

Dr. John R. Chait

Presents



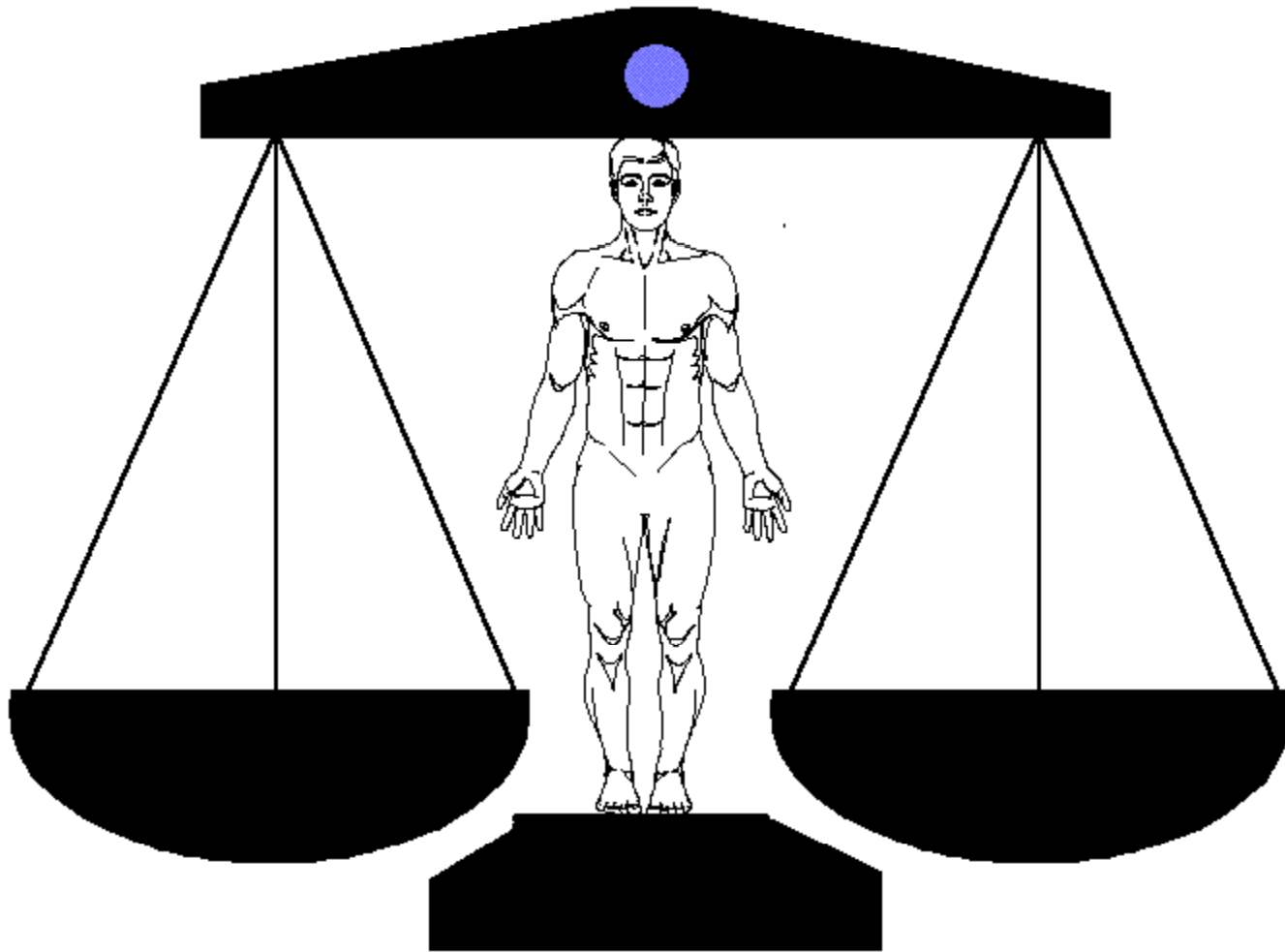
Computer Ergonomics

“ergonomics”

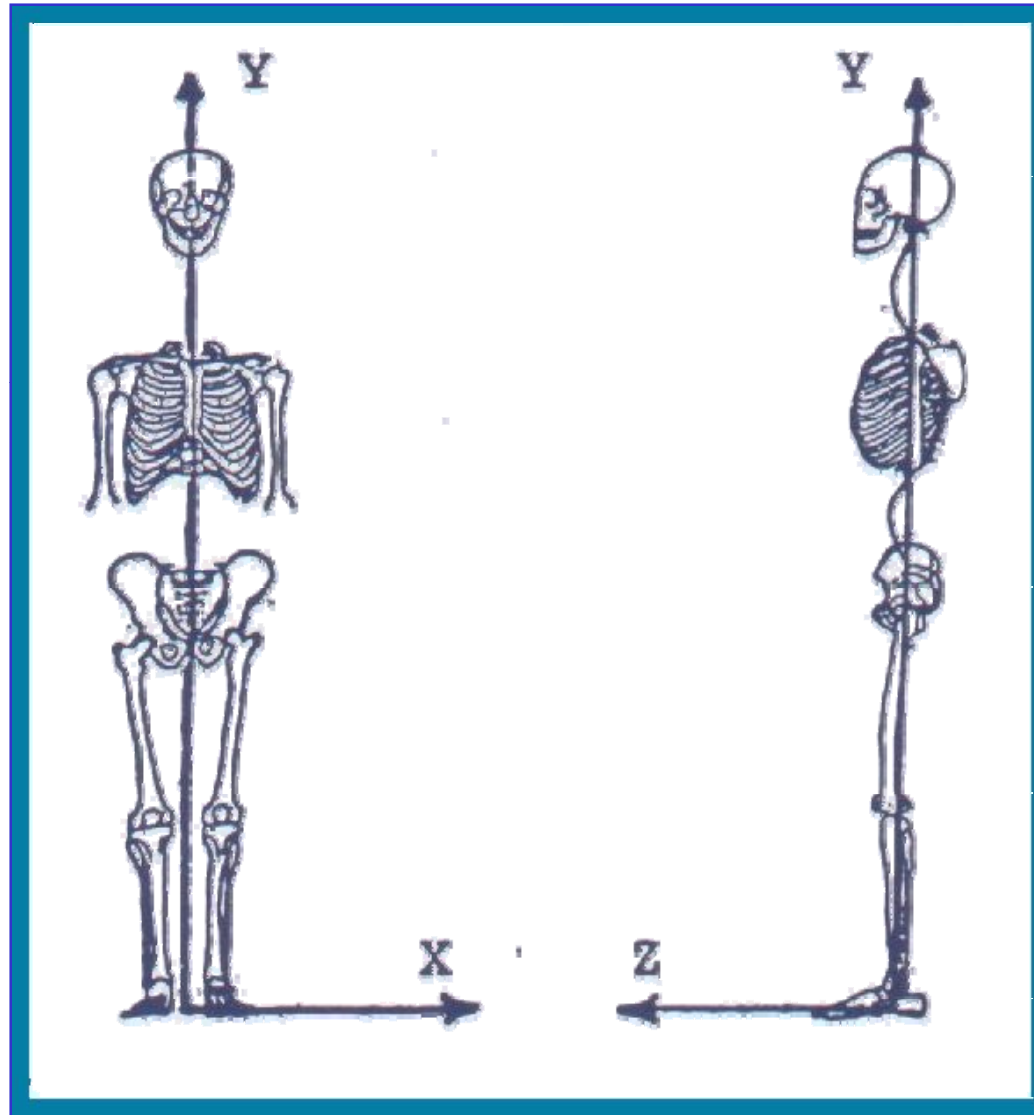
The study of the design and arrangement of equipment so that people will interact with the equipment in healthy, comfortable, and efficient manner. As related to computer equipment, ergonomics is concerned with such factors as the physical design of the keyboard, screens, and related hardware, and the manner in which people interact with these hardware devices.

Def. From the Free online dictionary of computing.

Body Balance



Normal Posture



Normal Sitting Posture



Proper PC Posture

Ears aligned with shoulders

Proper lumbar support

Proper seat height



Correct monitor height

Elbows bent 90 degrees

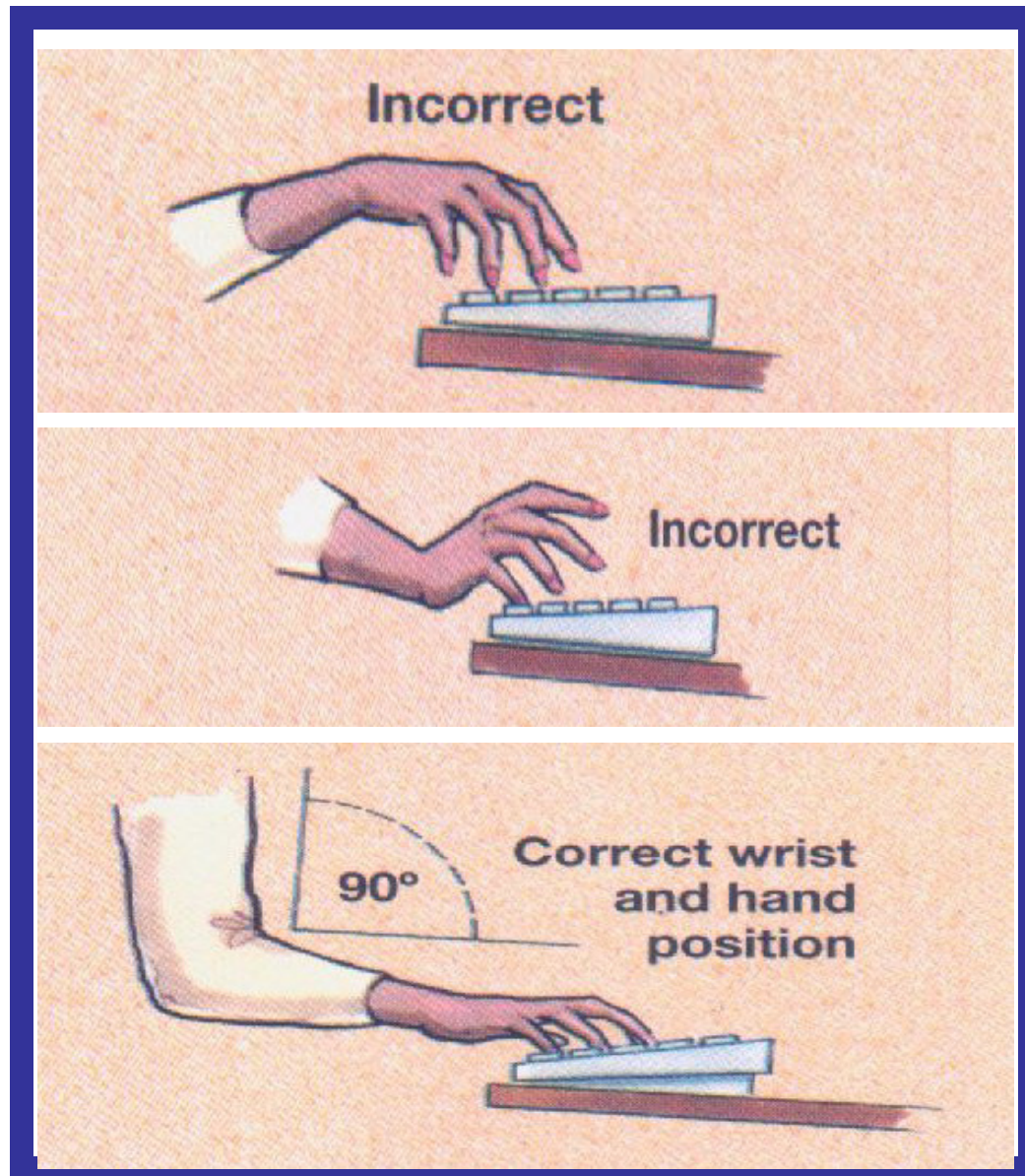
Feet flat on floor

Guidelines to Remember

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- The computer screen should be positioned to avoid glare.
- High luminance sources in the computer user's peripheral field should be avoided.
- The head should be tilted forward 15 degrees or less to maintain a vertical position.
- The elbows should be kept close to the body or supported.
- Wrists should be kept straight in a natural position.
- The keyboard slope should not be greater than 15 degrees.
- The user's lumbar curve should be maintained at all times.
- The edge of the seat pan should be at least 2-4 inches from the soft tissue area behind the knee [popliteal area].
- Feet should never dangle and should be supported.
- Fingers on the home row of a keyboard should be approximately 0 to +1.5 inches above elbow rest height.
- The backrest should support the lower back area and not interfere with the turning motion.

Key Board Ergonomics



☺ Mouse Ergonomics ☺

☺ The mouse should be positioned at a comfortable level to the right or left side of individual. There should be a level plane between the hand, the wrist, and the forearm with support for all. It is a good idea to use two mouse pads if possible, one for the mouse, and one for the persons elbow. There should be an approximate bend of 90 degrees of the elbow.

🖱️ Mouse Ergonomics 🖱️

🖱️ **The motion of the mouse should be controlled with the muscles of the shoulder, (Not the wrist or hands) making sure that proper angles are maintained.**

🖱️ **If possible set up you're PC to single mouse click to open programs instead of double clicking.**

🖱️ **Do passive stretching exercises before and after manning the mouse.**

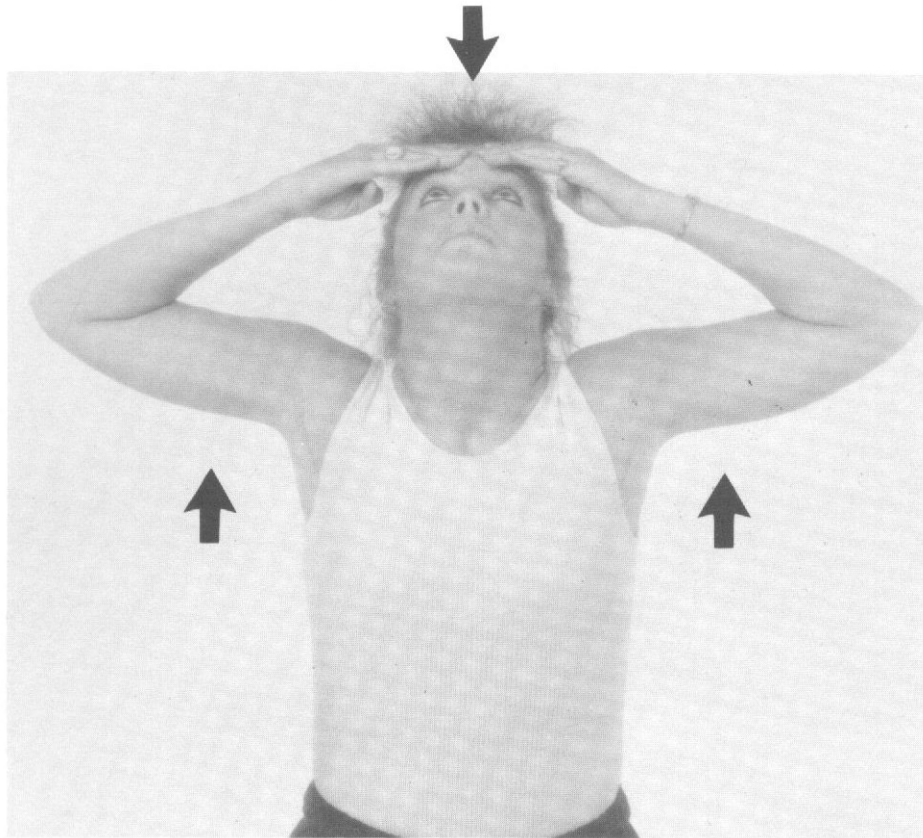
🖱️ **Take periodic breaks to give your joints a rest.**

Ergonomic Exercises

CHIROPRACTIC BIOPHYSICS

SPINAL REHABILITATION PROGRAM

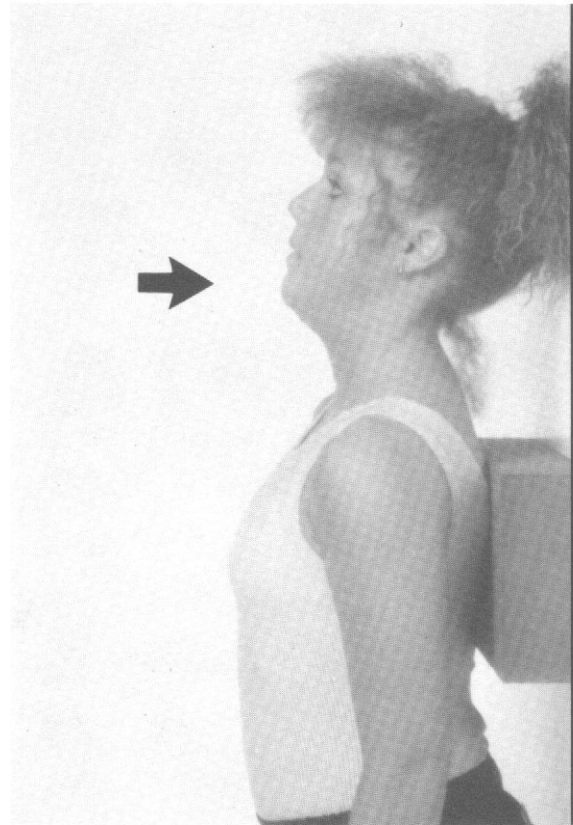
CERVICAL EXTENSION COMPRESSION EXERCISE



CHIROPRACTIC BIOPHYSICS

SPINAL REHABILITATION PROGRAM

SKULL POSTERIOR TRANSLATION





Make sure your chair is stable. With feet flat on floor, clasp hands behind head and slowly arch back, bending head backward. Hold up to 5 seconds.



Turn your head slowly to the left and hold 5 seconds. Then repeat on right side. Drop chin to chest, hold, then slowly tilt head back as far as possible. Repeat sequence 5 to 10 times.



Palming: Cup your hands gently over your closed eyes. Hold for one minute.



Let your arms relax at your sides. Then raise your shoulders and rotate them up and back in a circular motion. Repeat up to 5 times. Then change direction.



With your hands held in front of you, gently rotate your wrists so that the fingertips describe circles in the air. Repeat 5 times in each direction.



With hands held in front of you, first clench both fists and hold 5 seconds. Then spread fingers as far as you can and hold 5 seconds. Repeat 5 times.



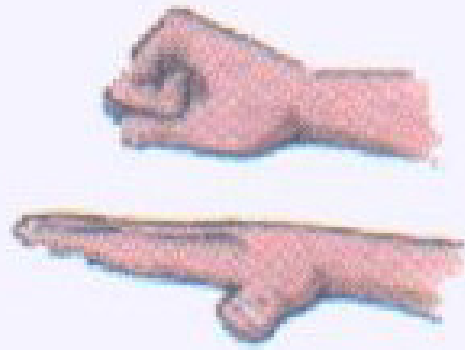
With your hands in front of you and your elbows at a comfortable angle, gently rotate your wrists. Repeat 5 times in each direction.



Grasp the fingers of one hand and bend back the wrist. Hold for 5 seconds. Then switch hands.



Gently grasp the thumb of one hand and pull out and down until you feel the stretch. Hold for 5 to 20 seconds. Repeat 3 to 5 times with each thumb.



With hands in front of you, first make a fist and hold for 5 seconds. Then spread out the fingers as far apart as you can. Hold for 5 seconds. Repeat up to 5 times for each hand.



Gently massage the palm and back of each hand, using a circular motion. This especially helps the muscle at the base of the thumb.

Ergonomic Equipment











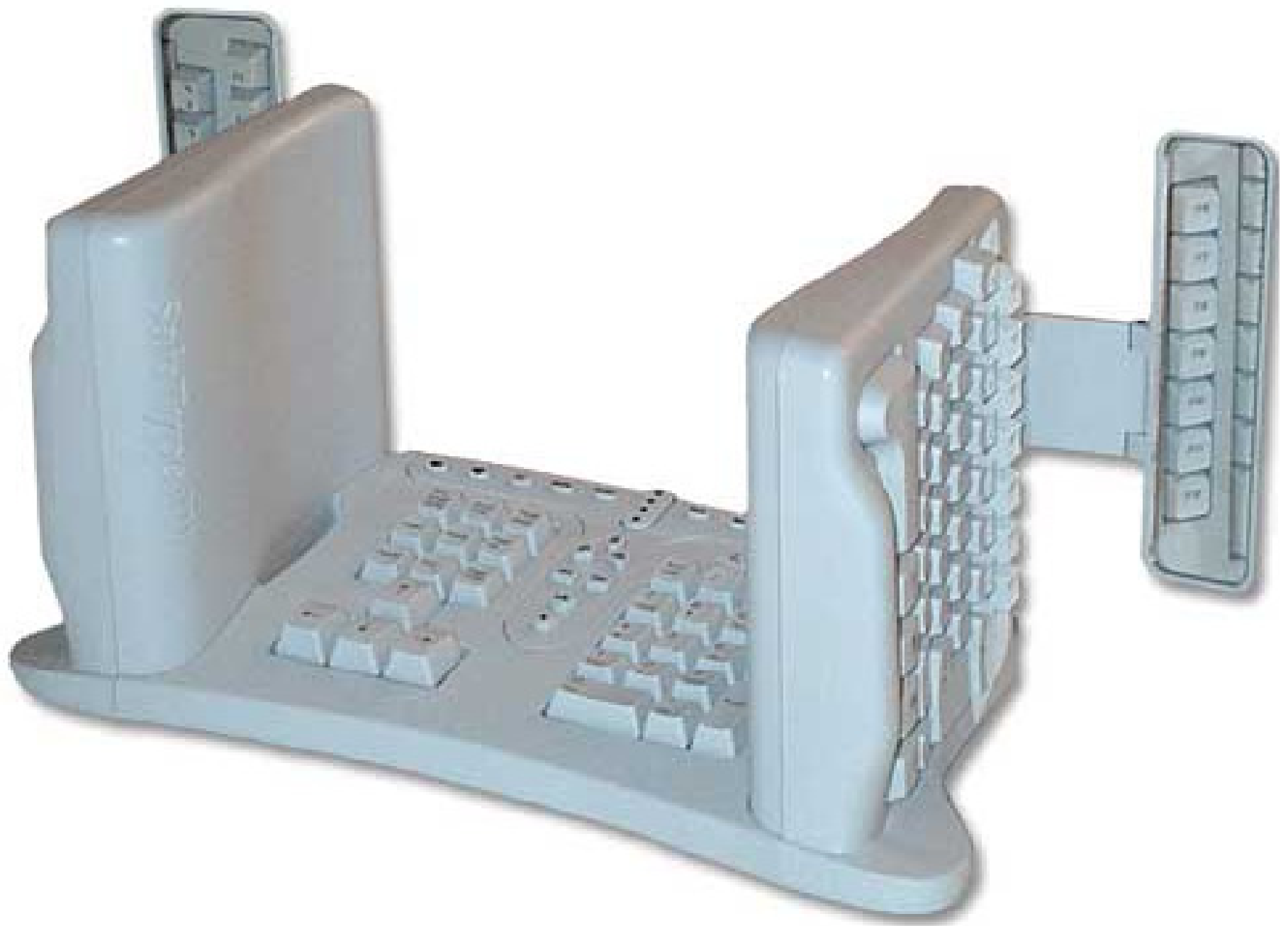




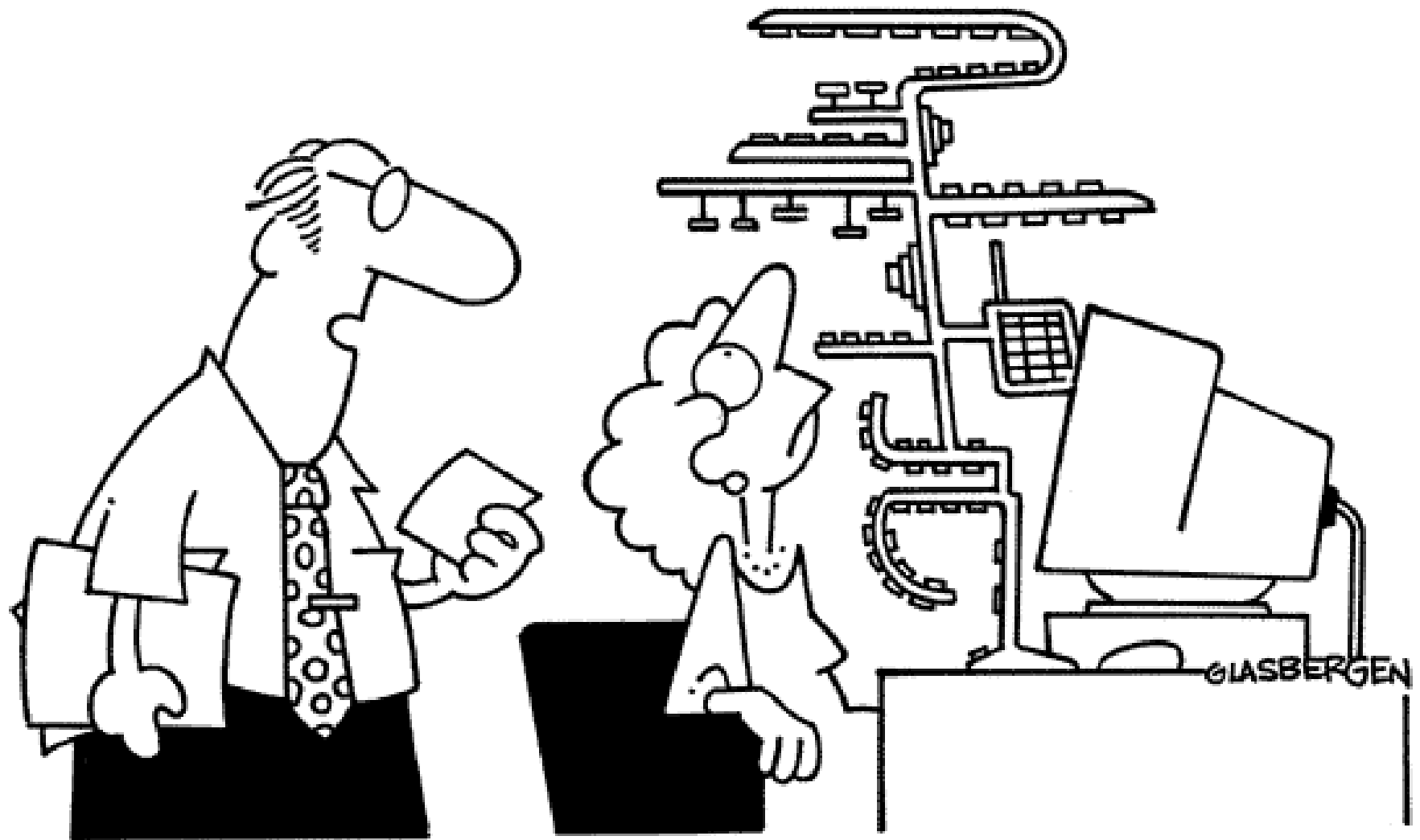








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“It’s an ergonomic keyboard. Once you learn how to use it, it will increase your speed by six percent!”





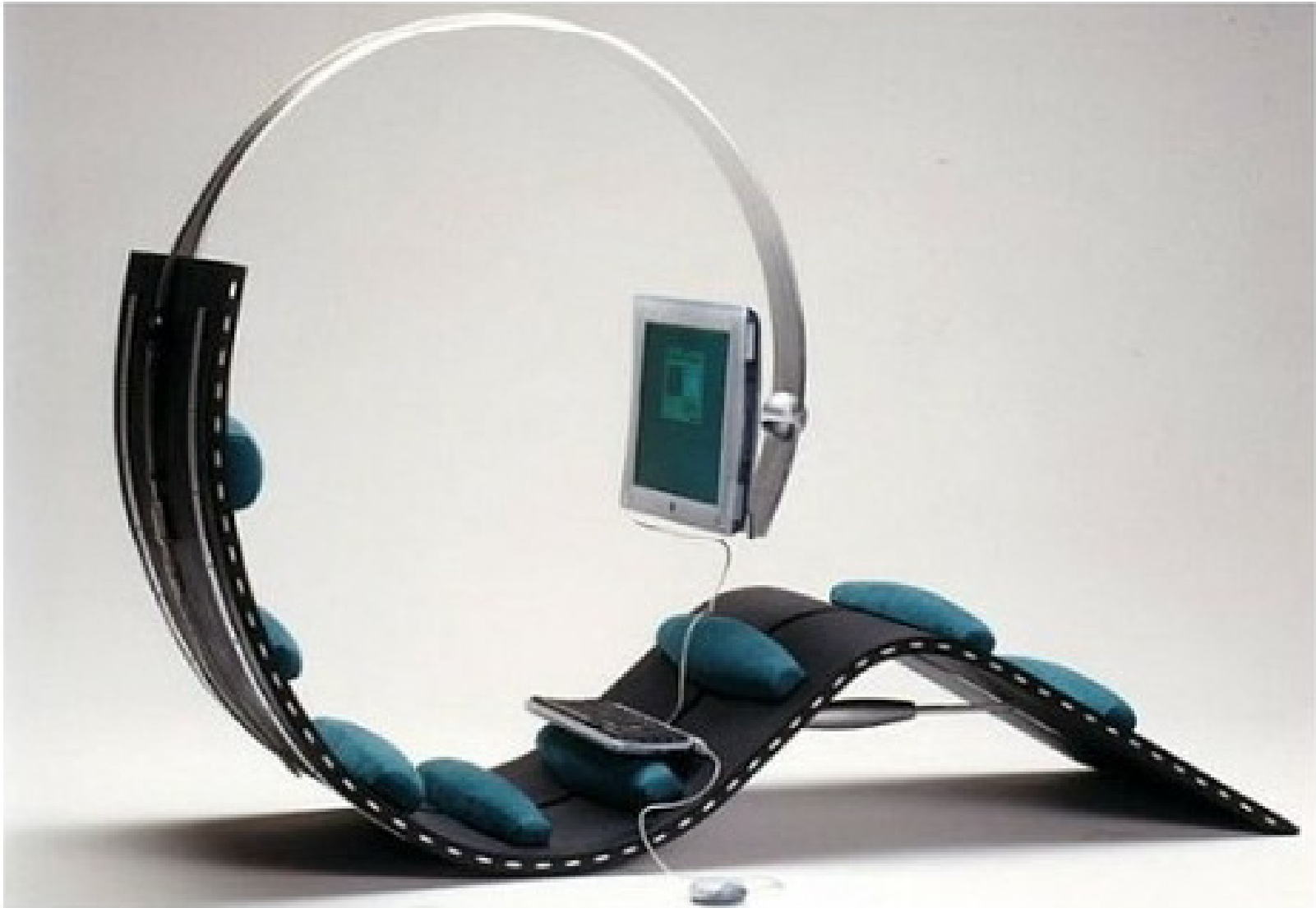
Use different types of mice to limit repetitive stress











Computer Related Symptoms

- **Low Back Pain**
- **Leg Pain (Sciatic)**
- **Neck Pain**
- **Arm, wrist or hand pain (Carpel Tunnel)**
- **Shoulder pain**
- **Fatigue or tired muscles**
- *These symptoms may be pinpoint or may radiate.*
- *These symptoms can be helped through Chiropractic adjustments.*

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Questions and answers