

Lecture 10

SETTING UP A WORKSTATION

Monitor your thought process



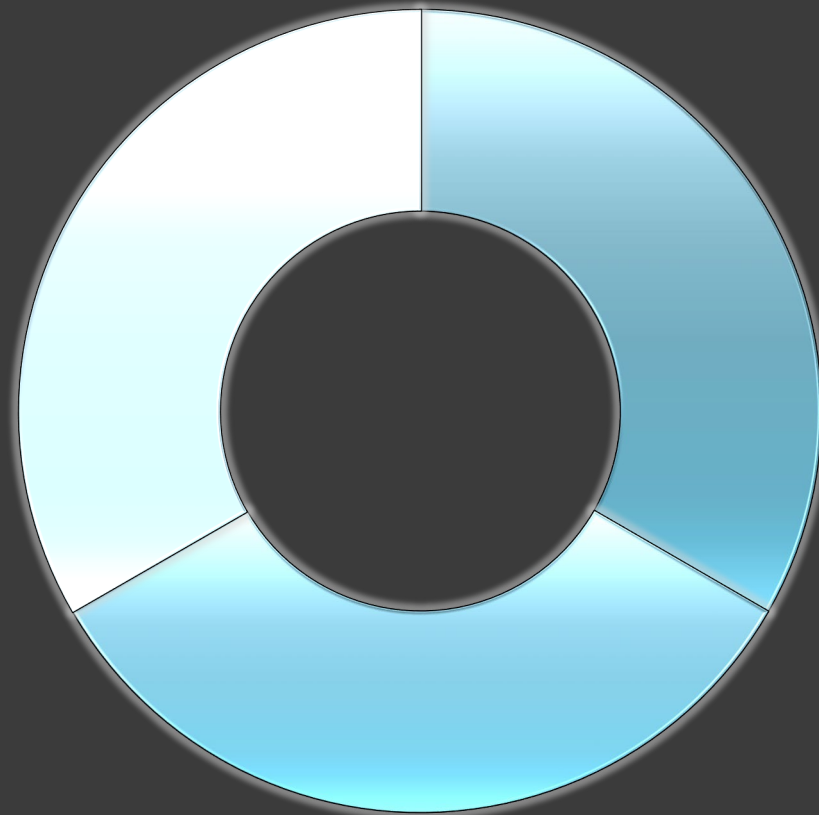
What makes a good setup?

The client/employee is able to:

- ⦿ carry out a given task
- ⦿ At the best of their ability (effective)
- ⦿ Within a reasonable timeframe (efficient)
- ⦿ Without compromise on their well-being in both short and long-term

Things to keep in mind

Sales



- 1 physical well-being
- 2 stature
- 3 task

Nature of the task

- ⦿ % time of task required using keyboard
- ⦿ % time of task listening, meetings, reading
- ⦿ Assess level of difficulty of task being engaged: easy – medium – hard
- ⦿ Total duration of task
- ⦿ Continuous vs interrupted task
- ⦿ Productivity vs Creativity

Stature – the fit

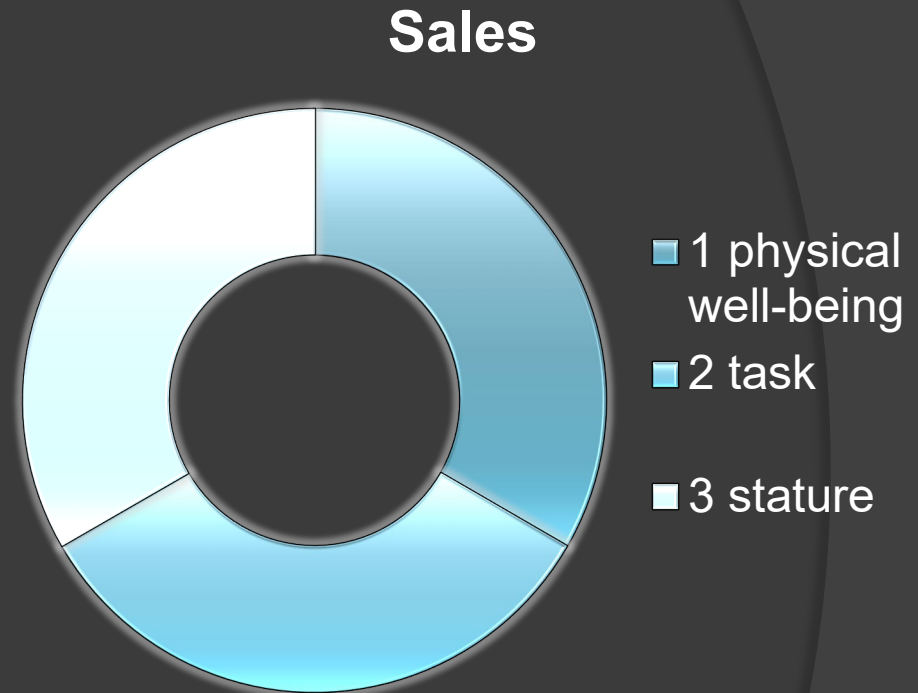
- Height – short - medium – tall
1.50-1.69 - 1.70 - 1.80 - 1.81 upwards
- Weight – slim – average – overweight
- Gender – male hips vs female hips
- Age – young (18-24)
middle (25-45)
upper (>45)
- Clothing / shoes (heels)

Physical well-being

- ⦿ Note on-going pain and discomfort
e.g. headaches, lower back pain
- ⦿ Note relevant past medical history
e.g. car accident leading to whiplash injury
- ⦿ Note any present physical disability
e.g. arthritis
- ⦿ Any long standing medical condition
e.g. scoliosis
- ⦿ Note any temporary medical condition
e.g. pregnancy, fractures etc

Concepts to keep in mind

- ⦿ Gravity
- ⦿ Leverage
- ⦿ Alignment
- ⦿ Support
- ⦿ Duration
- ⦿ Fatigue



What is not aligned with gravity needs to be supported
Through active or passive tension

Some thumb rules to follow

- ⦿ Feet planted firmly to the ground
- ⦿ Knees below the hips
- ⦿ Lower back has a lordotic curve
- ⦿ Shoulders backwards not forward
- ⦿ Chin tucked in

Some rules not to follow

- ⦿ One size fits all rules
- ⦿ Back straight with hips and knees at 90
- ⦿ Standing desks are better than sitting
- ⦿ Footrests are necessary
- ⦿ Armrests are necessary
- ⦿ Backrests must be used

Setting up a work station

- Step 1 – what is the nature of the task?

Productive



Creative / Pensive



Forward & upwards

vs

Back down



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Aim for the stars.....

- ① Aim for the ideal sitting arrangement
- ① If this is not enough then you need to consult.
- ① Ergonomic consultants will make arrangements that take into consideration the other two determinants.
 - Physical attributes
 - Pathologies and complications

Physical attributes - size

- Height (desk, chair, back rest, arm rest)
- Width (chair seat, arm rests)
- Length (seat depth, desk depth)
- Weight (cushioning soft vs hard)

Impact of environment

How do you think the following factors affect our sitting posture?

- ⦿ Light quality
- ⦿ Sound
- ⦿ Temperature

Time factor – how does time affect our sitting ergonomics?

- time and physics / gravity
- Time and fatigue
- Time and stress
- Time and deadlines
- Time at sitting (the POMO)
- Sprinting vs marathon
- Endurance, morale, productivity
- Burnout 😞

Habit retraining

- ⦿ Set timers
- ⦿ Set cues
- ⦿ Set mediating habits (small drinking cup)
- ⦿ Habit buddy
- ⦿ Habit cornered (remove the option not to)

What about standing desks?



The truth about standing desks

- ⦿ Productivity is -----the same (no less no more)
- ⦿ Pain (less of the old more of the new)
- ⦿ Impact on circulation
- ⦿ Body alignment :
 - Above hips stays the same
 - Below hips changes

Alternatives



Open vs closed kinetic chains

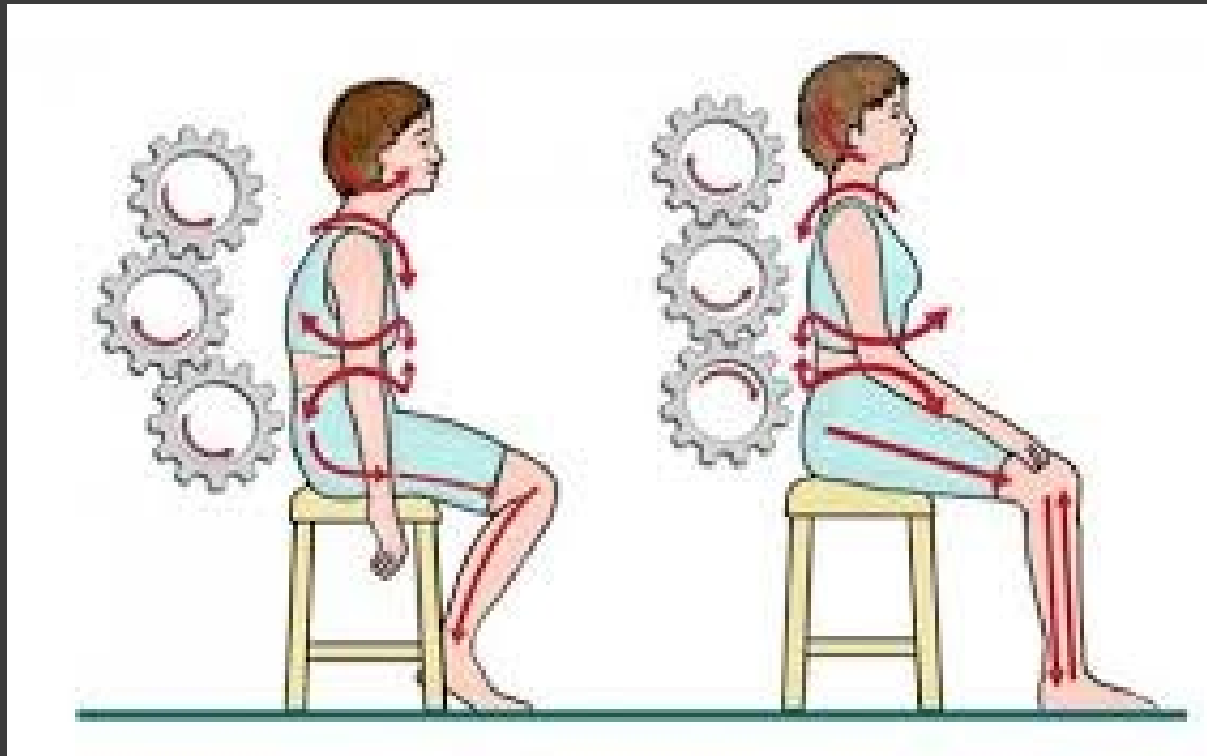
There are two kinds of kinetic chain exercises: open and closed. In open kinetic chain exercises, the segment furthest away from the body — known as the distal aspect, usually the hand or foot — is free and not fixed to an object. In a closed chain exercise, it is fixed, or stationary.



Is sitting posture open closed kinetic?



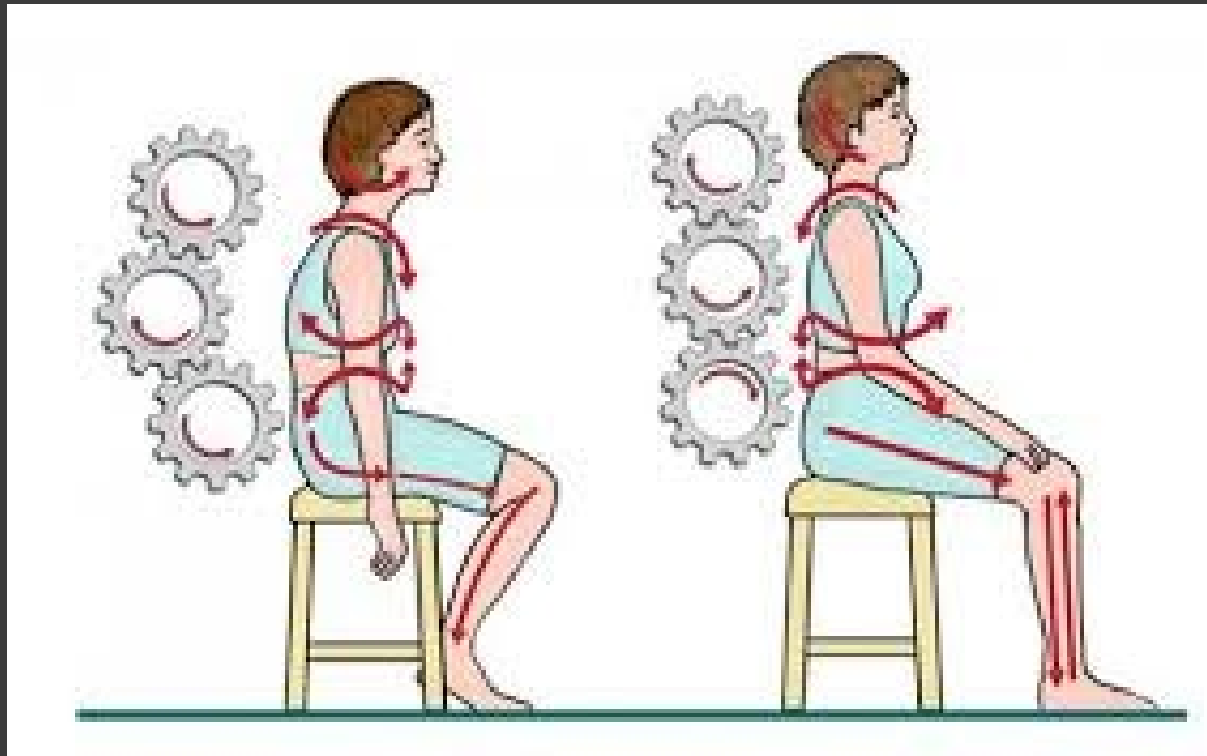
When sitting our posture acts as if it were a closed kinetic chain



The analogy of the cat



When sitting our posture acts as if it were a closed kinetic chain



Ergonomics as Therapy

- ⦿ Ergonomics is not just support
- ⦿ Ergonomics can be used for therapy

- ⦿ We can find the right posture and set the ergonomics accordingly
- ⦿ We can set the ergonomics to force us into the right posture
- ⦿ The obvious – e.g chair
- ⦿ Not so obvious – e.g. the monitor

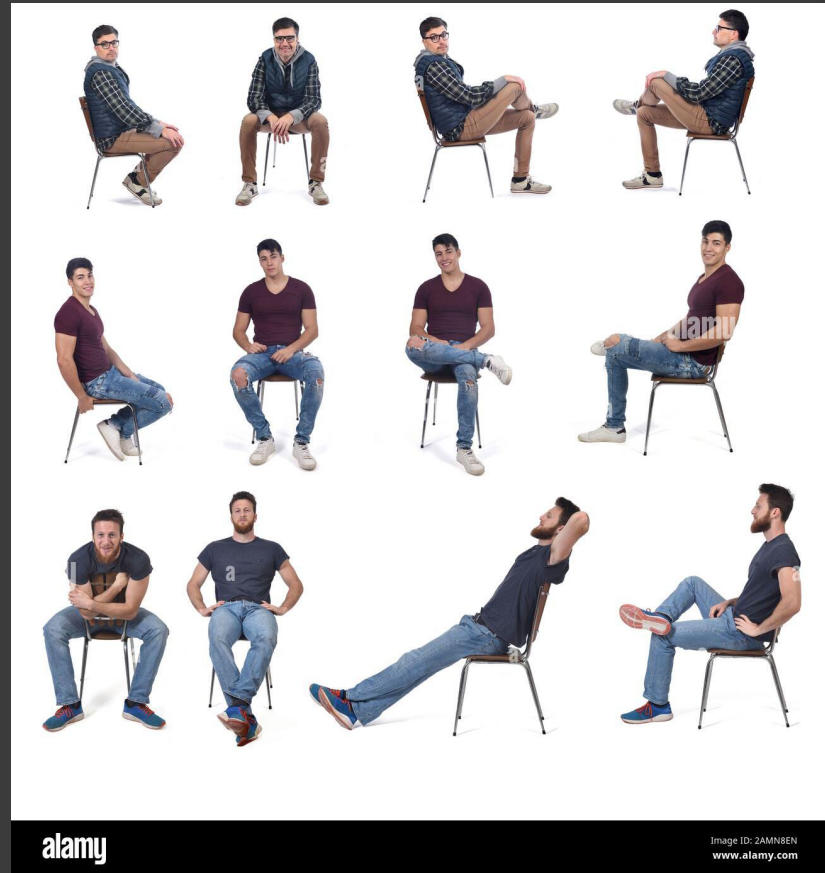
The Puzzle – Part 1

- ① What is the nature of the task



The Puzzle – Part 1

- What is the nature of the task



The Puzzle – Part 2

- ◉ What is the stature of the individual?



Keep in mind that just like with a shoe its better to have it slightly bigger than slightly smaller.
BIGGER FIT will hinder you!
SMALLER FIT will cripple you!!

The Puzzle – Part 2

- ① What is the stature of the individual?



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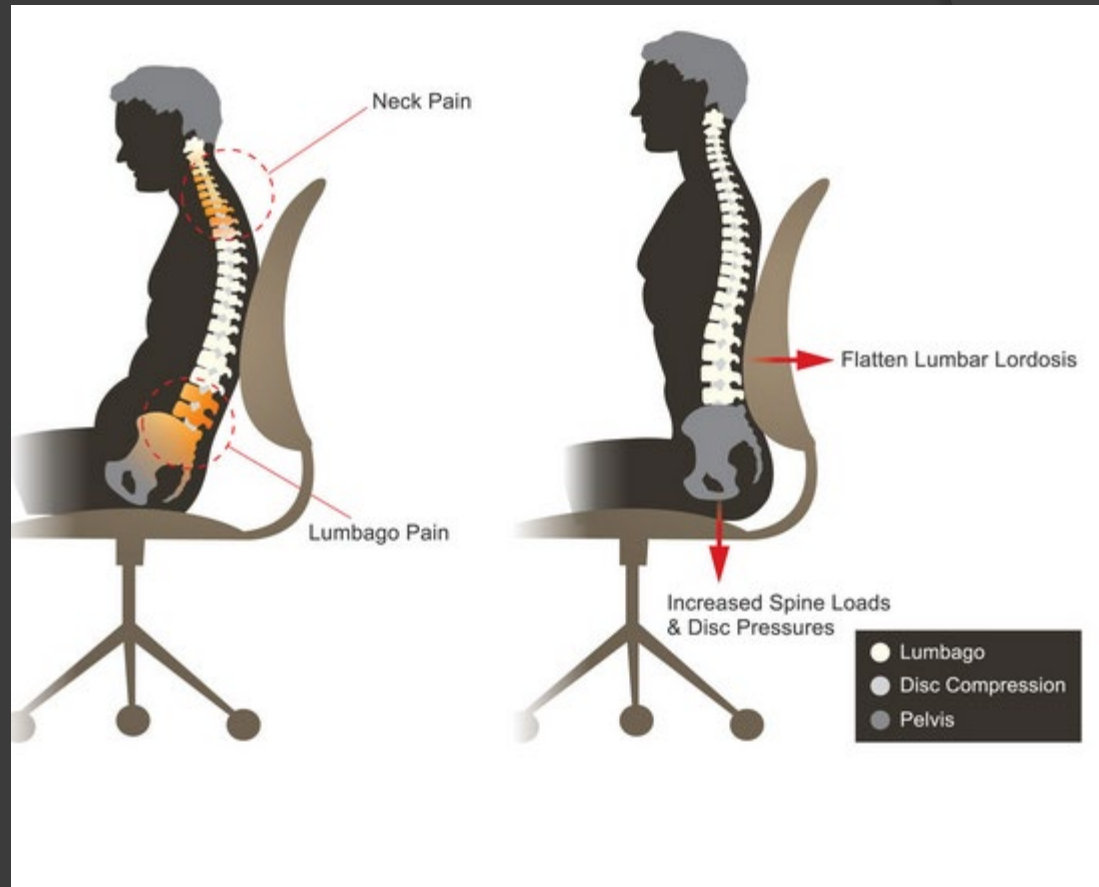
The Puzzle – Part 3

- ◉ What modifications need to be made?



The Puzzle – Part 3

- What modifications need to be made?
- This is where expertise comes in



Assess and Re-assess

- ⦿ Despite having found a theoretically sound posture there might still be set backs
- ⦿ The body needs time to adapt
- ⦿ The body needs time to learn
- ⦿ The body needs time to correct maladaptive
- ⦿ Small imperfections need time to surface

Recap

- Aim for optimal posture
- Start with textbook ideal
- Include stature
- Include pathologies
- Acknowledge the environment
- Build a habit
- Re-assess after 3 weeks
- There is not ONE optimal posture

Keep moving- optimal not perfect





THANK YOU

and

Good Luck