FIRSTBEAT

FIRSTBEAT TRANSFORMATION PROGRAMME

STRESS & RECOVERY SEMINAR

KEY REMINDERS

- Programme completion session – 1 June
- May = repeat measurement period
- Take advantage of individual follow-up coaching session

RECOVER

Recovery is a fundamental part of a healthy stress response.

"Prioritise frequent, sufficient and good quality recovery"

REFRAME

It is how we perceive the stress that determines its effect on health.

"This is a helpful response, energising me so I can perform well"

REFOCUS

Anticipating or reliving an event has the same effect as the stress itself.

"Practice mindfulness to remain present to the current moment"

RELEASE

Managing stress is an oxymoron! Effort sustains the stress response.

*"Key is to **allow** space and give yourself **permission** to relax, sleep & recover"*

RELATE

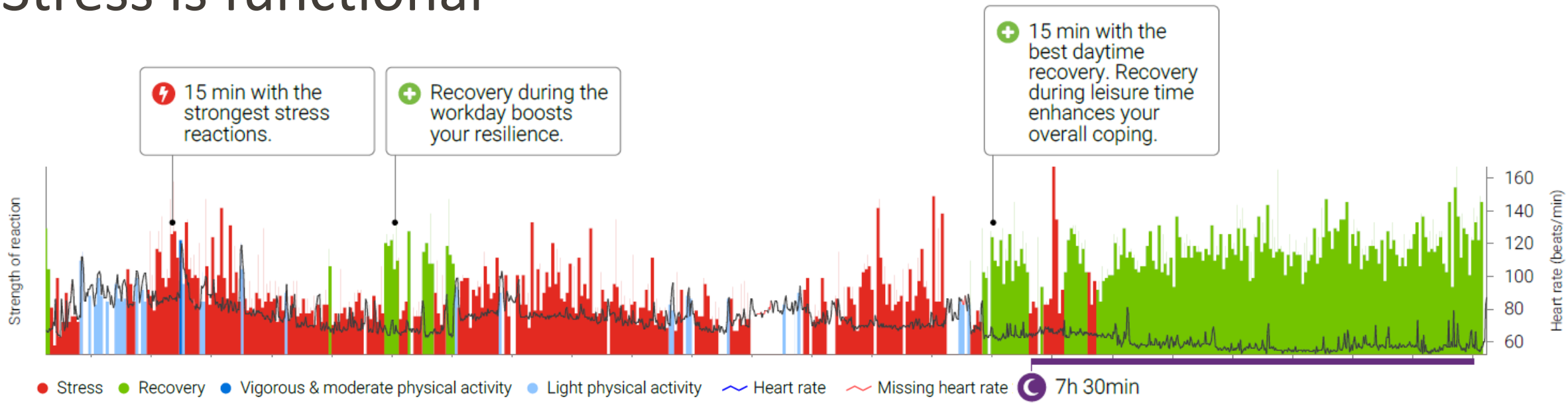
The stress response has an inbuilt protection mechanism.

"Connecting with and caring for others boosts our resilience"

The five stress essentials

The traditional and popularised view is *"stress is bad for our health"*.
This is simultaneously **correct** and **useful** as well as **incomplete** and **unhelpful**.

Stress is functional



STRESS AND RECOVERY

STRESS AND RECOVERY BALANCE

60 - 100p Good
30 - 59p Moderate
0 - 29p Low

82/100

Stress and recovery balance was good.

AMOUNT OF STRESS REACTIONS **11h 29min**

≤ 60% Normal | > 60% More than usual — **48%**

AMOUNT OF RECOVERY (day & night) **8h 3min**

< 20% Low | 20 - 29% Moderate | ≥ 30% Good — **34%**

A lot of recovery during the daytime (1h 18min).

SLEEP

RESTORATIVE EFFECT OF SLEEP

60 - 100p Good
30 - 59p Moderate
0 - 29p Low

86/100

The sleep period was long enough and recovery was good.

LENGTH OF SLEEP **7h 30min (Good)**

AMOUNT OF RECOVERY DURING SLEEP **6h 44min**

< 50% Low | 50 - 74% Moderate | ≥ 75% Good — **90%**

QUALITY OF RECOVERY (Heart rate variability)

0 - 12 ms Low | 13 - 23 ms Moderate | ≥ 24 ms Good — **20 ms**

SELF-REPORTED SLEEP QUALITY

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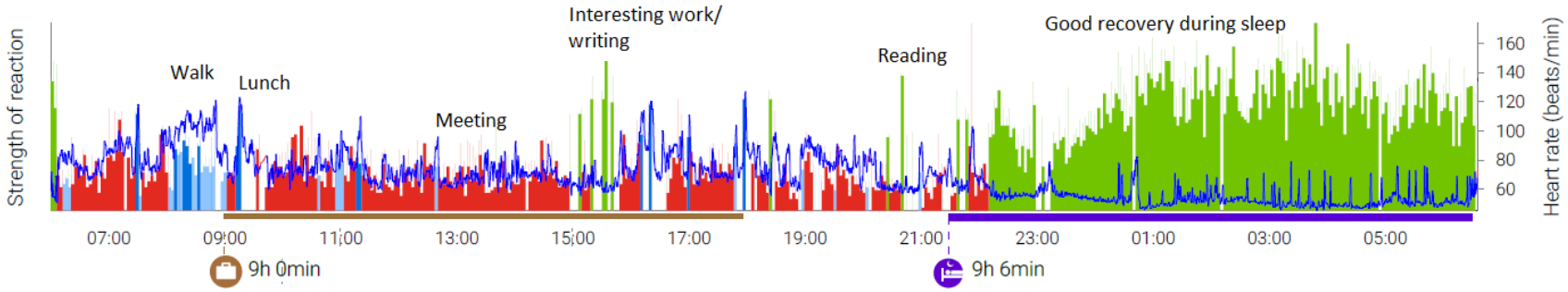
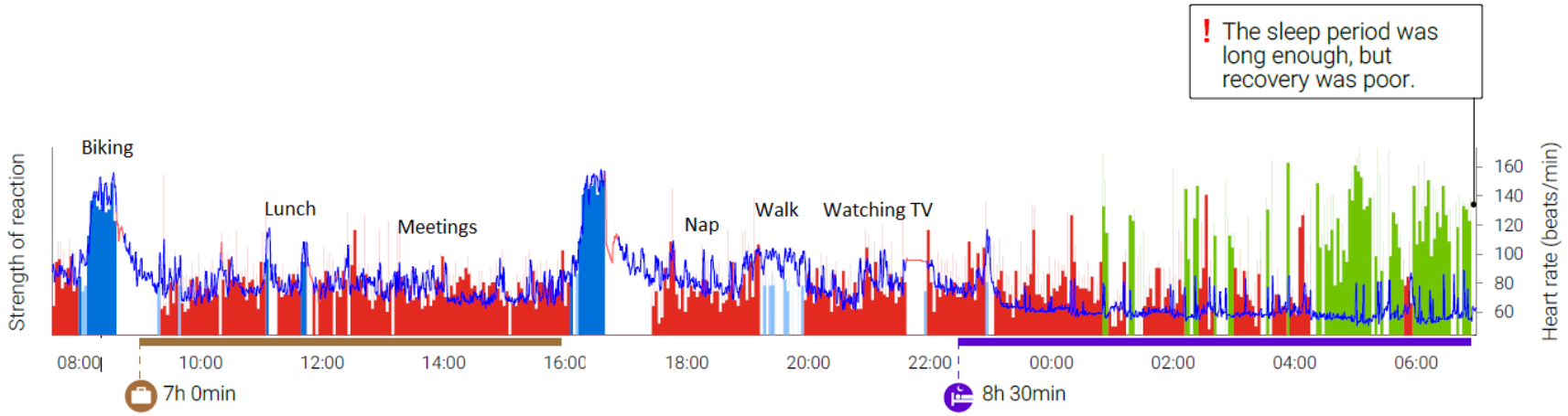
POSITIVE OR NEGATIVE STRESS?

Positive stress is functional and beneficial. It activates the body and improves efficiency, and generally does not inhibit day-time recovery or disturb recovery during sleep. We feel challenged in a positive way, it motivates us to meet the challenge and we are self-assured and feel capable. I have what it takes!



Negative stress is not functional and affects our health & performance. It keeps the body constantly activated (wired), blocks day-time recovery and disturbs recovery during sleep. We feel threatened, tense, uncertain, anxious and out of control or under pressure. I don't have what it takes.



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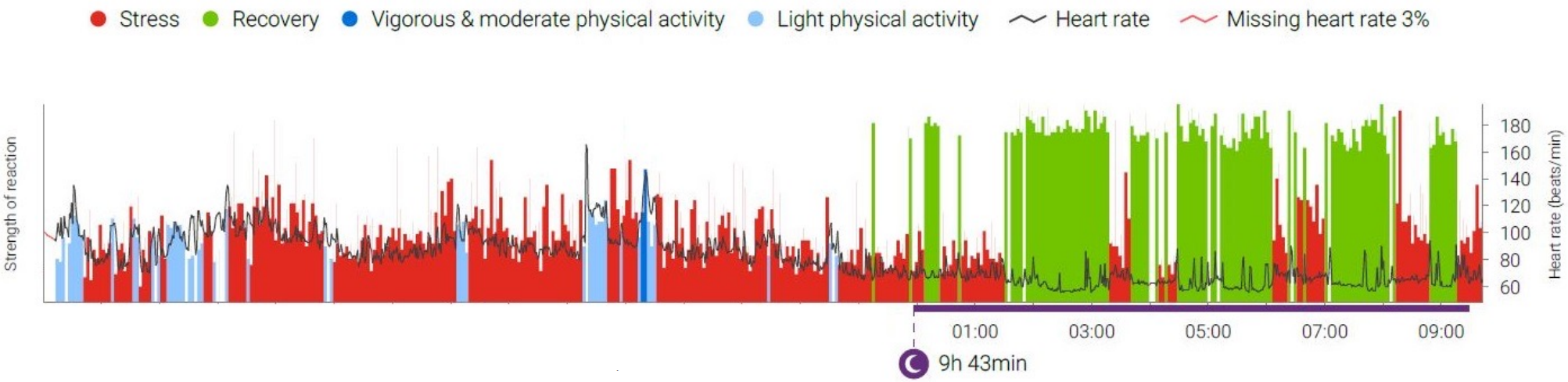
What is often the actual key pain point?



STRESS AND RECOVERY

STRESS AND RECOVERY BALANCE

60 - 100p Good
30 - 59p Moderate
0 - 29p Low

36/100

Stress and recovery balance was moderate.

AMOUNT OF STRESS REACTIONS **15h 26min**

≤ 60% Normal | > 60% More than usual — **59%**

AMOUNT OF RECOVERY (day & night) **5h 36min**

< 20% Low | 20 - 29% Moderate | ≥ 30% Good — **22%**

A moderate amount of recovery during the daytime (30min).

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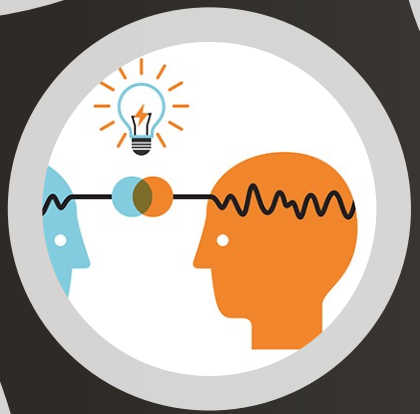
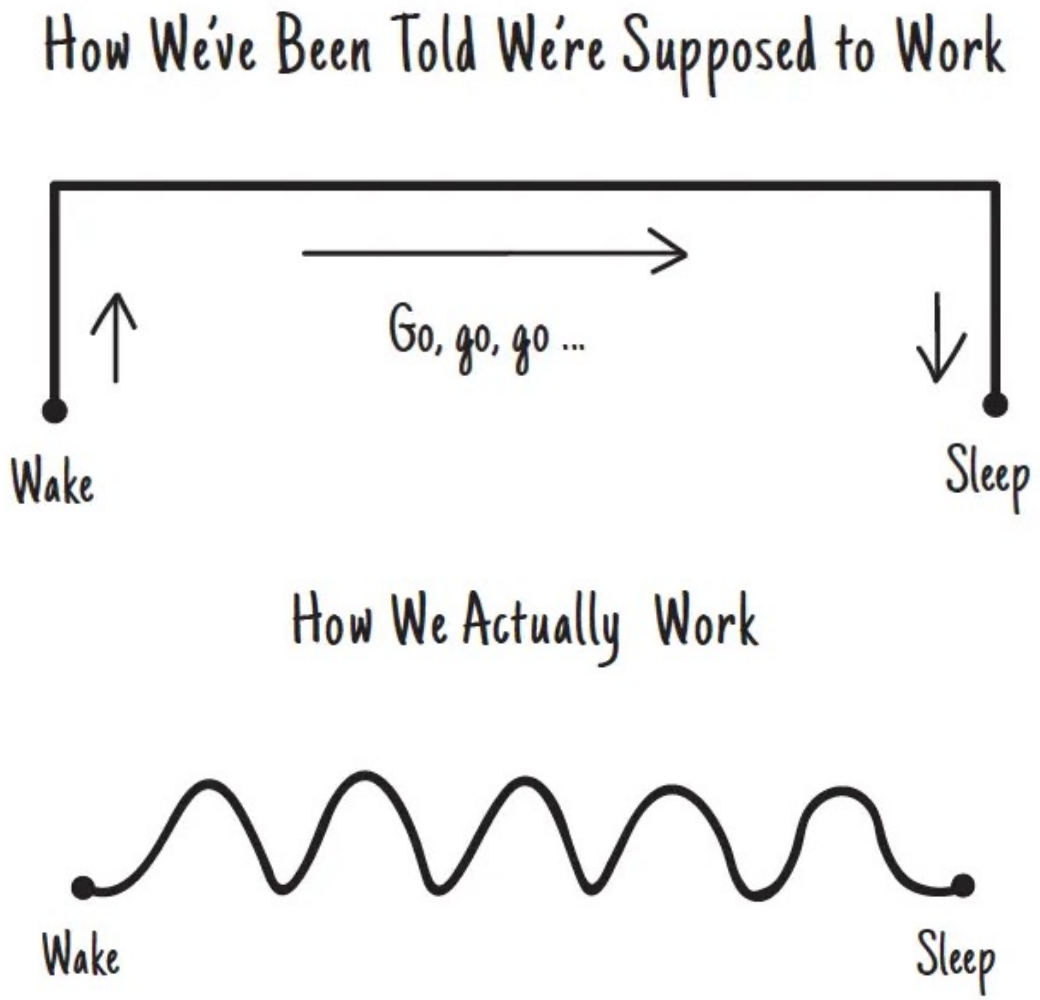
More often than not, the issue is a lack of recovery rather than a high stress load.



Day-time recovery strategies

Finding your individual sweet spot is key

Chronic high stress load > erodes our capacity for recovery



Our modern way of living is out of synch with our huma design parameters!

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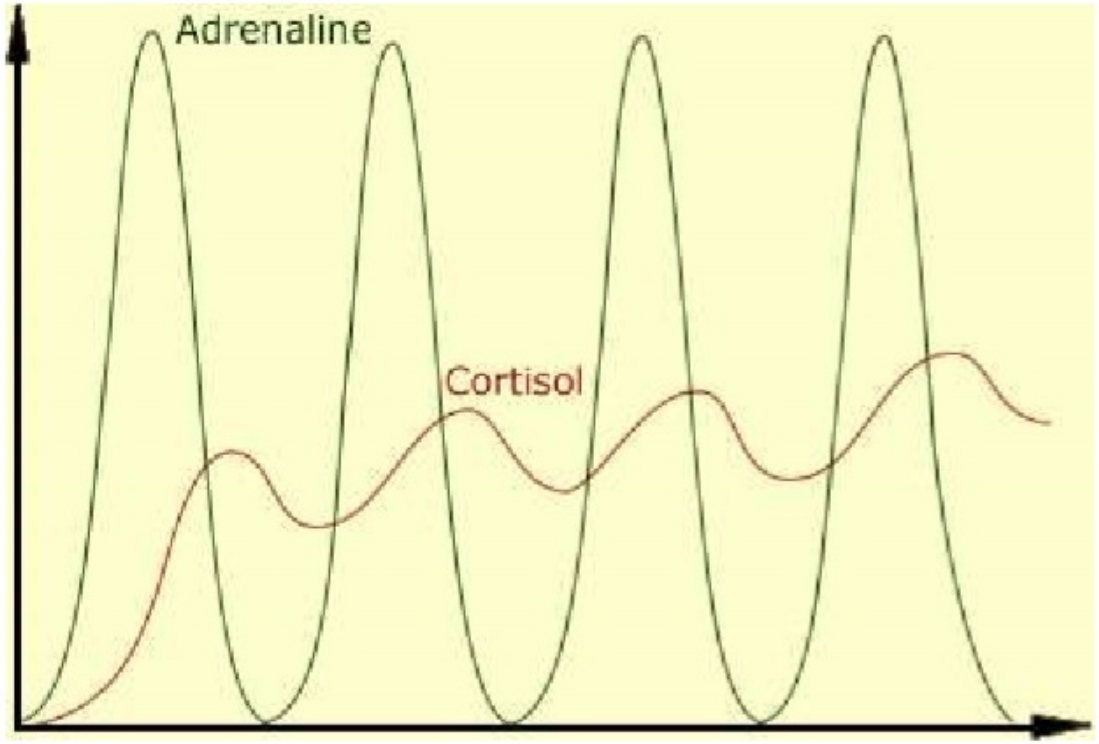
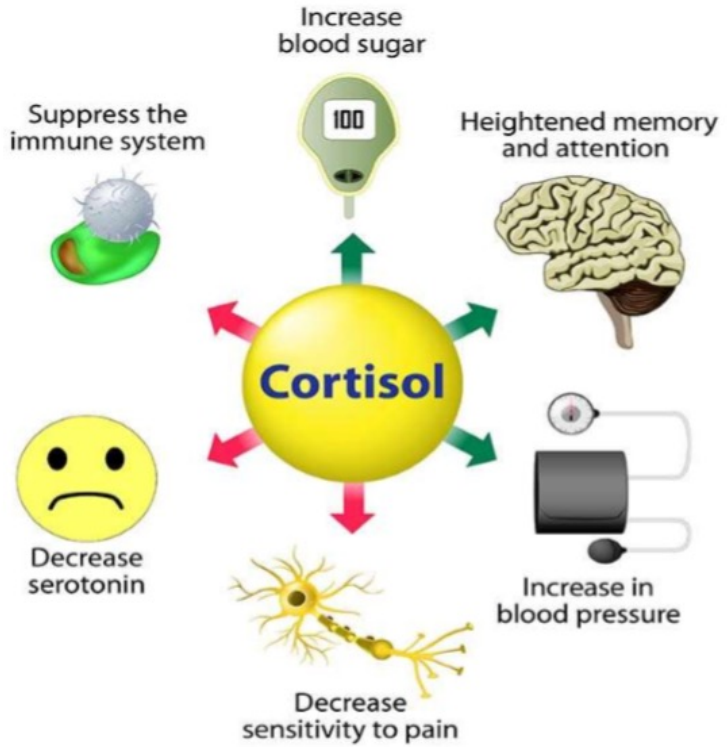
Source: Use the science of ultradian rhythms to boost productivity, energy and willpower. Pilar Gerasimo, BlueZones Blog

Chronic elevation of stress hormones

If there is lack of recovery after a stress activation, cortisol will not get the time to decrease and is sustained at chronically higher levels





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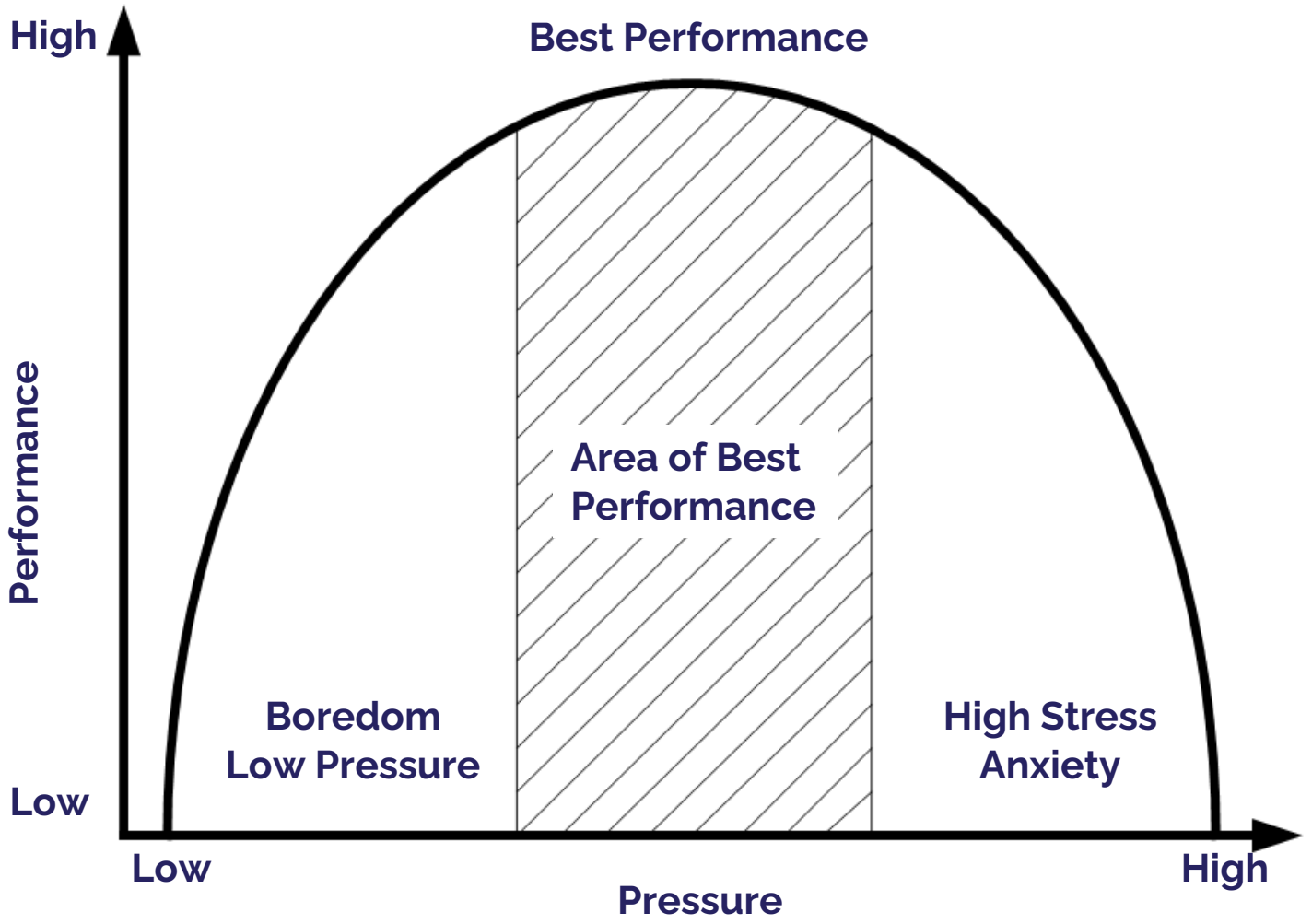
Stress and the inverted U model



Strong and in particular ***sustained or chronic stress impairs performance***

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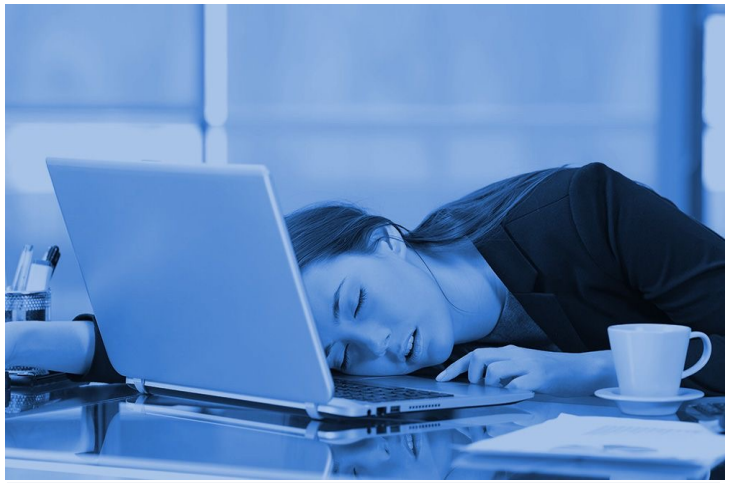
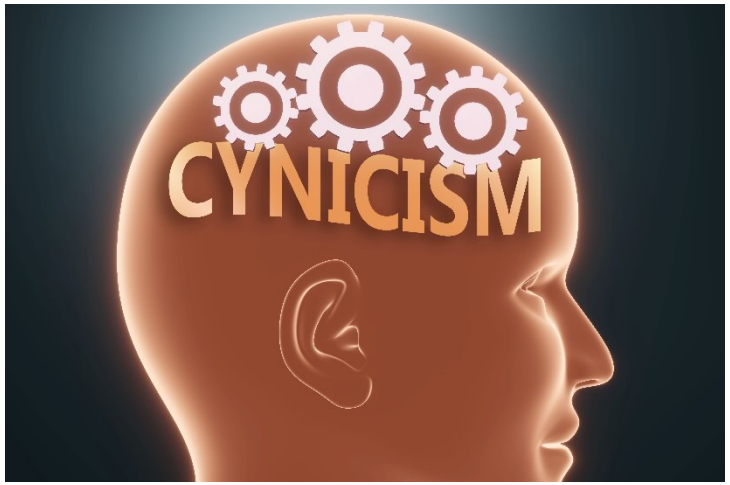
Risk of burnout – red flags



Chronic exhaustion
(mental & physical)



Cynicism or depersonalisation

Professional inefficacy

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Human design = allowing our nervous system to function optimally

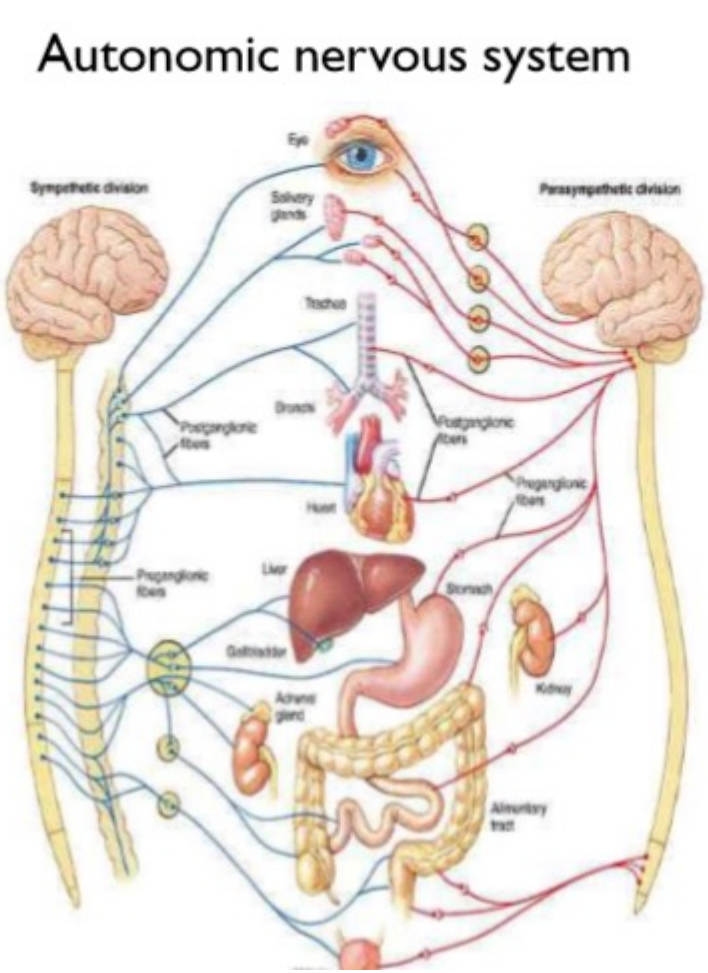
Sympathetic nervous system

= Fight-flight

Dominant during a feeling of threat: prepares for fight of flight

"Accelerator"

Release of energy



Parasympathetic nervous system

= Rest/recovery

Dominant during a feeling of safety and comfort

"Brake"

Recovery of energy, healing and growth

Accelerator

HRV lower

Brake

HRV higher

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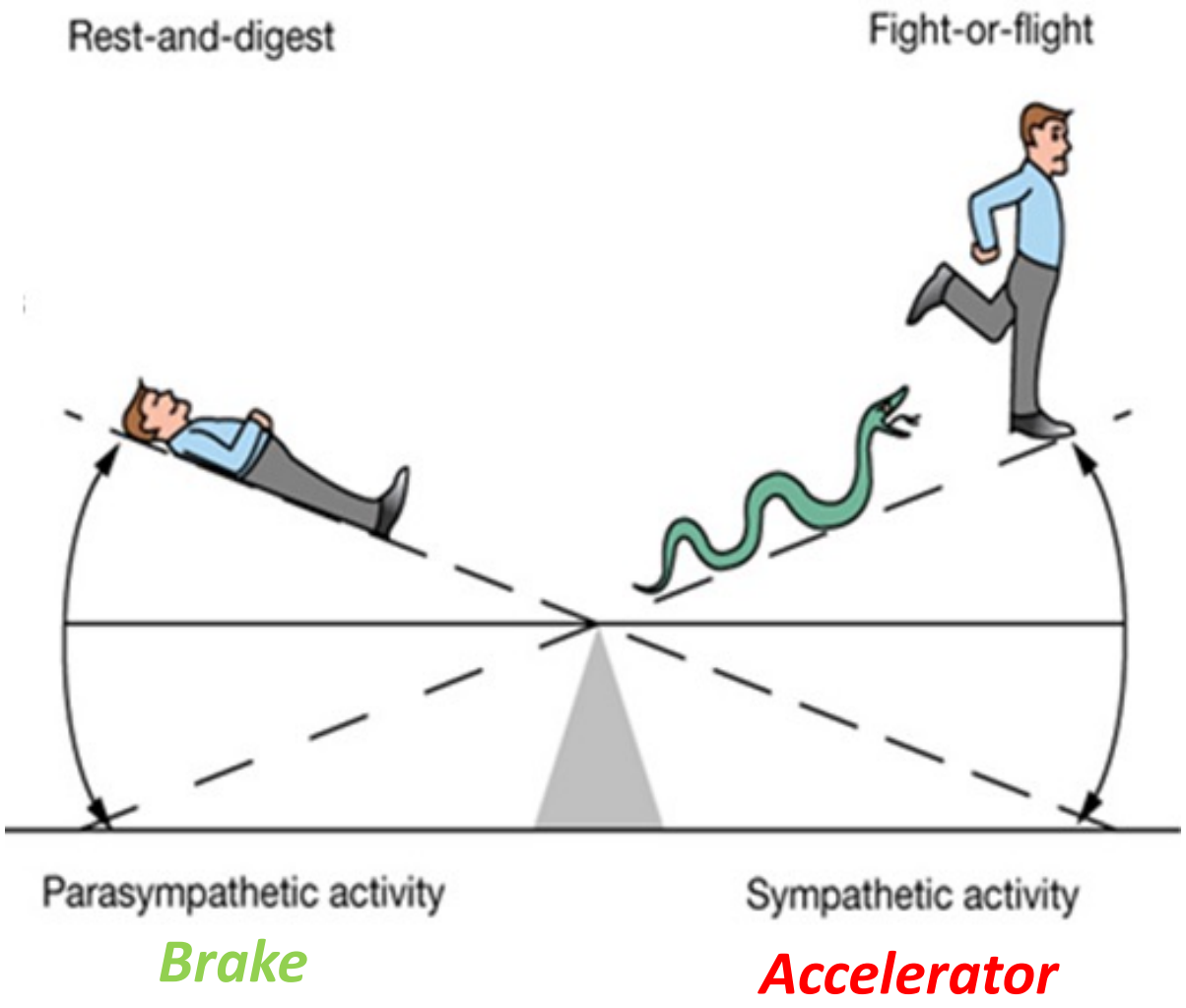
Evolutionary design flaw



The stress response was only ever designed as an acute, emergency response to stressors.

*Fast but **<u>temporary</u>** activation!*

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Modern living reality

Social / relationship stress

Environmental stress

Emotional stress (negative emotions, worry)

Mental / work / study stress

Nutritional stress

Social media / information stress

Financial stress

Physiological stress

Performance stress

Exercise stress

There is no shortage of demands on our stress response

"When invited to dance, we can choose not to tango!"

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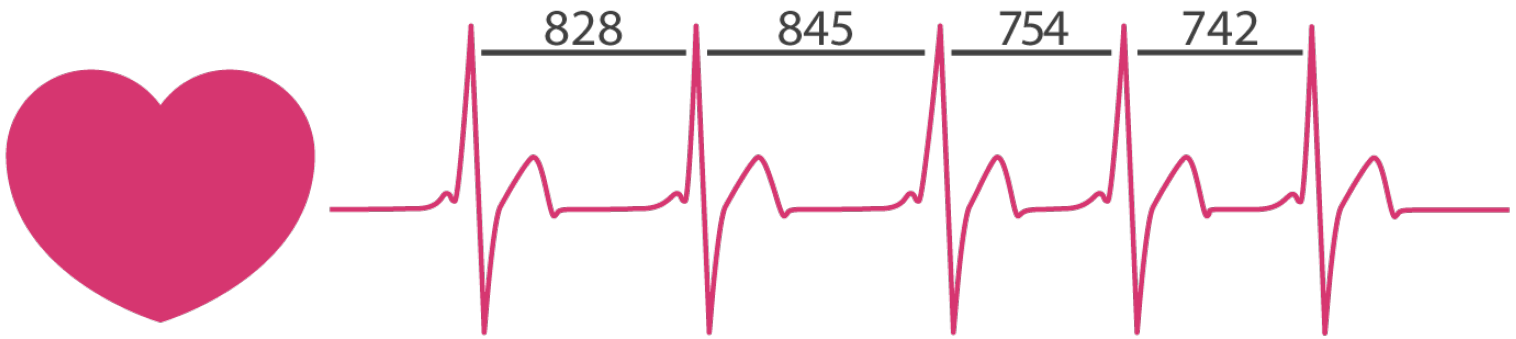
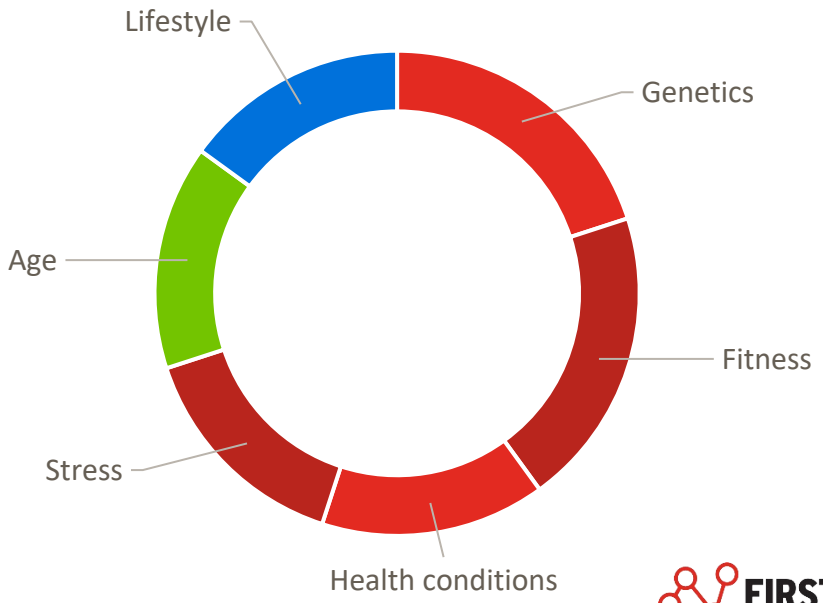
Having the capacity for good quality recovery



Heart rate variability (HRV) reflects the functioning, balance and resilience of all our regulatory processes. These processes keep us in tune and help us adjust to demands and changes.
They all operate at varying frequencies (e.g. circadian rhythm has a 24 hour cycle) and together they create a complex pattern of variability in our heart rate rhythm (controlled chaos).

Factors that influence HRV

(70 to 80% directly under our control)



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Tapping into that capacity

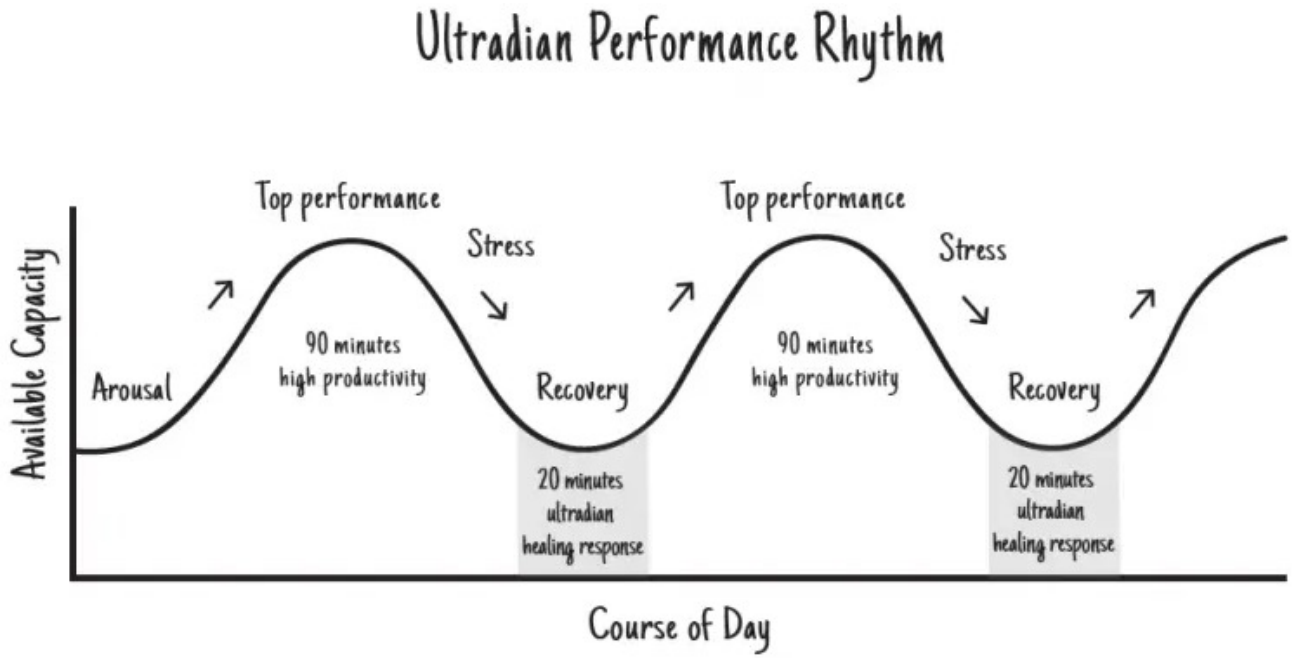

Illustration adapted from *The 20-Minute Break* by Ernest L. Rossi, PhD (Tarcher Putnam, 1991)

Micro-moments of recovery and resets throughout the (work) day

Sleep practices for optimal recovery during sleep

1. **Get outside first thing in the morning** ★★★★★
   Light is the timekeeper of your circadian rhythm. Morning sun light striking your eyes triggers the transition to a new cycle. Get at least 30 min outside, without sunglasses, by noon.
2. **Power down in the evening** ★★★★★
   Shutting off all electronics, ideally at sunset but at least two hours before sleep, avoids blue light from screens interrupting the production of melatonin.
3. **Give yourself permission to sleep** ★★★★½
   Let go of "there are not enough hours in the day" and embrace the science that shows good sleep enhances performance and productivity (in addition to your health & well-being).
4. **Adopt a consistent schedule with "resets"** ★★★★★
   Going to bed and waking up at the same time every day, including the weekend, helps to keep your natural circadian rhythm functioning optimally. Also "reset" often during the day.
5. **Replenish the melatonin building blocks** ★★★★★
   Few foods contain melatonin so focus on including its precursor tryptophan and the vitamins and minerals needed to produce it (Vitamin B6, magnesium, calcium and zinc) in your diet.
6. **Eat between sunrise and sunset** ★★★★★
   Avoid or minimise food, alcohol and other substances after sunset to allow your body to get ready for rest. A light snack before bed is fine - feeling hungry inhibits sleep.
7. **Reduce the temperature** ★★★★½
   Contrary to popular belief our body temperature needs to lower during the night. Avoid a hot bath / shower right before bed and keep the bedroom cool. Make sure your feet are warm.
8. **Use the bedroom exclusively for sleep** ★★★½★
   Avoid multi-purposing the bedroom and keep it clear from distractions. If you cannot sleep get out of bed and hop back into bed only when sleepiness returns.
9. **Be physically active & exercise regularly** ★★★★★
   Exercise uses up energy and makes you feel more tired at night. It also reduces stress and anxiety which are common reasons for not falling asleep and sleeping restlessly. Make sure to do high intensity workouts earlier in the day so they don't disrupt your sleep.
10. **Find your own wind-down routine** ★★★★★
    Release stresses and emotions build up during the day with a wind-down routine to allow your parasympathetic nervous system to kick-in and downregulate your level of activation.
11. **Put the clocks away** ★★★★★
    Make sure (alarm) clocks are not visible. Watching the clock makes you worry and activates your mind, making sleep even more elusive.
12. **Prevent revenge bedtime procrastination** ★★★½★
    Allow some 'me time' in your day so that you don't put off going to bed. Build in some micro-steps like eating lunch away from your desk or doing one thing that makes you happy.

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Workplace design for wellbeing

Key takeaways

View stress in adaptive ways
(our relationship with stress is vital)

Adopt a good sleep practice
(sleep = best recovery opportunity)

Prioritise Ultradian Rhythm Breaks
(reset stress response throughout the day)

Connect & care
(buffer and protect through human connection)

Boost fitness level
(increases nervous system resilience)

Practice mindfulness
(develop capacity to be in the present moment)

RECOVER

Recovery is a fundamental part of a healthy stress response.

"Prioritise frequent, sufficient and good quality recovery"

REFRAME

It is how we perceive the stress that determines its effect on health.

"This is a helpful response, energising me so I can perform well"

REFOCUS

Anticipating or reliving an event has the same effect as the stress itself.

"Practice mindfulness to remain present to the current moment"

RELEASE

Managing stress is an oxymoron! Effort sustains the stress response.

*"Key is to **allow** space and give yourself **permission** to relax, sleep & recover"*

RELATE

The stress response has an inbuilt protection mechanism.

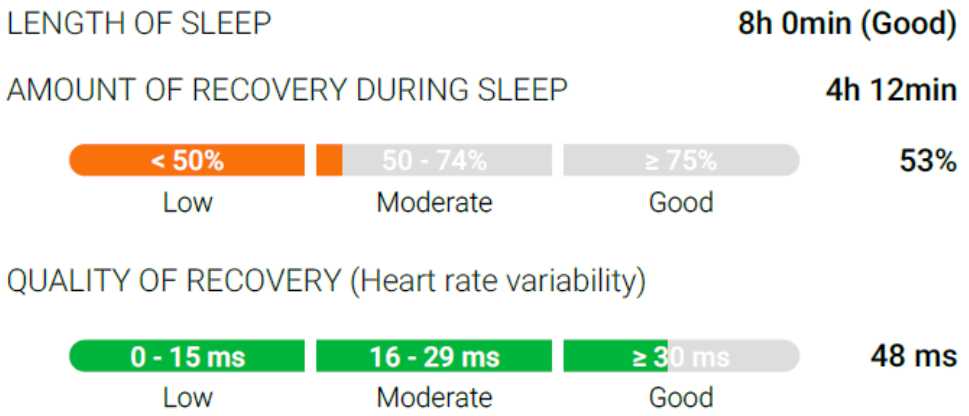
"Connecting with and caring for others boosts our resilience"

The five stress essentials

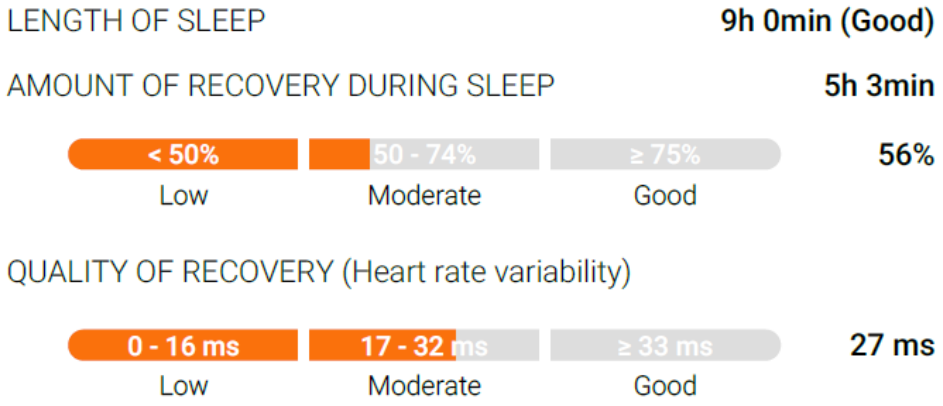
The traditional and popularised view is *"stress is bad for our health"*.
This is simultaneously **correct** and **useful** as well as **incomplete** and **unhelpful**.

Acute versus chronic stress?

Quality high + amount low
=
acute stressor



Quality low to moderate
=
chronic stress



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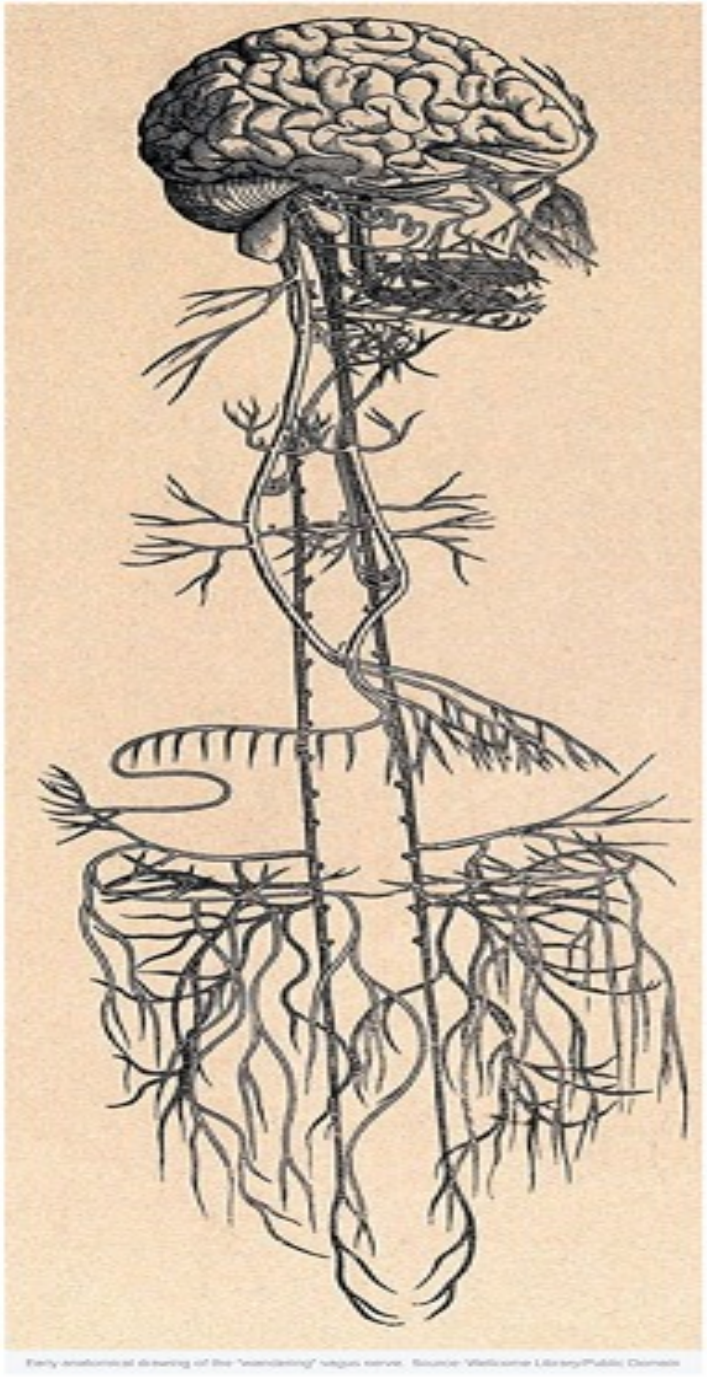
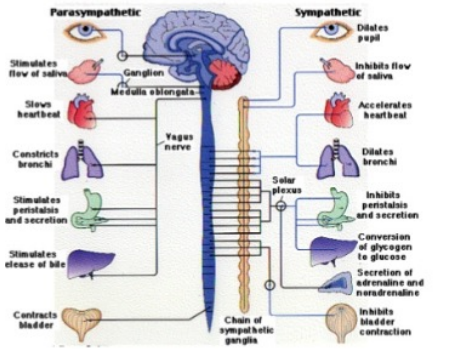


THE VAGUS NERVE

Higher Function



Deeper Function

Psychological experience

Emotional self-regulation

Cognitive performance

Social engagement

Cognitive ageing

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Relationship with stress really matters!

"Reporting a lot of stress *and* perceiving that stress affects health a lot increased the risk of death by 43% (from 3.5 to 5.1%)."

Source: Does the Perception that Stress Affects Health Matter? The Association with Health and Mortality, Keller et al, 2013

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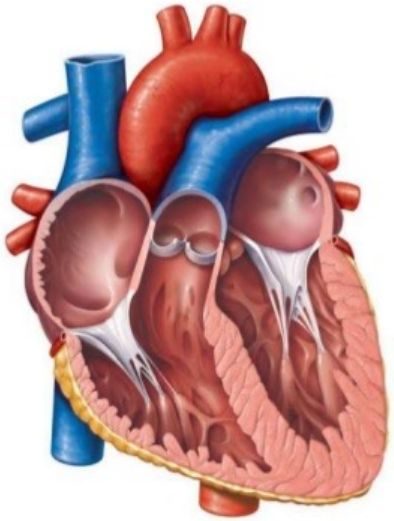
Relationships ~~with stress~~ really matter!

Oxytocin is a cardiovascular hormone.



Gutkowska & Janowski (2012) *Journal of Neuroendocrinology, 24(4).*

"Experiencing stressful events significantly predicted increased mortality among those who had not tangibly helped others in the past year, but among those **who had provided help, there was no association between stress and mortality**."

Source: Giving to Others and the Association Between Stress and Mortality, Poulin et al, 2013

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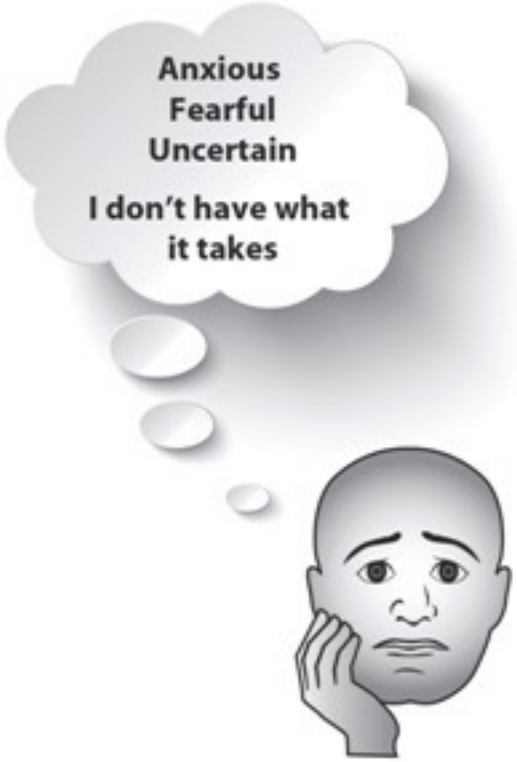
Relationship with stress really matters!

Vasoconstriction artery



Threat

Negative mental approach to pressure situations. Mental resources do not meet demands of situation.

Challenge

Positive mental approach to pressure situation. Mental resources meet demands of situation.

Normal artery

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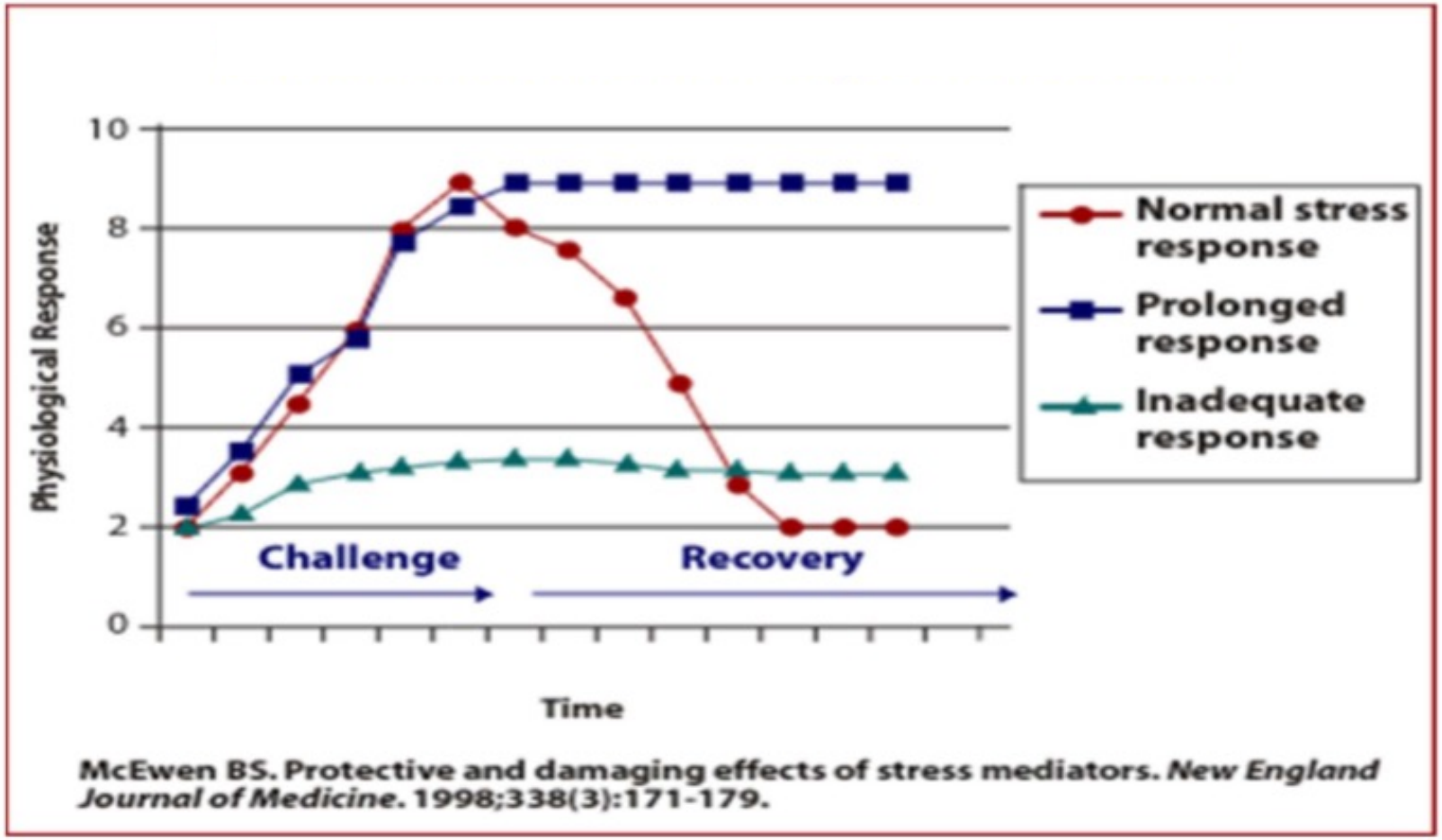
Normal & abnormal stress response



McEwen BS. Protective and damaging effects of stress mediators. *New England Journal of Medicine*. 1998;338(3):171-179.

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