

CHAIR FEATURES

Adjustability:

- ❖ Seat pan, backrest and armrest should be easily adjusted and lockable from a seated position

Seat Pan:

- ❖ The seat pan tilt should be adjustable between 3° forward (for activities such as writing) and 4° backwards (for activities such as conversation)
- ❖ The seat pan should be large enough to provide support for upper legs but should not press into the backs of the lower legs
- ❖ The front edge of the seat should have a smooth “waterfall” shape

Back Rest:

- ❖ An adjustable range for tilt between 95° and 110° is recommended
- ❖ The backrest should provide lumbar support

Armrest:

- ❖ The use of armrest is recommended to support arms and shoulders
- ❖ Armrests should allow the worker to sit close to the desk

Chair Base:

- ❖ The base should have 5 casters
- ❖ The base should allow the chair through 360°

Seat Cushion:

- ❖ The cushion should compress approximately 2.5 cm
- ❖ Both cushion and seat pan should have minimal contouring to allow easy shifting of position

Seat Covering:

- ❖ Fabrics should be non-slippery and permeable to allow ventilation and absorption of perspiration
- ❖ The covering should not produce any pressure points

CHAIR ADJUSTMENT

The chair should be adjusted to allow a neutral, relaxed posture

- ❖ Set the chair height such that the knees are at hip level, the feet rest flat on the floor (or footrest) and weight is evenly distributed over the seat pan
- ❖ Tilt the seat pan to a comfortable angle
- ❖ Set the backrest height and angle such that the lumbar curve supports the small of the back
- ❖ Set the armrest to support the forearms with the elbows bent 70°-135°

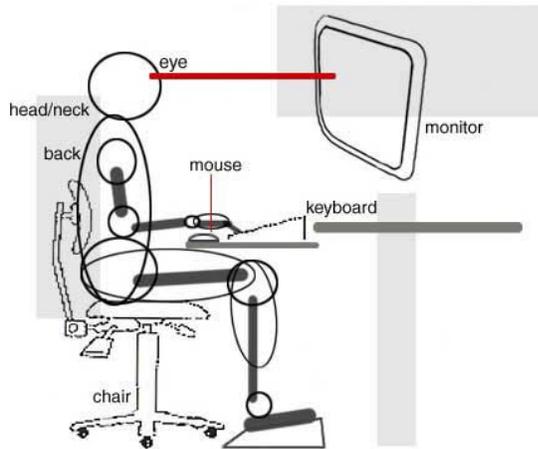
KEYBOARD & MOUSE

The keyboard and mouse should be positioned such that:

- ❖ The lower and upper arms form an angle of 70° - 135° at the elbow with upper arms roughly vertical and lower arms roughly horizontal
- ❖ Forearms rest on armrests
- ❖ Wrists are straight

A wrist rest in front of the keyboard may provide additional support

MONITOR



- ❖ Place the monitor with the top of the screen at or below your eye height
- ❖ The monitor should be located in the central field of view
- ❖ Glare can be eliminated by controlling light sources or by using an antiglare screen

WORK PRACTICES

- ❖ Take a five-minute break from your VDT workstation every hour

TRAINING FOR WORK

Establishing Excellent Work Habits

1. Ideal Postures – practicing good posture is one of the principal ways to avoid potential injury induced by computer use
 - ❖ Ideal sitting posture (computer fit, Randall helm,1997)
 - ❖ Head over the shoulders
 - ❖ Back straight against the chair's back rest
 - ❖ Slight lumbar (lower back) curve
 - ❖ Knees bent 90°
 - ❖ Feet flat on the floor or on a foot rest(learning good postural habits reduces common postural problems, in addition to other computer-related injuries like cumulative trauma disorder, repetitive motion/strain injuries as well as neck, shoulder, arm and back pain.)
2. Maintain muscle balance by performing proper stability exercises in conjunction with an individualized strengthening and flexibility program.
 - ❖ Ask your physiotherapist or Kinesiologist for an exercise prescription
3. Take Frequent breaks – allow for opportunities to stretch and relax overworked muscles
4. Vary your job (perform different tasks) and working position as frequently as possible
5. Introduce cardiovascular exercise as part of your daily regime (physically fit individuals have both the physical and mental stamina to over come stresses of a hectic workplace are more productive workers and have higher energy levels to enjoy other aspects of life).
6. Good nutrition and stress management are also key

REFERENCES

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www.uhs.berkeley.edu/facstaff/ergonomics/

ErgAerobics – Ergonomics, RSI, Carpal tunnel syndrome, stress...:

www.ergaerobics.com/ergercises.htm

Ergonomics:

www.tradenet.it/links/sc/ergonomics

Ergonomics at work:

www.combo.com/ergo/atwork.htm

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Larson, N., Macleod, D., Kennedy, E. Adams, W., and Meier, C., (1991) *An Ergonomics Guidebook for Computer Users*. Ergotech Inc. Minneapolis

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www.msds.org/oshanswers/ergonomics/office/office.htm

University of Waterloo. (1994) *Characteristics of an Office Workstation*. Centre for Occupational Health and Safety. Adapted from CSA. Z412-M89