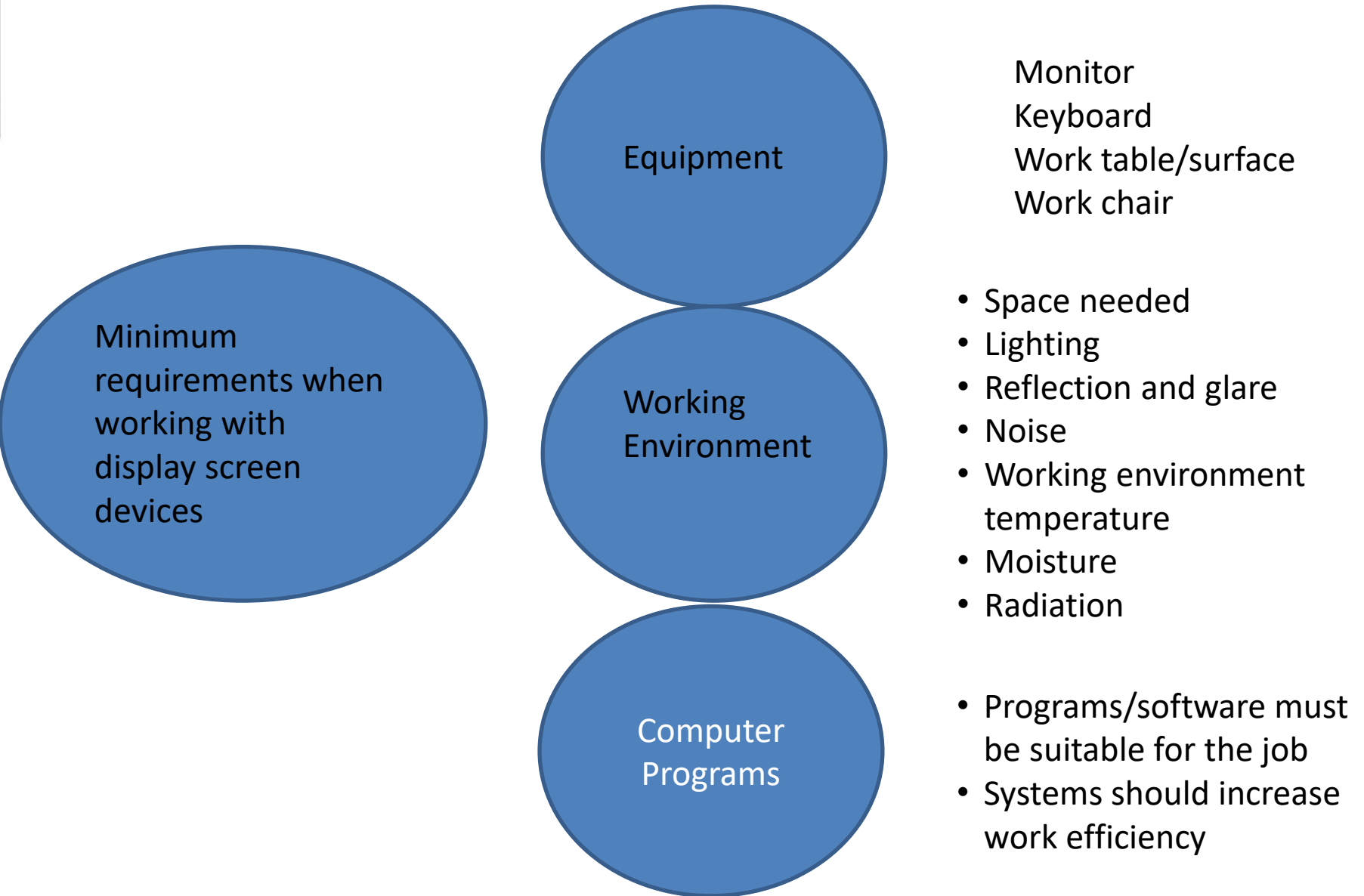
Mehmet ARSLANYİĞİT

Instructor

Class C Occupational Health and Safety
Specialist

WHAT WILL WE LEARN?

We will learn about the health and safety measures while working with display screen devices.





Monitor

The characters that appear on the screen should be easily visible,

The screen image should be stable, without flickering

Brightness and contrast should be easily adjusted

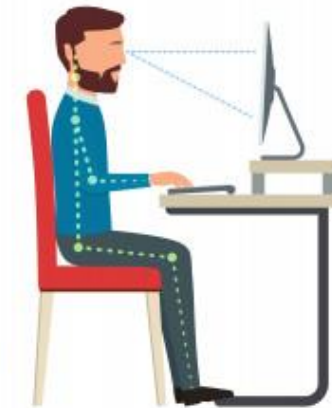
The screen should be easily adjusted by turning it in all directions according to the needs of the user.

The screen should be able to be used on a separate base or on an adjustable table

Reflections/glare that will disturb the user should be avoided.



WRONG SITTING POSTURE



CORRECT SITTING POSTURE



Keyboard – Mouse

A special support should be placed on the front of the keyboard where the user can rest on his wrists.

The color of the keyboard should be opaque and should not reflect the light.

The locations of the keyboard characters should be arranged to make them easier to use.

Depending on the working position, the symbols on the keys should be easy to choose, clear and legible.

For a correct hand - mouse placement

Keyboard and mouse should be at the same height.

The mouse should be next to the keyboard.

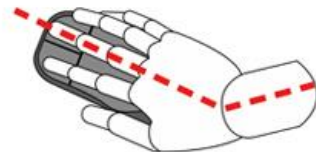
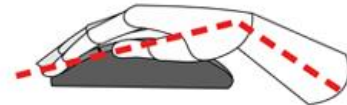
The wrist should be kept in a straight line.

The wrist should not be bent to the right or left when using a mouse.

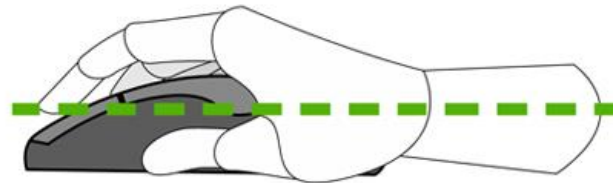
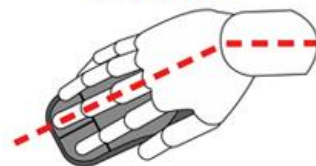
Only 2 fingers should NOT be used when writing.



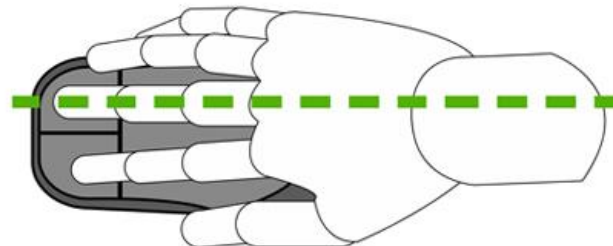
INCORRECT

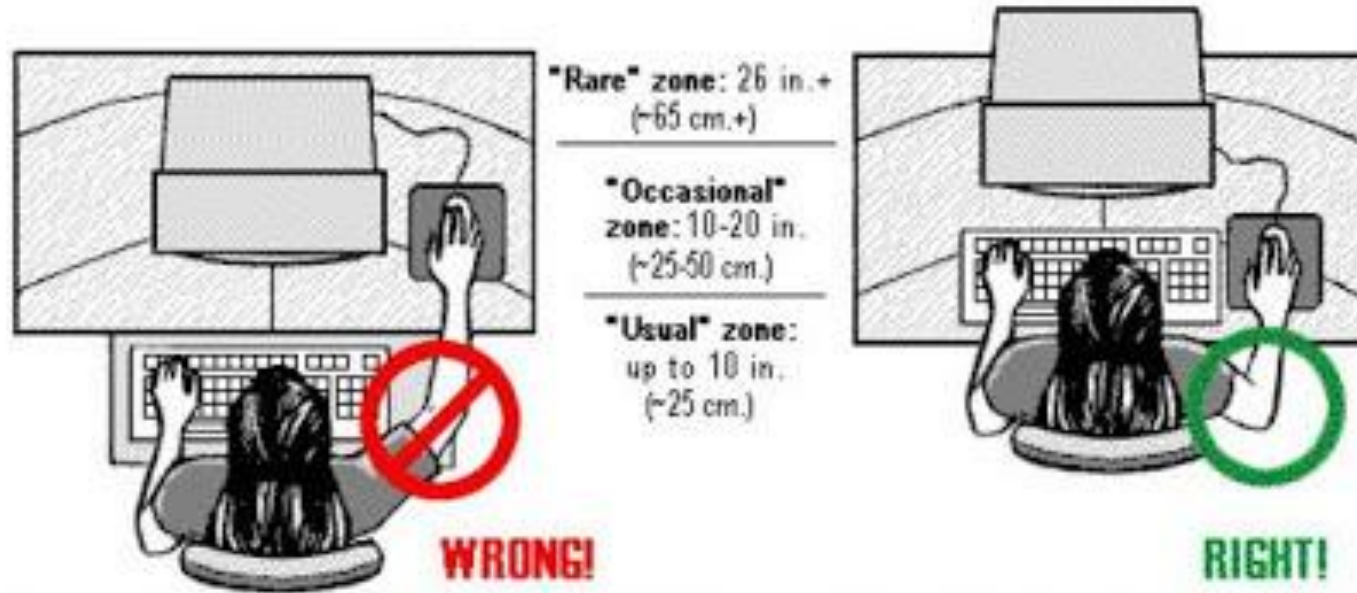


INCORRECT



CORRECT

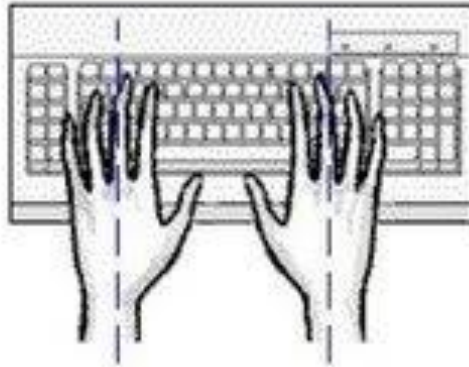




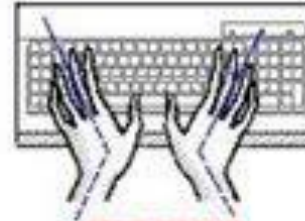
There must be enough space in front of the keyboard for the user's hands and arms.

The keyboard should be separate from the screen and should be movable so that the operator's hands and arms don't get tired.

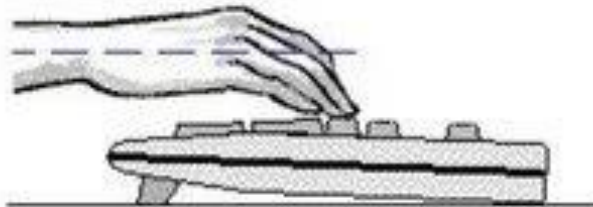
RIGHT!



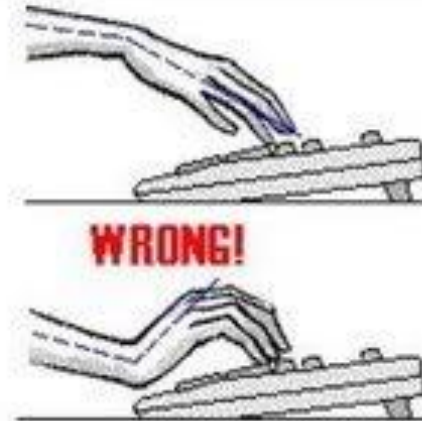
WRONG!



RIGHT!



WRONG!



Arm Circle



Klavye, fare, yazı ve okuma alanı, dirsekler vücuda bitişik, eller açılmış durumda iken, dirseği masadan kaldırmadan çizilen yayın içinde olmalıdır (Kol dairesi).

The Work Table Or Work Surface

It should be large enough to allow the screen, keyboard, documents and other related materials to be arranged comfortably. Also, its surface should not reflect light.

An adjustable document holder should be used to minimize irritating eye and head movements of the user.

There must be enough space for the user to be in a comfortable position.

Work chair

The chair should be stable so that the employee can sit in a comfortable position and move easily.

The height of the seat should be adjustable.

The backrest should be adjustable in forward/back and up/down directions. The back support should be suitable for the waist and be flexible.

When requested, an appropriate foot rest must be provided to the employee.

UYGUN ÇALIŞMA SANDALYELERİ



Working environment factors

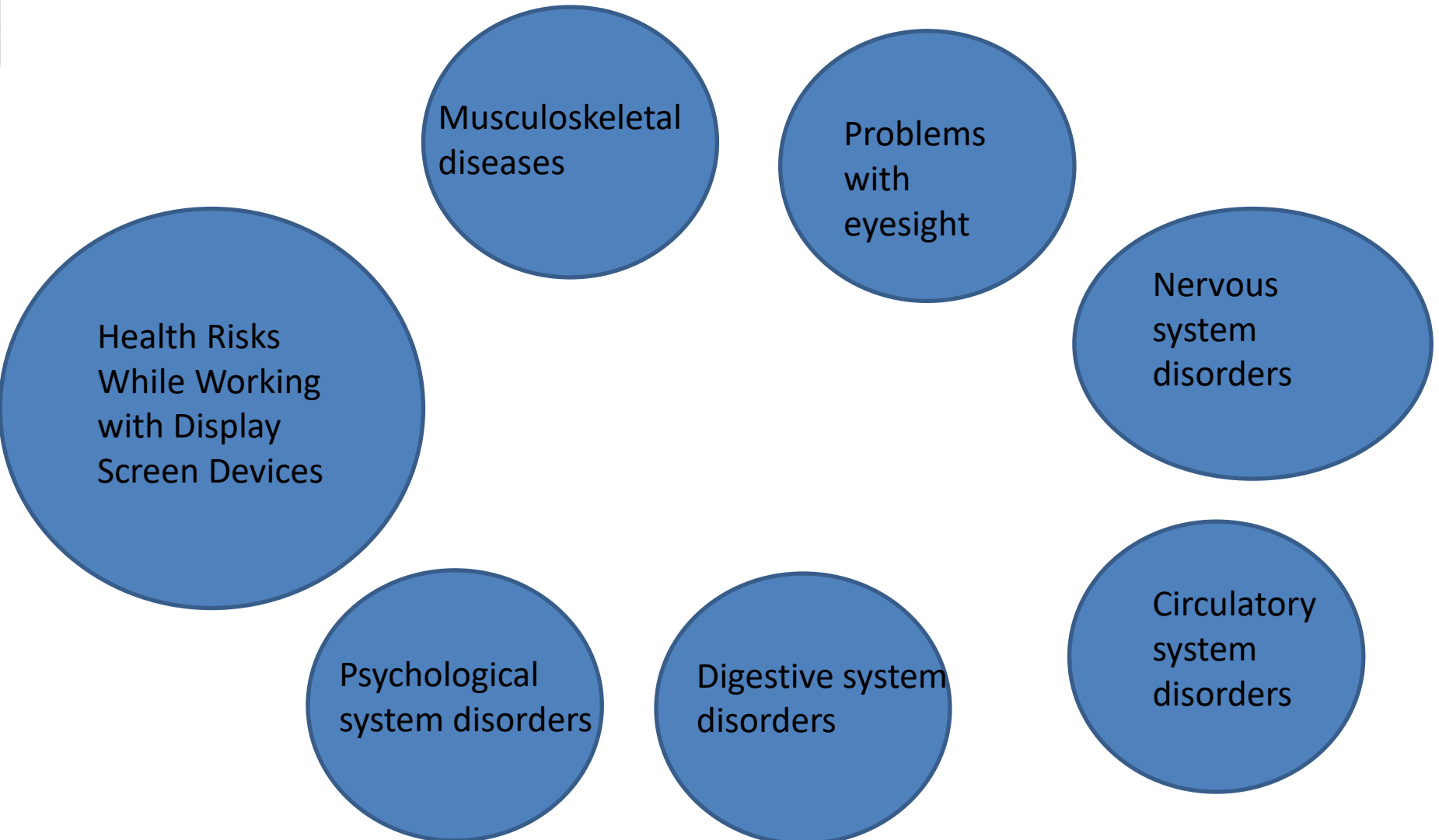
- a)Space Needed
- b)Lighting
- c)Reflection and Glare
- d)Noise
- e)Temperature
- f)Moisture

Risk Factors in the Office Environment

- 1- Repetition; using the keyboard or a tool for more than 4 hours continuously on a working day
- 2 - Improper posture of the body
- 3 - Working in the cold
- 4 - Fire sources
- 5 - Office management deficiency, lack of order
- 6 - Excess workload
- 7 - Ergonomic problems
- 8 - Leaving the feet unsupported while sitting
- 9 - Bending of the back, neck, arm or wrist for more than 2 hours a day
- 10 - General fatigue, work stress, etc.



Health Risks While Working with Display Screen Devices



Health Risks While Working With Display Screen Devices

Light reflection, flickering, distorted colors from the monitor cause serious mental and perceptual load and eye strain.

Overloading in the eyes causes an increase in the degree of eye disorders such as myopia and astigmatism and difficulty in concentration.



Health Risks While Working With Display Screen Devices

People who work for a long time in front of a computer experience pain in the neck, shoulder, wrist and back, limitation of movement, numbness, headache and redness in the eyes at the end of the day.

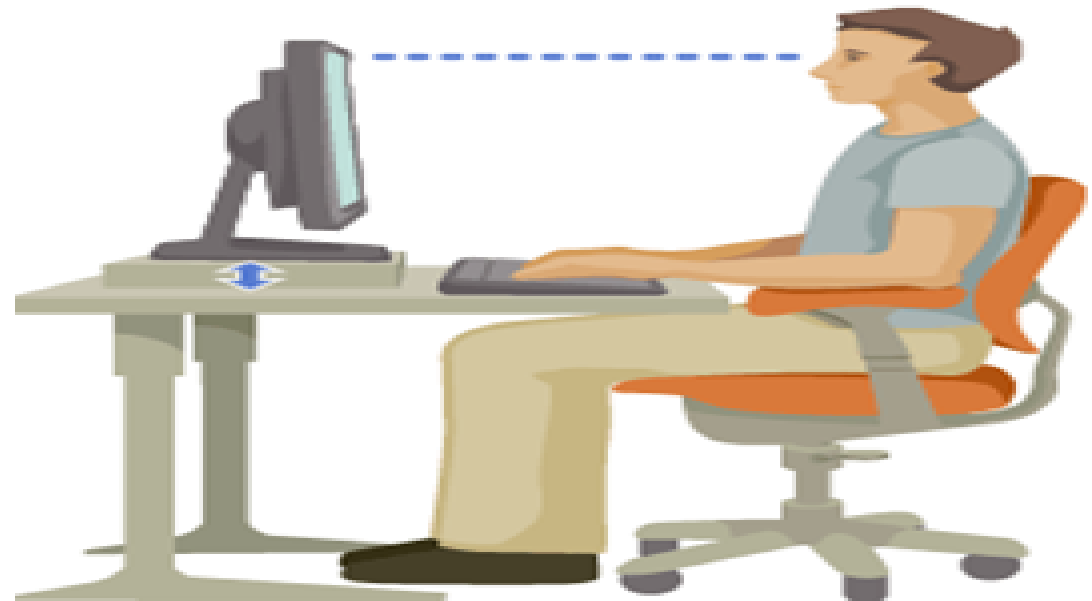
This situation, which reduces business success and quality of life, can be prevented by some basic ergonomic measures.

Nervous System Disorders

SİNİR SİSTEMİ ETKİLENMİŞ BİREY ve ETKİLERİ



- Ortalama olarak göz-ekran uzaklığı en az kol mesafesi kadar uzaklıkta 60-70 cm. olmalıdır.



Işığın karşıdan, yani bilgisayarın üzerinden gelmemesi sağlanmalıdır.



Monitörün tepe noktası göz seviyenizden daha aşağıda olmalıdır.

Ekran üzerine düşen yansımaları önlemek için monitörün eğim açısı değiştirilmelidir.



Ekran da çok küçük karakterler kullanılmamalıdır.

Ekran kontrastı gözü yormayacak şekilde ayarlanmalıdır.



Monitörden gelen kimi zararlı ışınları önlemek için **ekran filtresi** kullanılmalıdır.

Keyboard typing should not be more than 40 minutes without rest.

Eye blinking should be done frequently.

The eyes should be separated from the screen at 20-minute intervals and focused at a distant point, and the eyes should be closed and rested for 10 to 15 seconds.

KİŞİLERE UYGUN ; KİŞİSEL KORUYUCU DONANIM KULLANINIZ



Ergonomik

Uzun süreli oturma pozisyonlarından
dolayı oluşan ağrıları önler.
Terletmeyi önleyen tasarımı ile sağlıklıdır.
Koltuklara kolayca takılabilir.
Beli her iki yönde de kavrar.
Sağlam yapısı ile uzun ömürlüdür.

Monitör Filtre Koyucu



Health Check Ups

Before starting to work with display screen devices, eye examinations of employees should be done by a specialist physician.

According to the inspection and test results, if necessary, employees should be provided with the appropriate tools and equipment for their work.

Health files of the employees should be prepared and their current ailments should be recorded.

Periodic health checks should be identified and followed by the workplace doctor.



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