MODULE 13 - DIGITAL TECHNOLOGY & HEALTH

CHAPTER 1

ERGONOMICS OF WORKSTATIONS





INTRODUCTION

This chapter covers the principles of ergonomics to effectively organize your workspace in order to reduce the risks of physical pain, particularly related to musculoskeletal disorders. You will discover how to adjust your workstation, whether it is the height of the screen, the positioning of the keyboard, or even the lighting of the room.

1 ERGONOMICS AND WORKSTATION

THE LAYOUT OF THE WORKSTATION

Ergonomics helps reduce the risks of MSDs (musculoskeletal disorders) and pain related to the use of screens. An appropriate layout of the workspace and knowledge of certain rules of use can help prevent the onset of these pains.

WHAT SHOULD I THINK ABOUT?

1 ROOM TEMPERATURE:

When I'm focused on a screen, it's easy to miss temperature changes. In summer, it's recommended to keep the temperature between 23 and 26°C, while in winter it should be between 20 and 24°C. It's also important to take regular breaks and hydrate yourself if you spend long periods of time in front of a screen.



EYESIGHT:

If you wear glasses, it is recommended to have a blue light filter directly on the lenses. Every hour, remember to look up from the screen and focus on a point further away to relieve your eyes and prevent headaches.



The lighting should be sufficient to avoid straining your eyes, but be careful not to place any light source directly in your field of vision in order to limit glare.





ERGONOMICS AND WORKSTATION

THE LAYOUT OF THE WORKSTATION

THE OFFICE TABLE:

The table top should be in good condition, stable, and provide enough space for the tasks to be performed. Ideally, the table top should be matte and light in color (but not white).

The table should allow enough space for legs and feet, and the table top should be at elbow height. If this is not the case, the table should be able to be adjusted in height.



THE SCREENS:

To maintain a neutral neck and back position, the top of the monitor should ideally be at eye level for most users. The keyboard, documents, and monitor should be aligned in a straight line facing the user, to avoid prolonged body rotation.

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THE MOUSE:

There are different types of mice, wired or wireless, simple or ergonomic. The most important is that it is easy to handle and placed close to the keyboard to offer good freedom of movement.





THE LAYOUT OF THE WORKSTATION

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THE OFFICE CHAIR:

There are several types of armchairs; the ideal is to try them in store or get advice when purchasing one. As much as possible, **the chair should meet the following criteria**:

- It is stable and easy to move, and the cranks work properly.
- The seat height is easily adjustable.
- The seat depth is adjustable.
- The backrest is height adjustable and reclining.
- The backrest provides adequate lumbar support.
- It allows a dynamic sitting position.
- The armrests are adjustable.
- Respecting these criteria contributes to better ergonomics at work.





THE OPTIMAL WORKING POSITION



This is the position you need to adopt to work ergonomically!

1 ERGONOMICS AND WORKSTATION

CHAIR SETTINGS



- Seat Height: Adjust the height so that your feet are flat on the floor, with your knees at a 90° angle to your hips.
- Seat Depth: Adjust the depth so that there is about two fingers' space between the edge of the seat and the back of your knees, allowing for good blood circulation.
- Lumbar Support: Position the lumbar support to maintain the natural curvature of the lower back.
- Armrest height: Adjust the armrests so that your shoulders are relaxed, and your elbows are close to your body, forming a 90° angle with your forearms.
- **Backrest:** Tilt the backrest slightly back for good support without straining the spine.

Adjusting these items helps prevent pain and promotes an ergonomic posture for office work!



THE EFFECTS OF BLUE LIGHT



Blue light can have a harmful effect on the body. It is present in the screens of smartphones, tablets, televisions, etc.

There are blue light filters that can be attached to computer screens, and treatments can also be applied to eyeglass lenses to reduce its impact.

You can also adjust its intensity in your computer settings (gear icon)