

**HOSPITAL FOR SPECIAL SURGERY
HAND THERAPY CENTER
(212) 606-1660**

Therapist: _____

Date: _____

Choosing a Chair

Considerations

This is a quick review of the key features to look for in a desk chair. “Ergonomic” chairs can be quite expensive but more money does not guarantee a better chair. Any chair must be adjustable to accommodate a variety of positions and postures. And, most importantly, they must feel comfortable to you!

1. Adjustable height – Most office chairs have height adjustments. Adjustments are either mechanical or automatic. Look for chairs with automatic height controls. These are usually pneumatic. If it is easy to adjust the height, it will be easier to change positions when necessary. The user should be able to place both feet flat on the ground while in a comfortable position. A reference range would be between 38 and 58 cm but you still need to try them individually.
2. Backrest – The backrest should be of sufficient size to provide adequate support for your back. Some supports go as high as the neck/head but these are probably unnecessary for most people. The back rest should be curved slightly to accommodate the natural curve or “lordosis” of your lower back.
3. Backrest Adjustments – The back rest should have a height and recline adjustment. Height adjustments will allow the backrest to approximate your lordosis more accurately. A recline adjustment will allow you to sit in more relaxed position. Research indicates that reclining to 110 degrees can alleviate substantial stress on the low back. Some chairs do not allow for fixed positioning of the backrest depth. Instead the user is able to lean back and is supported by a spring like action. I prefer people to use chairs that have fixed depth adjustments. This will allow the user to fully lean back against the backrest.
4. Seat Pan - The seat pan should be wide enough to support the user and padded enough to be comfortable. A seat pan that has an adjustable tilt (separate from the lumbar recline) is preferable.
5. Seat Depth adjustment – The person using the chair should be able to sit with their feet flat on the floor and without the back of the knee touching the edge of the seatpan. A clearance of about 2 inches is recommended. Adjustments of the seat depth can help to accommodate this. Seat depth can be adjusted via two mechanisms – the back rest or the seat pan. In some chairs the backrest, in

addition to reclining will slide forward and backward. In fancier chairs the seat pan itself will actually slide back and forth to reduce or increase the chair depth. Depth adjustments also allow for a greater variety of positions.

6. Five legs – Any chair should be supported by 5 legs. If you need to move the chair then it should be on smooth gliding casters. The chair should also swivel easily.

Other features to consider

7. Chair recline or tilt – In chairs with this option, both the lumbar support and the seat pan tilt together. In most cases, this is not preferable to individual adjustments.

8. Armrests – Choosing a chair with armrests is a matter of preference. Armrests may benefit some people and they may hinder others. In general armrests may benefit people with concerns about the spine and shoulder. However, armrests do limit your freedom of movement. If you have to perform seated tasks that require large ranges of upper extremity motion, then you will have to decide whether armrests will be help or a hindrance. Also, armrests may alter the wrist angles and may exert pressure on the elbow.

Armrests should be adjustable. Height adjustments are necessary to allow for proper arm position. Width adjustments are available on more expensive chairs. And, in premium chairs, the armrests may swing away completely. Keep in mind that armrests can be removed from many chairs should they prove to be restricting. Or in some cases, they can be lowered out of the way

8. ANSI standards – ANSI/HFES 100 standard for VDT Workstations specifies ranges and dimensions for ergonomic chairs. Many chairs are compliant with ANSI standards. Look for chairs that say they “meet or exceed” ANSI standards. For a copy of the standard, contact the Human Factors and Ergonomics Society, PO Box 1369, Santa Monica, CA 90406.

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