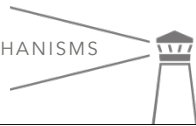


Stress Management & Personal Development

6. SLEEP MECHANISMS



Today's outline

- Main purpose:
 - Understand what regulates our sleep (a preparation for sleep aid)
- Check-in round
- Content:
 - Why do we sleep
 - How much sleep do we need
 - Sleep mechanisms
 - Sleep patterns
- Break in the middle

Check-in round

- How are you today?
- Something special we need to know?
- How did you sleep tonight?
- What do you want to know about sleep?

Why do we sleep?

- Biological need, a natural process
- Restores energy, "charges your battery"
- Performance
- Reduces stress hormones
- Recovery state for CNS
- Recovery and re-building state of the body (immune system activation, testosterone and growth hormone secretion)
- Learning and memory
- Process daily impressions (in dreams)

How much sleep do we need?

- The myth of 8 hours
- 6-9 hours is normal
- The feeling of being rested
- Have energy for the whole day

Sleep Mechanisms

What regulates sleep?

- 2 mechanisms
 - Rhythm
 - Balance

Circadian Rhythm

The inner clock of the body

- We and the world are rhythmic
- The inner “clock” governs many processes in the body:
 - Body temperature
 - Heart rate
 - Blood pressure
 - Hormone secretion
 - Urine production
 - And more...
- Indications of good sleep
- The body clock “signals” day and night

Circadian Rhythm

The inner clock of the body

- Circadian rhythm and sleep:
 - Going down → easiest to fall asleep
 - Lowest point → easiest to stay asleep
 - Going up → easiest to wake up
 - Highest point → most difficult to fall asleep

Circadian Rhythm

The inner clock of the body

- Morning persons and evening persons
- The clock is fine-tuned every day by:
 - Light
 - Sleep and wake times
 - Food intake
 - Activity and rest
- The sleep hormone melatonin
- Flexibility for survival
- BUT, for the sake of stable sleep:
 - Day light, routines, regularity

Homeostatic Sleep Debt

The balance between sleep & wake

- 6-9 hours of sleep → 15-18 hours of wake
- 15-18 hours of wake → 6-9 hours of sleep
- Sleep pressure or sleep drive
- Naps → sleep scale pan
- A rest can be many things...
- From rested/refreshed to sleepy
- The mechanisms interact...

How the mechanisms interact

YOU WILL FIND THE PICTURE HERE:
<https://www.opensourcedworkplace.com/news/why-we-sleep-matthew-walker-ph-d->

Summary...

- Why do we sleep
- How much sleep do we need (the myth of 8 hours)
- Sleep mechanisms
 - Rhythm (circadian rhythm, the inner clock of the body, biological processes)
 - Balance (homeostatic sleep debt, sleep presupposes wake, sleep drive)
- Sleep stages (5 in cycles)

Upcoming classes...

- Sleep disturbances
- Improve your sleep
- Natural sleep aid
- Sleep intervention (for those who want to)

Until next time...

- Do one thing differently per day (write down your experiences):
 - Balance activity with rest
 - Focus on main activity
 - Do it slow and present
- Focus on your three values
- Sleep tight!
- See you Tuesday!



GOOD NIGHT!