

Tips & tricks for ergonomically-friendly online lectures

Goele Theuwissen

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Special thanks to: Myriam Westhovens



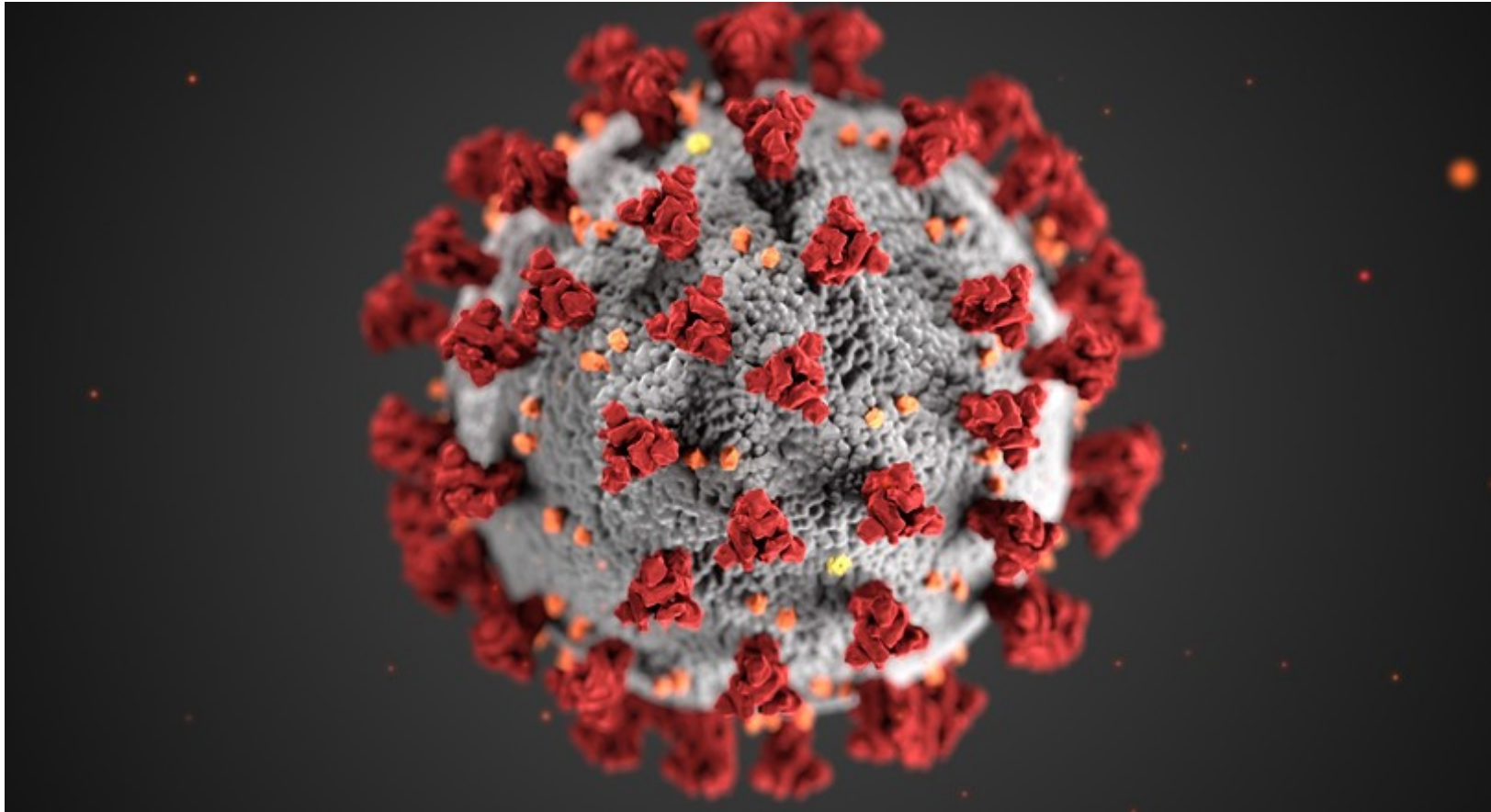
**UNIVERSITY OF APPLIED
SCIENCES AND ARTS**



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Introduction



After this webinar, you'll have ...

- insights in sedentary behaviour
- insights in office ergonomics
- tips and tricks you can easily apply to improve ergonomics during online lectures

Before we start...



Sedentary behaviour

- Everything you do while sitting or lying down
- Requires little energy expenditure
- ~~Sleeping~~
- ≠ being physically inactive



Sedentary behaviour - risks

Physiological effects:

- Blood circulation ↘
- Burned calories ↘
- Muscle strength and endurance ↘
- Muscle cramps ↗

Increased risk of:

- Cardiovascular diseases
- Obesity
- Cancer (Lynch B, Kerry S Courneya K, Friedenreich C, 2013)
- Type 2 diabetes
- Musculoskeletal injuries
- Depression, anxiety (Zhai L, Zhang Y, Zhang D, 2015)
- Premature death

Sedentary behaviour – premature death

Study population	Hours being sedentary/day	Comparison group (hours being sedentary/day)	Increased risk of premature death
Australian men and women aged 45 years and older	8 - 11	< 4	15% (Van der Ploeg HP, Chey T, Korda R, et al., 2012)
Australian men and women aged 45 years and older	> 11	< 4	40% (Van der Ploeg HP, Chey T, Korda R, et al., 2012)
Adults	≥ 10	< 4	+65% (Chau, Grunseit, Midthjell, et al., 2015)
Men and women from the US, aged between 50-74 years	> 6	< 3	+19% (Patel, Maliniak, Rees-Punia, Matthews, Gapstur, 2018)

About you



Stretching exercises



Ergonomics → Office ergonomics



Office ergonomics: sitting on your desk with PC

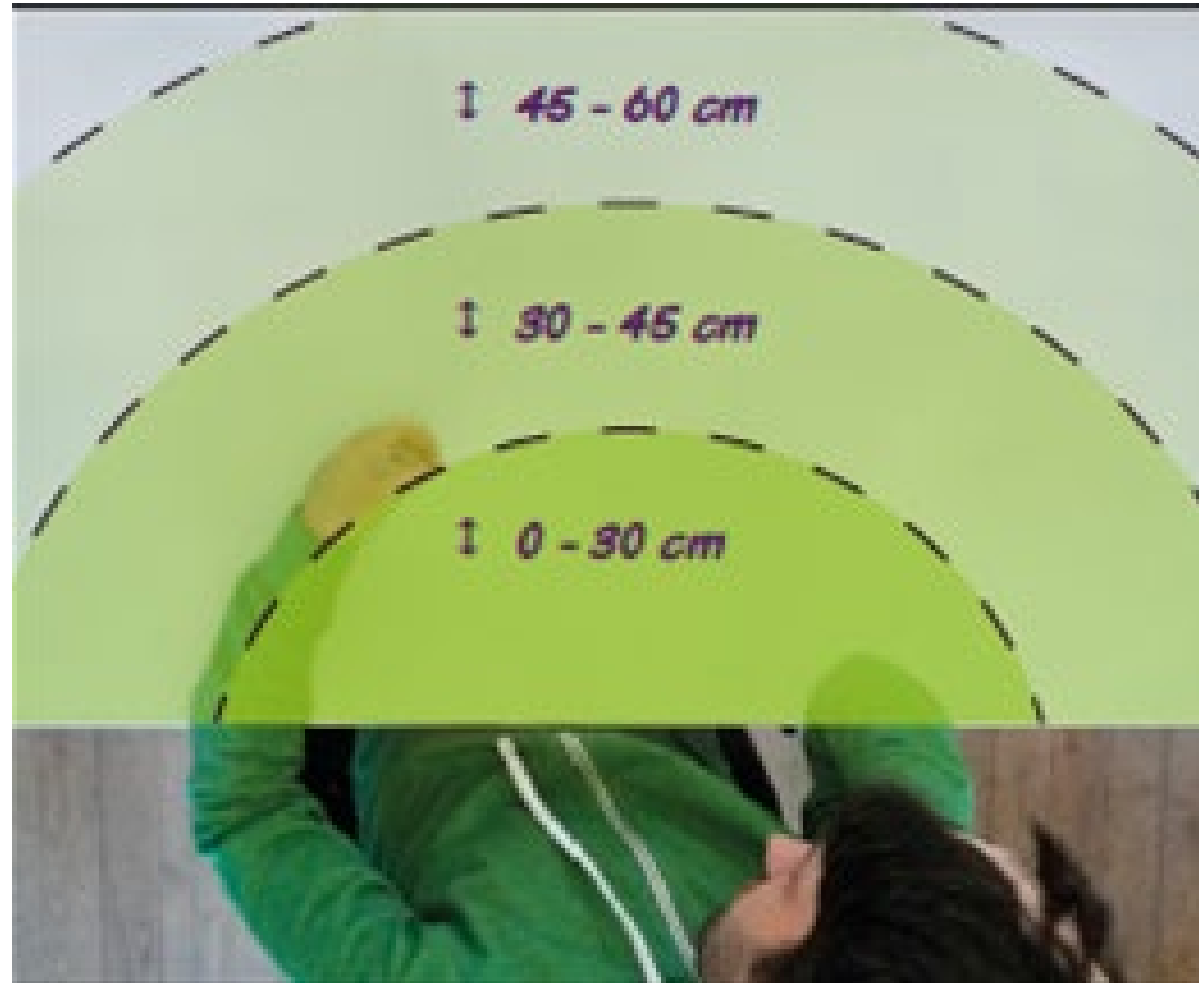
10 recommendations



Office ergonomics: Layout of the work area

horizontal gripping distance

recommendations



Office ergonomics at home?



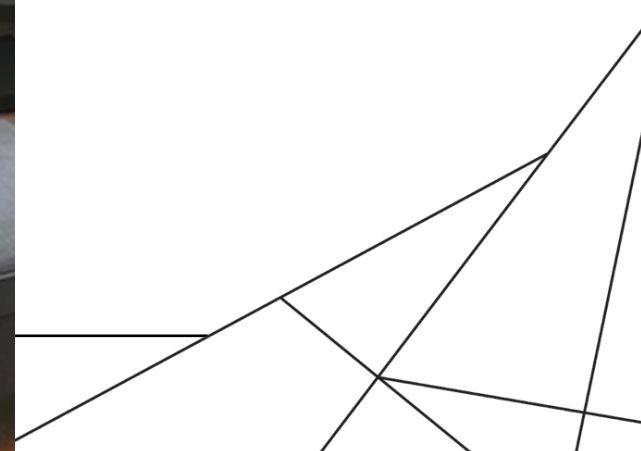
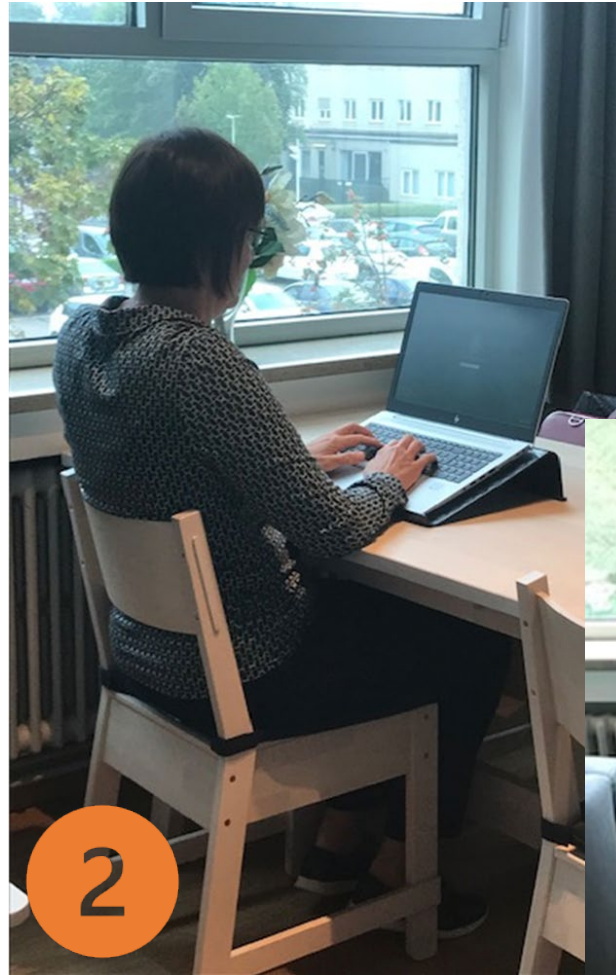
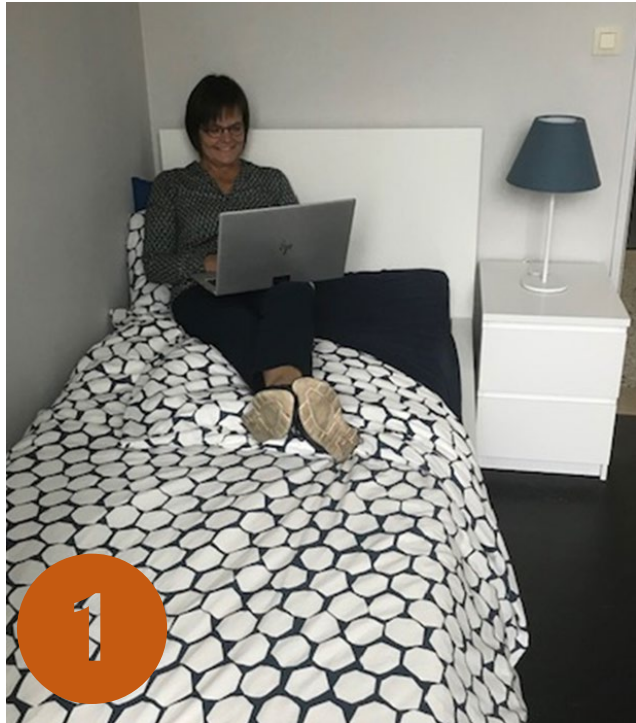
Good or bad practice?

Which position do you prefer?

You've been working at your desk all day. You want to continue working in the couch. Which position is best?

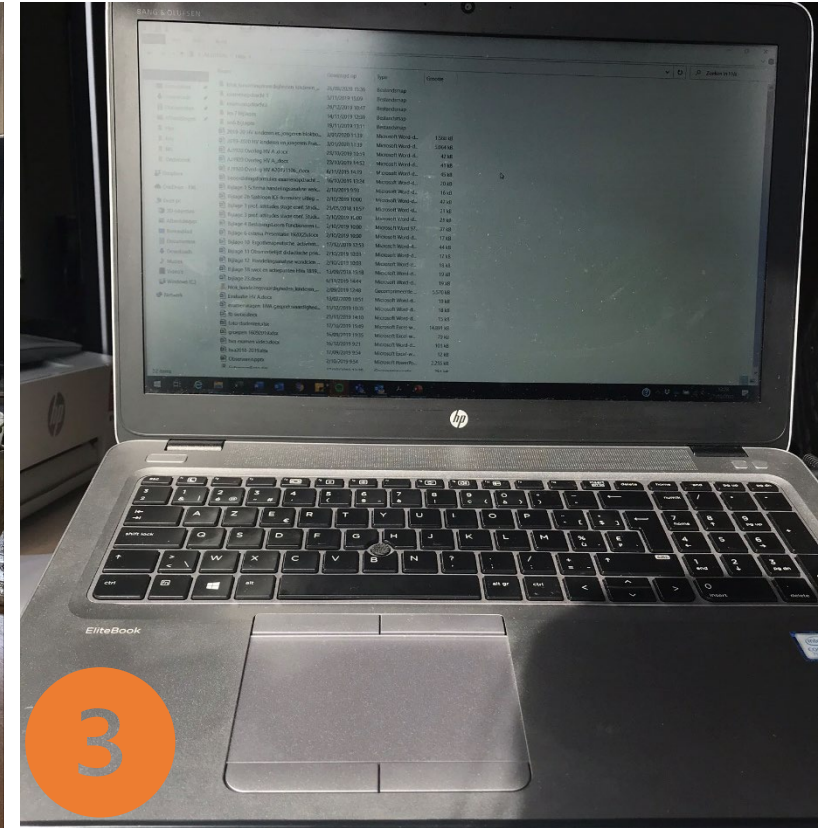
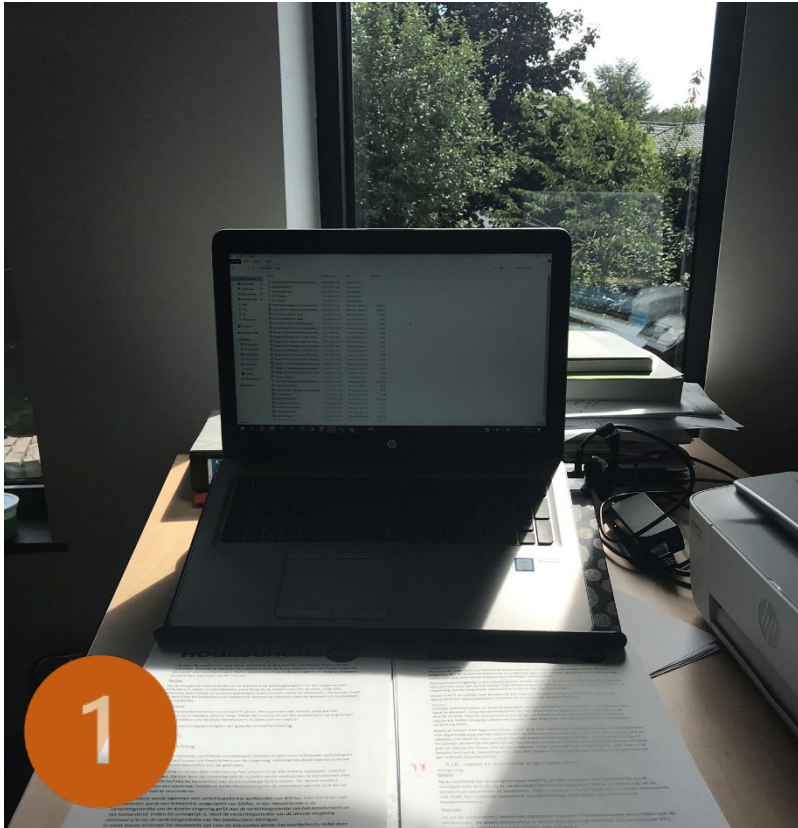


You've been working at your desk for 3 hours. Your next task is an online meeting. Which position do you assume?



Which standing position is the best?





What is the best position for your screen in relation to a window?

Tips & tricks

Your chair

Seat height: pelvis higher than knees

place a cushion on the seat of the chair

Lower back support

support in the arch of your back, this can be done with a pillow

Support with both feet on the ground

a footrest or a stack of books

Change regularly

a kitchen chair or a stool



Source: VerV



Your desk

Work at a spacious table

→ about 80cm depth and 120cm width

Make sure you have enough legroom

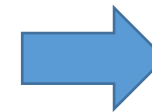
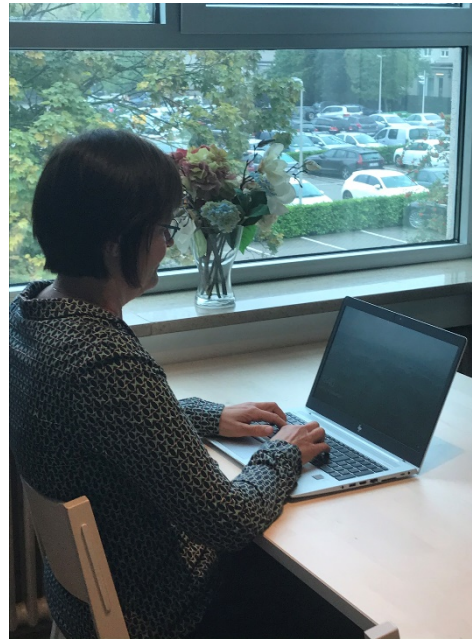
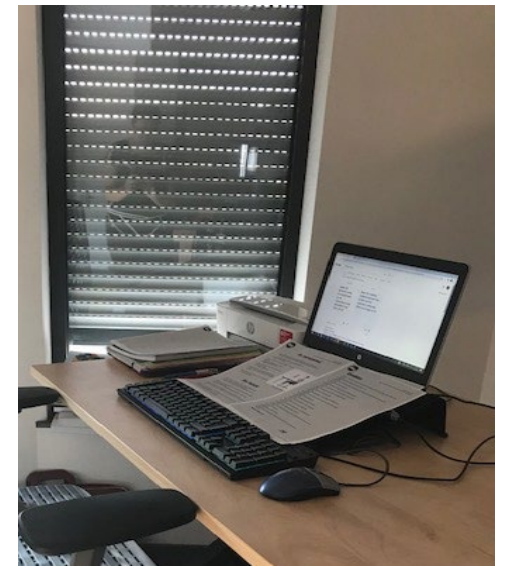
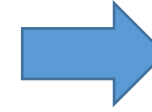
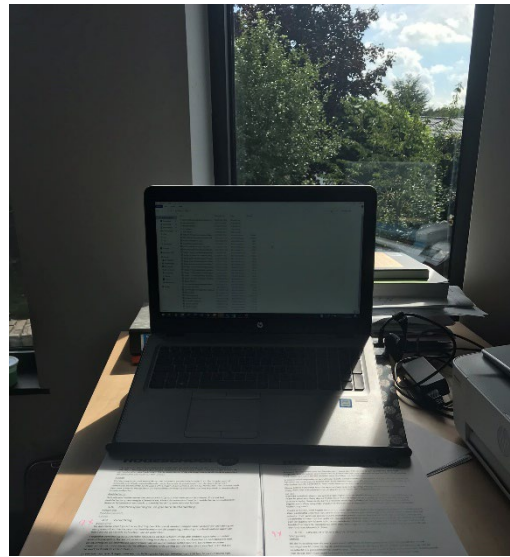
→ Can you adopt different comfortable positions with your legs?

Place the reading material between the screen and the keyboard

→ If possible tilted at an angle of 45°

Your display / Screen

- Use a large screen, no smaller than 19 inches
- Place the screen at eye level
Notebook stand, a stacks of books
- The brightness of the screen is equal to the brightness of the environment,
Close the curtains or the blinds when there is lots of sunlight
- Settings of your screen:
Brightness
Size of the text
Contrast



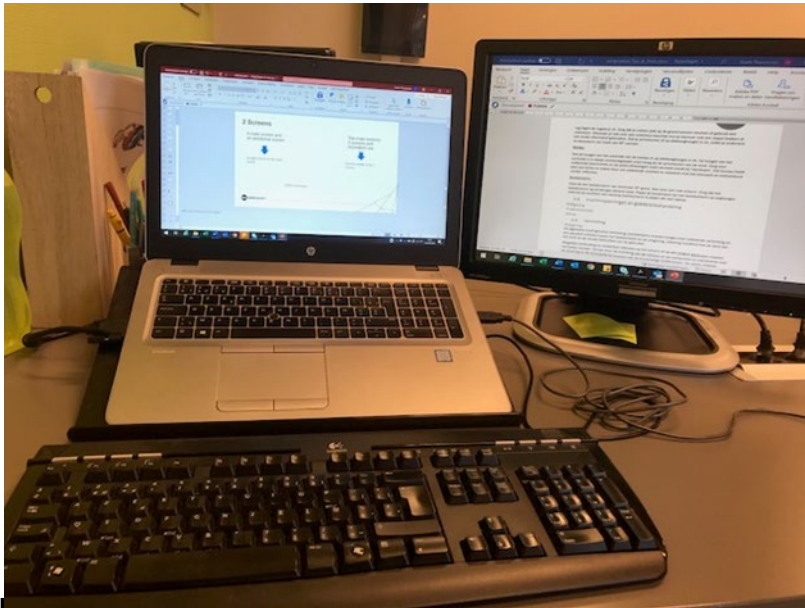
Source: VerV

2 Screens

A main screen and
an additional screen



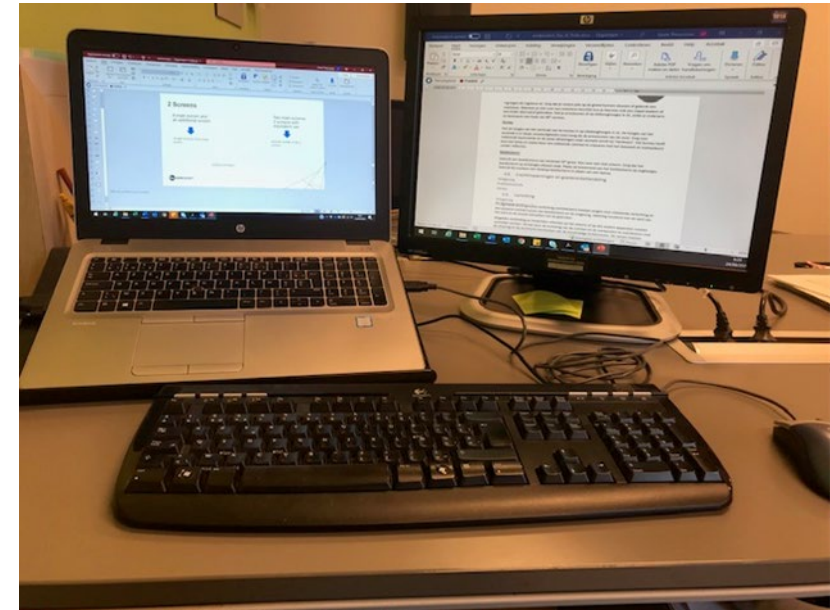
sit right in front of the main
screen



Two main screens:
2 screens with
equivalent use



sit in the middle of the 2
screens

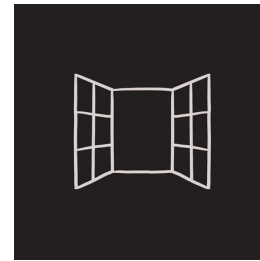


Your workspace

Work in a separate room where you can work quietly. In this room you can also more easily regulate lighting, sound, temperature and air quality.



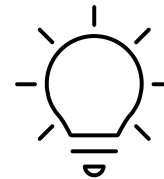
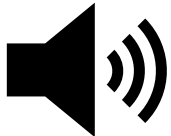
18°C- 25°C



Open the window



45db -55db



Daylight:perpendicular to
window
Artificial light: 500 lux

MOVE!

Interrupt the sitting position every **30 minutes**

TIPS:

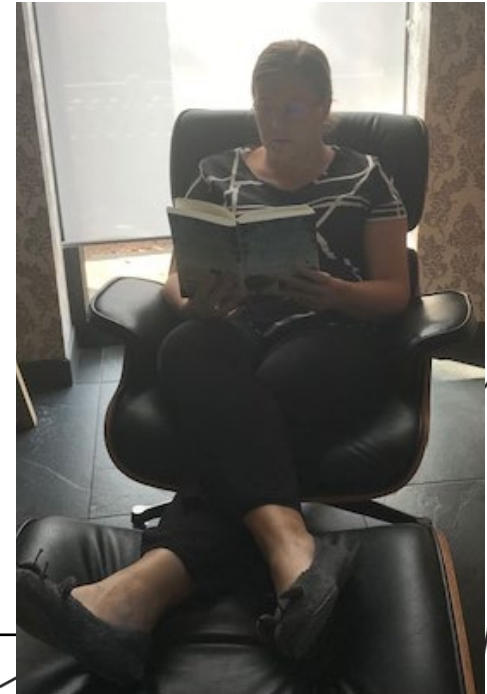
Sit mobile
stretching



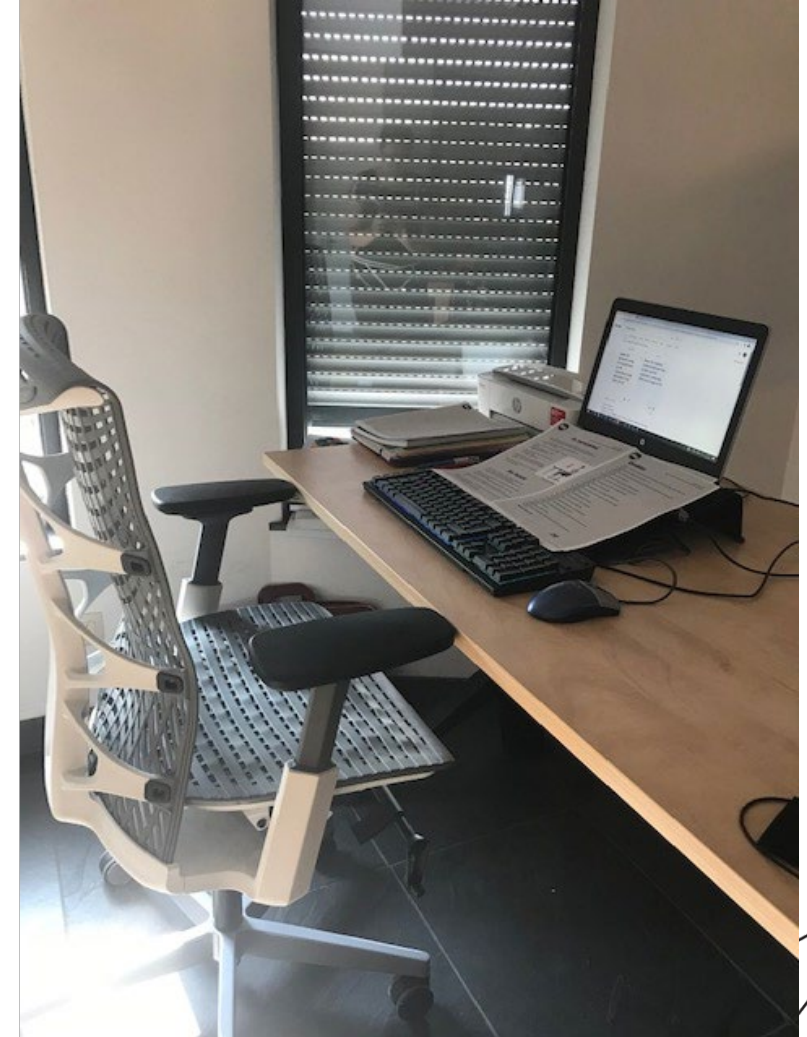
Active pause:
household task
walk



Passive pause:
rest in the seat



Your ergonomic home office



Stretching exercises



Take home message



- **Stand up**
 - Break up long periods of sitting
 - **Sit less**
 - Reduce your overall sitting time
 - **Move more**
 - Move around in your workplace
 - **Apply office ergonomics**
 - Aim for a good posture
- ☐ Set timer, every 30 minutes
 - ☐ Use a sit-stand desk (or an ironing board)
 - ☐ Whenever you feel discomfort in your back/neck/shoulders
 - ☐ Take a break between 2 lectures or online meetings
 - ☐ Do small household chores after every online lecture or meeting
 - ☐ Use the toilet upstairs
 - ☐ Go outside during lunch break
 - ☐ Drink enough water

Stand Up Victoria program, 2013

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Thank you!



working from home can
mess with your head

Any questions?

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