“Neutral” postures:

Neutral postures do not just refer to one posture or position of a joint, but to a range of postures in which the muscles work efficiently and the joint is well-aligned. Generally, neutral positions coincide with the mid-point in the movement of the joint.

Benefits of adopting neutral postures at work

- Work can be carried out with greater efficiency (less effort and better performance).
- The tension in muscles, tendons, nerves and bones is reduced.
- Control over the task is greater.

Awkward postures?

Awkward postures occur when the joints are not in neutral positions. If these postures are held for a prolonged, continuous periods of time they can cause musculoskeletal problems. In the following examples, the green areas shows the neutral postural range, whilst the red areas shows positions that are considered awkward.

A well-designed workplace ensures that tasks can be undertaken without adopting awkward postures.
Whenever possible, your head and the neck should be **aligned with your torso**, or **within the range** of acceptable movements.

### FLEXIONS AND EXTENSIONS

- **Flexion**: bending the head forward
- **Extension**: bending the head backwards

### ROTATIONS

- Instead of turning your neck, move your feet in the required direction or move your body

### INCLINATIONS

- Try to help yourself by moving your body

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**If you work with a computer:**

- Position the top of the monitor at eye level to avoid extensions and flexions of the neck. If you use progressive lenses, put the screen as low as possible.
- Place the monitor in front of you to avoid turning your neck. If you have to change task, turn your seat to face the task.

**If you carry out other activities:**

- Work at suitable heights to avoid flexions and extensions of the neck. Use mechanical aids if necessary.
- Turn your body to face the task to avoid turning your neck unnecessarily.
Whenever possible, organise the workplace to reduce risks.

- Working at the right height will help you to avoid awkward postures.
  - Use mechanical aids (stepladders, platforms) that help you to work without adopting awkward postures.

- Reduce flexion of your neck by working at the right height.
  - If the work surface is too low, place stable objects on top of it that help you to work at the right height.
Whenever possible, keep your arms close to your body and your elbows below your shoulders.

**FLEXIONS AND EXTENSIONS**

- Try to use mechanical means that enable you to work at suitable heights.

**ABDUCTIONS**

- Use mechanical means (ladders) so that you can work without raising your elbows above your shoulders.
- If this is not possible, take breaks or change activity so that tensed muscle groups can relax.

*When you have to work at height:*
Whenever possible, your forearm, wrist and hand should be aligned.

**Flexions and Extensions of the Wrist**

- Flexion
- Extension

**Lateral Deviations of the Wrist**

- Left lateral deviation
- Right lateral deviation

**Rotations of the Forearm**

The use of portable electric tools is recommended to avoid awkward postures.

**If you work with a computer:**

- Do not use the legs on the back of the keyboard, to avoid extending your wrists for prolonged periods.
- Support your forearms and wrists on the table to ensure neutral, relaxed postures.
- Reduce the use of laptops as they cause lateral deviations of your wrists (due to the small keyboard size).

**If you carry out other activities:**

- Whenever possible, use portable electrical tools.
Aligning your forearm, wrist and hand will reduce muscle effort

Whenever possible, use portable tools to minimise awkward postures and the effort required.

Your forearm, wrist and hand must be aligned.

When you push or pull a load, do it at the right height. This will prevent you from adopting awkward postures.
Whenever possible, **avoid excessive flexions, rotations and inclinations**

### FLEXIONS AND EXTENSIONS

- **Bend your legs when you need to bend your back**
- **0°** allowed
- **45°** not allowed

### ROTATIONS

- **If you have to turn, move your entire body and point your feet in the direction in which you have to carry out the task**
- **0°** allowed
- **10°** not allowed

### INCLINATIONS

- **Use movements of your body to avoid inclinations**
- **0°** allowed
- **10°** not allowed

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**If you work with a computer:**

- Support your back well by using the chair’s backrest.
- Use a swivel chair to avoid twisting your torso.
- Do not bend to reach objects that are far from you. Move close to them with your chair (take advantage of the chair’s wheels).
Try not to handle loads with just one arm. If possible, use mechanical aids with wheels.

A standing-sitting posture allows you to alternate between the two positions.

Remember to alter the height of the work surface.

If you work at the right height, you will avoid bending your torso and consequently you will avoid overexerting your lumbar region.

**Balance your torso and work at the right height.**

**Ergonomic recommendations**

**Posture at work**

1. Introduction
2. Head and neck
3. Shoulder and arm
4. Forearm, wrist and hand
5. Torso
6. Other postures
7. Recommendations

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Other postures that could cause musculoskeletal injuries

**Working in a crouching position**

When tasks require you to work in a crouching position:

- Use **kneepads** or **mats**.
- **Alternate between knees**.
- Use **means (such as footstools)** so that you do not have to kneel.

**Working in a static position**

When you work in a static position:

- Try to have one leg in front of the other and alternate between legs.
- If possible, support your foot on a raised surface.

Alternate between tasks that require static positions and dynamic tasks that enable you to relax your tensed muscles.

Carry out static work on a work table.

Use systems that enable you to work comfortably.
GENERAL RECOMMENDATIONS

Have breaks: if the task you need to do will take a long time, try to take breaks that will help the recovery of the muscle group that is being used. Sometimes these breaks could be carried out by working on other tasks that allow the muscles to relax.

ORGANISATION OF TASKS

Jobs should be planned to alternate between postures and to use different muscle groups.

TASK 1

TASK 2

TASK 3