

## Sitting Posture And Ergonomics For A Healthy Back

### A Few Ergonomic Recommendations:

#### Rest Breaks

- Fundamentally important to reduce discomfort and injury due to static muscular contractions
- Should be short and frequent (every 20 minutes)
- Standing and walking should be encouraged

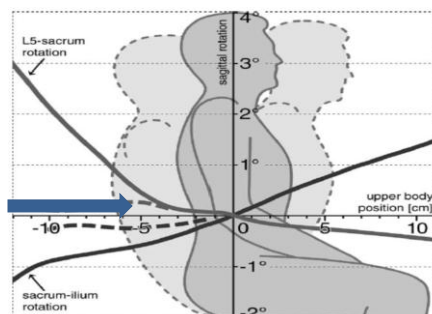
#### Correct Seat Height

- Should be at the level of knees (approximately 380-535 mm), if not adjustable → use a footrest
- Feet in contact with the floor (transfers 25% of body weight through legs)

#### Lumbar Support

- At least 6 cm of free shoulder space from the front of the lumbar support is a minimal requirement
- Back support is required from below the bottom of the shoulder blade to minimize the rotation of low back vertebrae and the sacrum on each other

Fig 1 (below) A back support should be used to keep the low back in its neutral curvature. A low backrest chair keeps the natural curvature of the low back.



Armrest at the level of keyboard, gap for the elbow and ulnar nerve

10-20 degrees of backwards tilt and supports the upper back and thorax

Lumbar support for the lower back

Seat height at the level of knees



#### Back-rest Tilt

- Range between 10-20° of backwards tilt
- Supports the weight of the thorax reducing low back muscular activity
- Chairs with a low back rest recommended (see fig 1)

#### Arm-rests

- Reduce muscular exertion in the trapezius muscles
- Must be a gap between the armrest and the backrest to ensure the ulnar nerve (at the elbow) is not impeded
- Adjusted for elbows to be at the level of the keyboard

If you have any questions or concerns, please do not hesitate to contact us directly.

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