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# How to leverage neuroscience & manage stress effectively through mind-body practices

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# Introduction

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- ❖ Outline
  - ❖ The neuroscience of stress
  - ❖ The stress cycle
  - ❖ Warning signs
  - ❖ How to leverage the neuroscience through mind- body practices

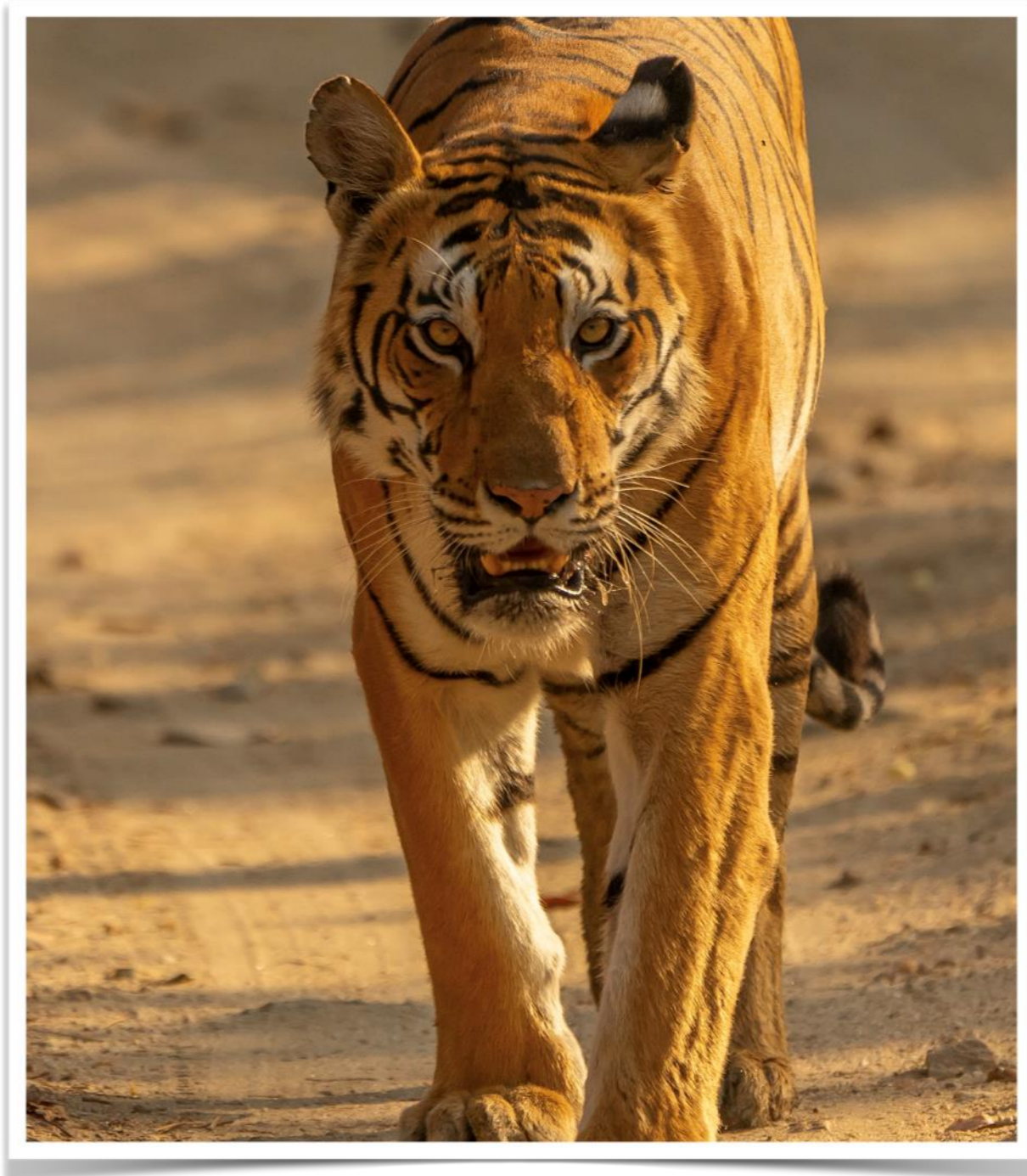


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# Imagine

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- ❖ Physiological change
- ❖ Dominant emotion(s)
- ❖ Thoughts and thought pattern
- ❖ Behaviour
- ❖ Story & Beliefs

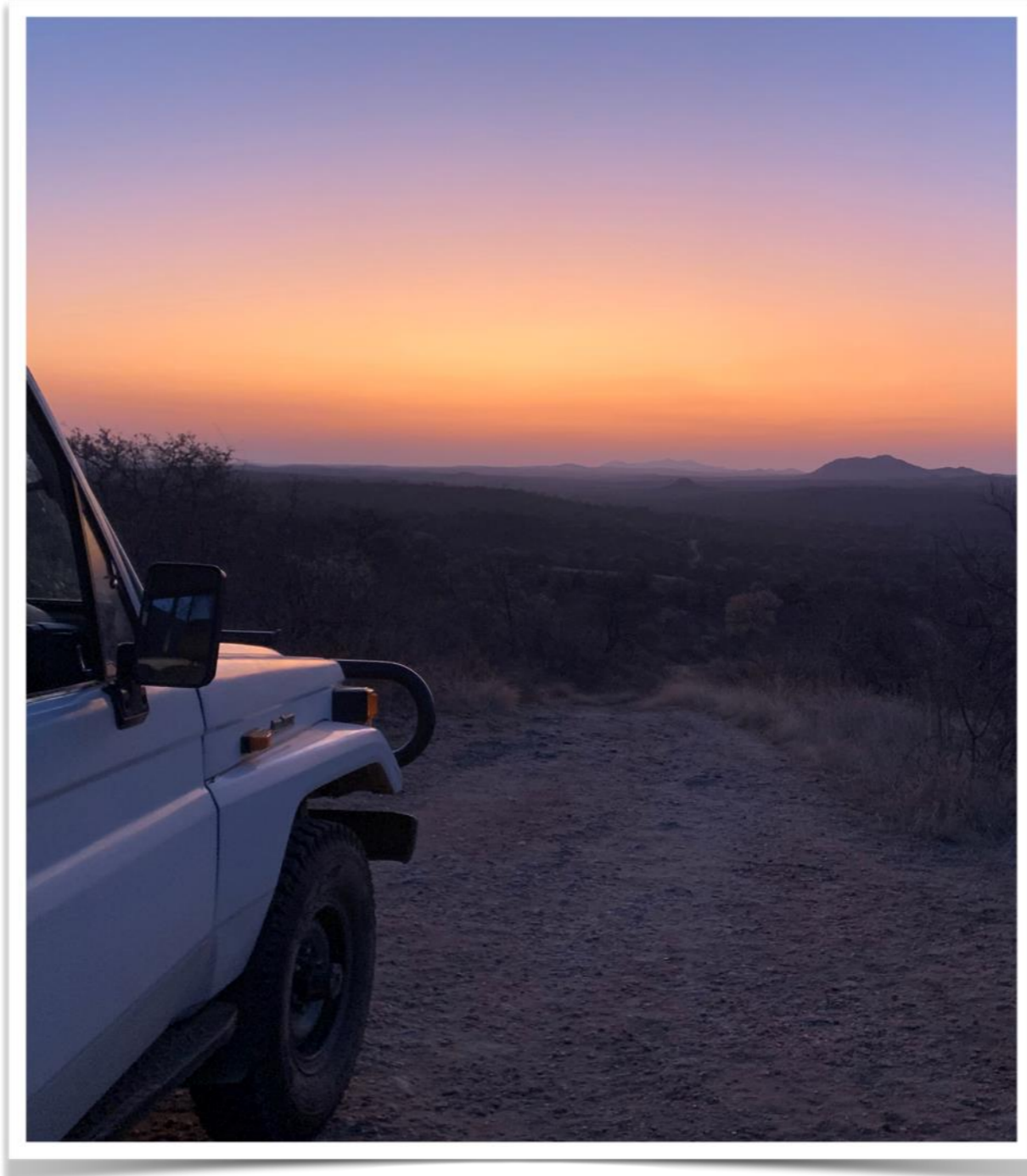


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# Then...

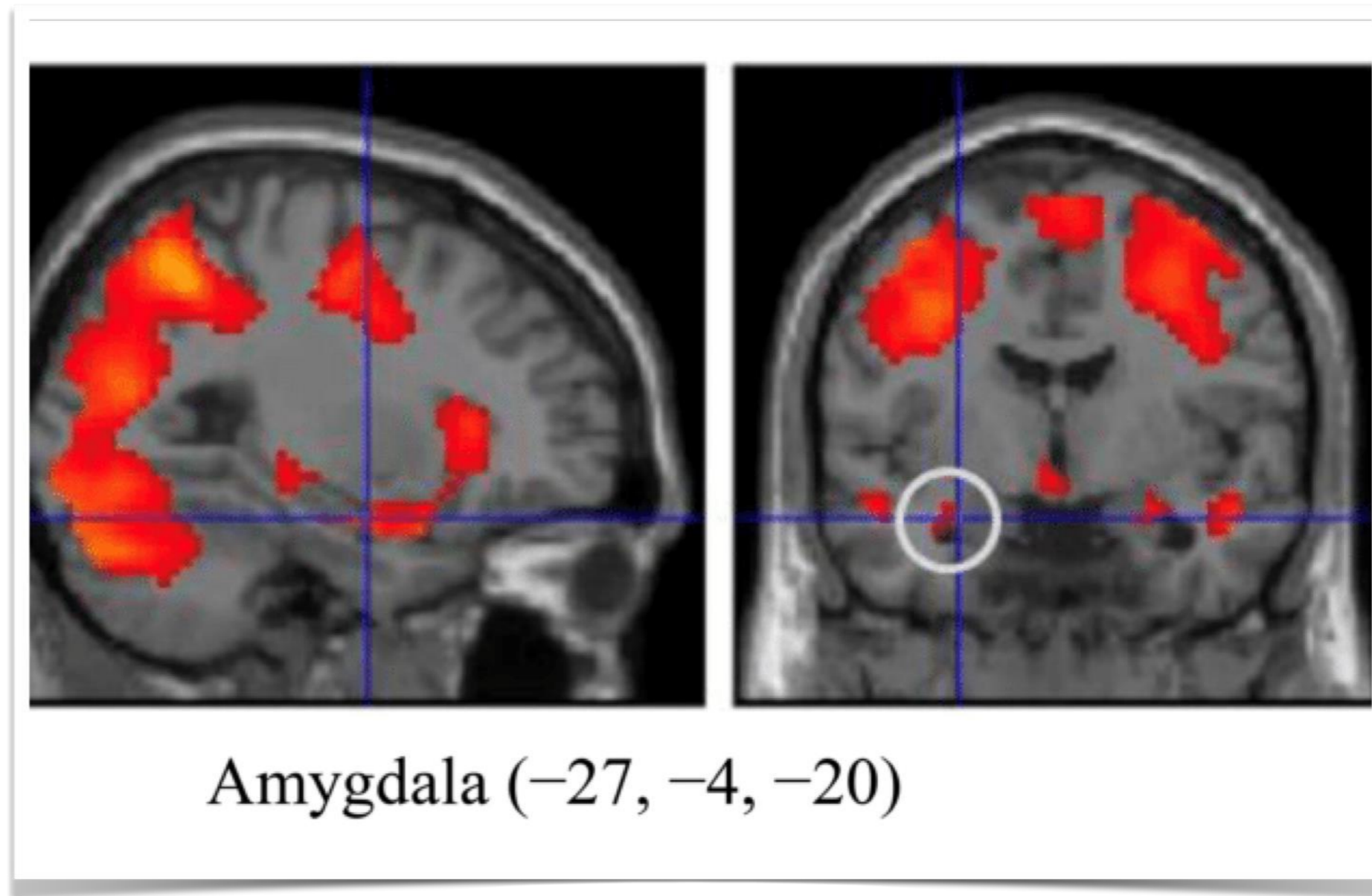
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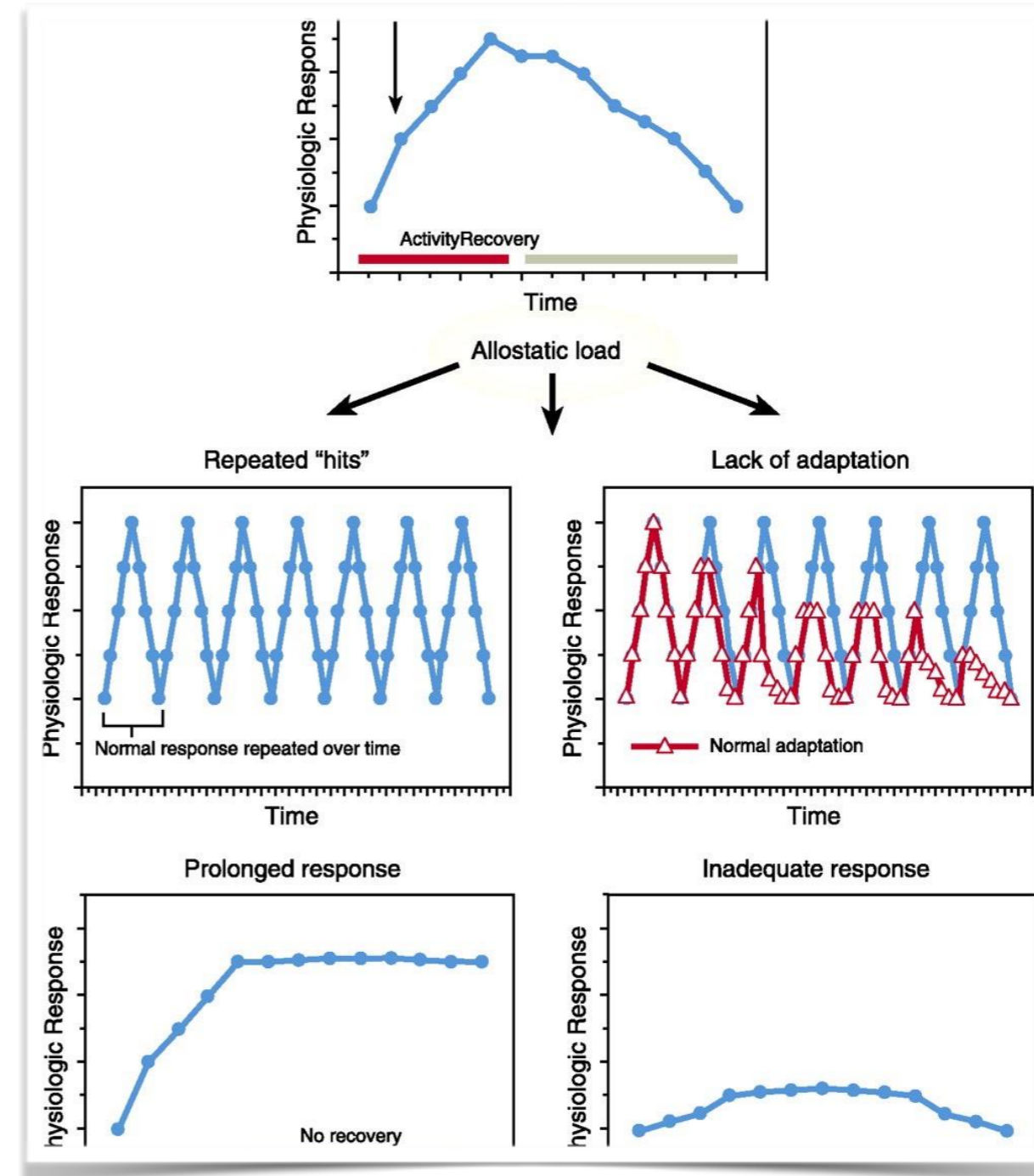
# What actually happened in your brain?

- ❖ Limbic
- ❖ F/F/F
- ❖ Cascade
- ❖ Physiology
- ❖ Survival
- ❖ Story



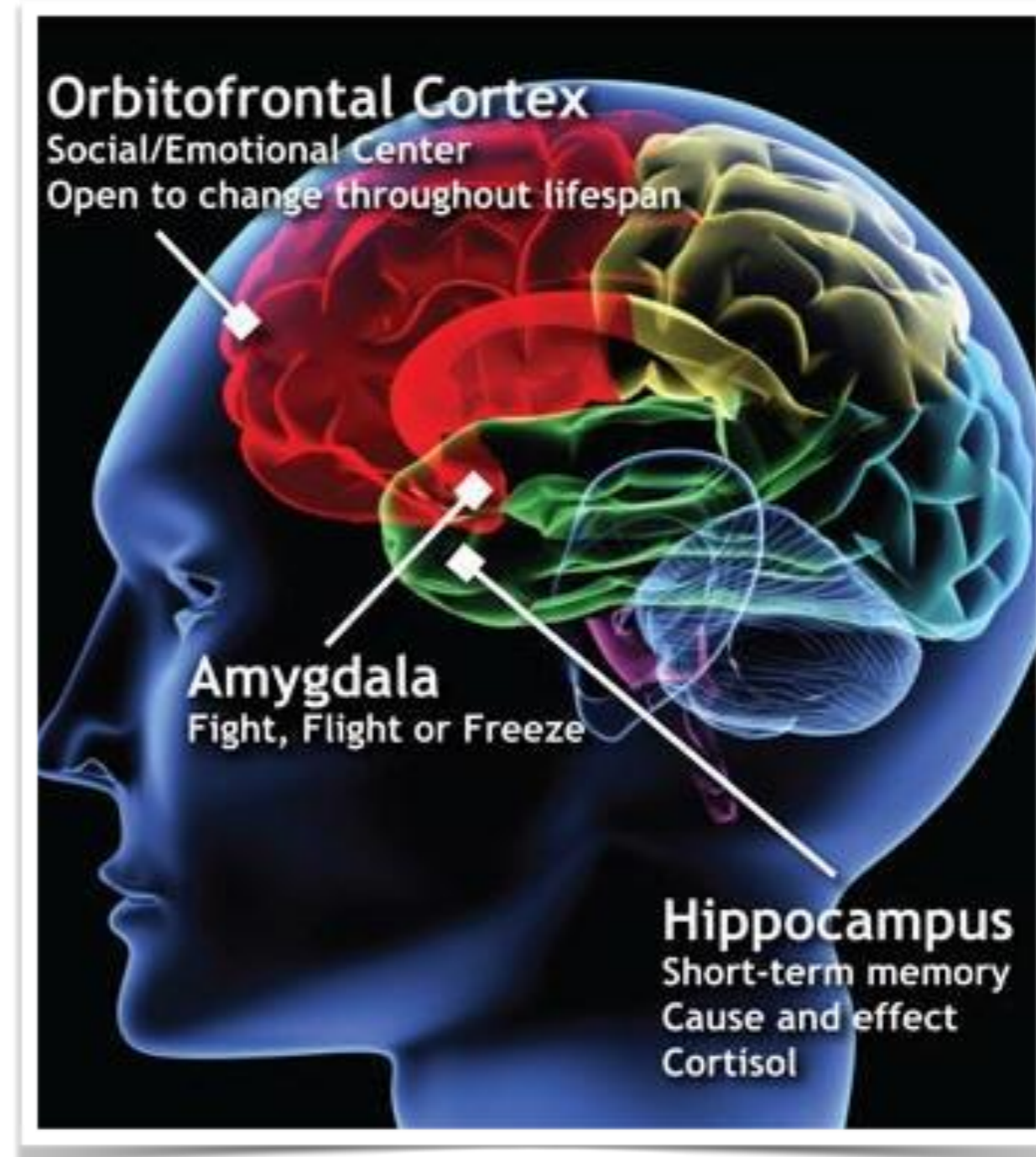
# What actually is stress?

- ❖ Non specific response to our body to any demand
- ❖ Negative or positive
- ❖ Real or Perceived
- ❖ Normal and appropriate to ensure survival
- ❖ If prolonged, failure of recovery results in dis-ease



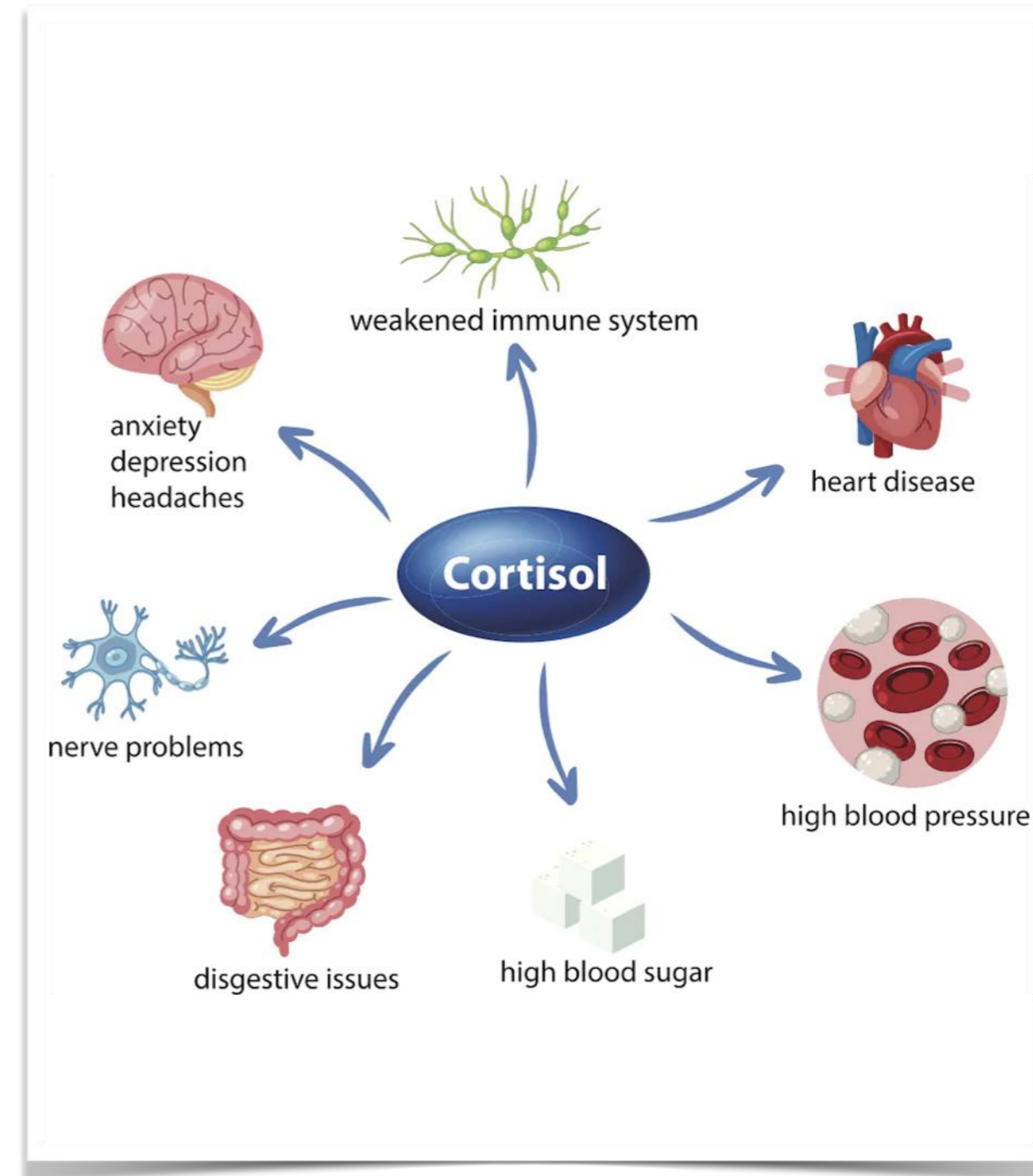
# NEUROSCIENCE

- ❖ **SURVIVAL**
- ❖ **Perpetuation of species**
  - ❖ Food, Reproduction
- ❖ **2 main programs**
  - ❖ Prefrontal Cortex
  - ❖ Limbic system

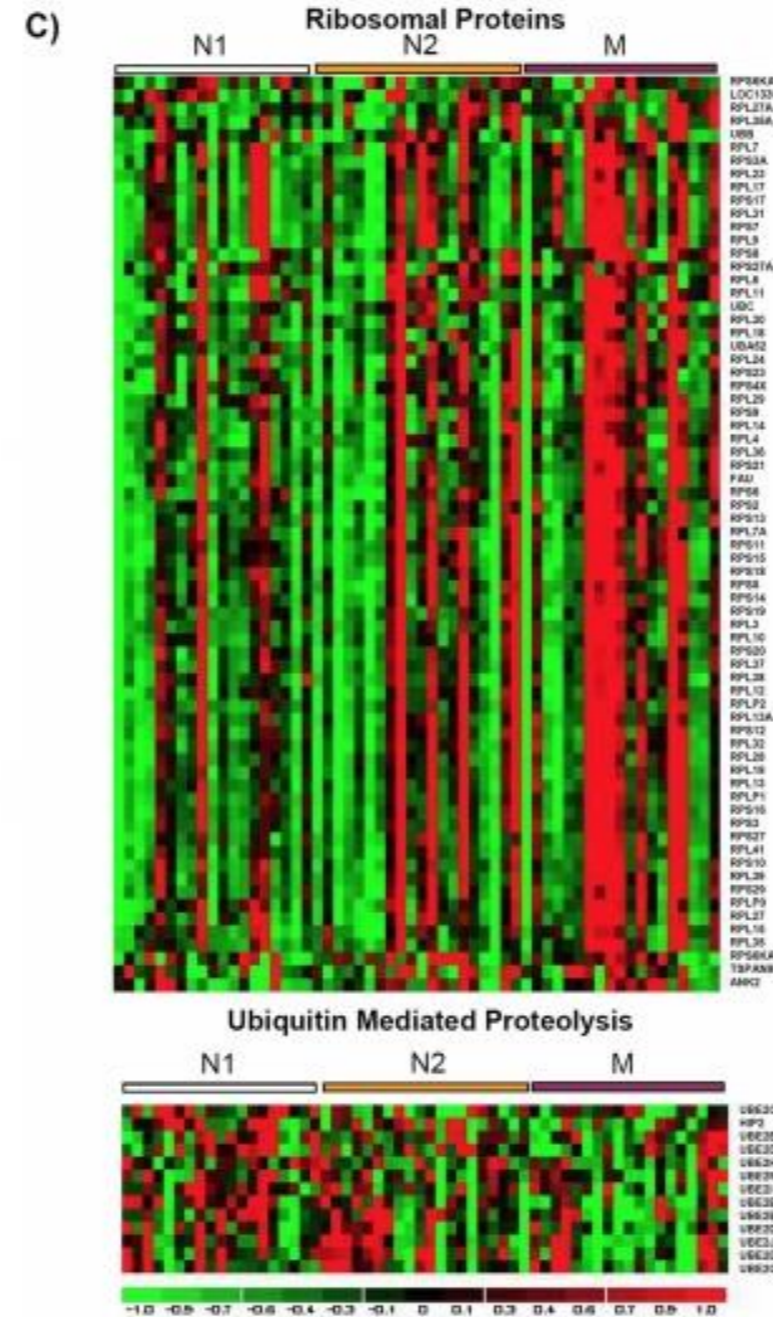
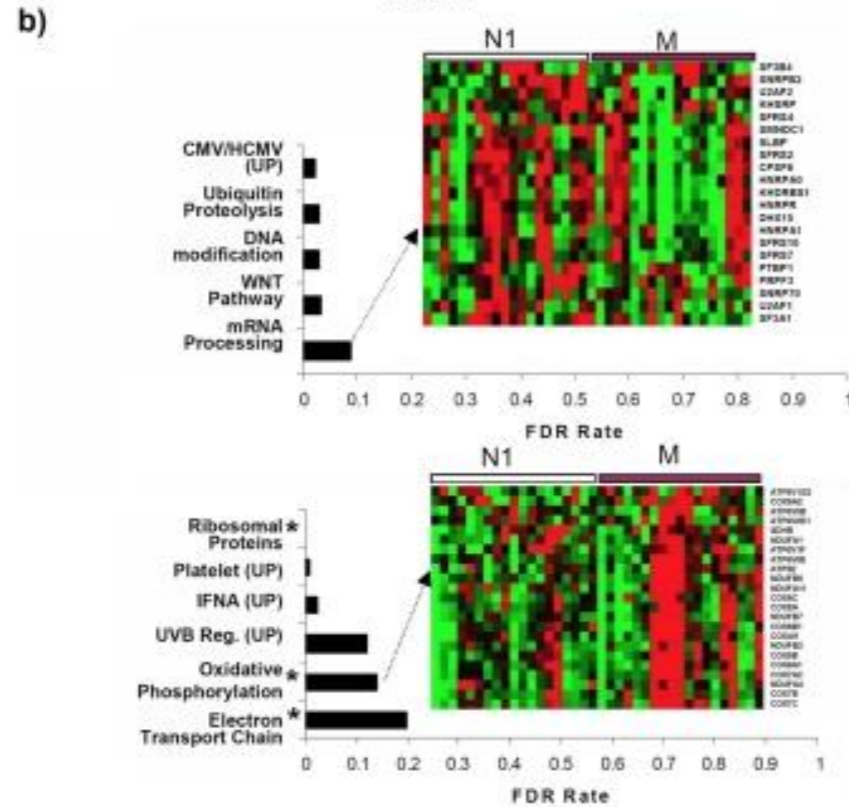
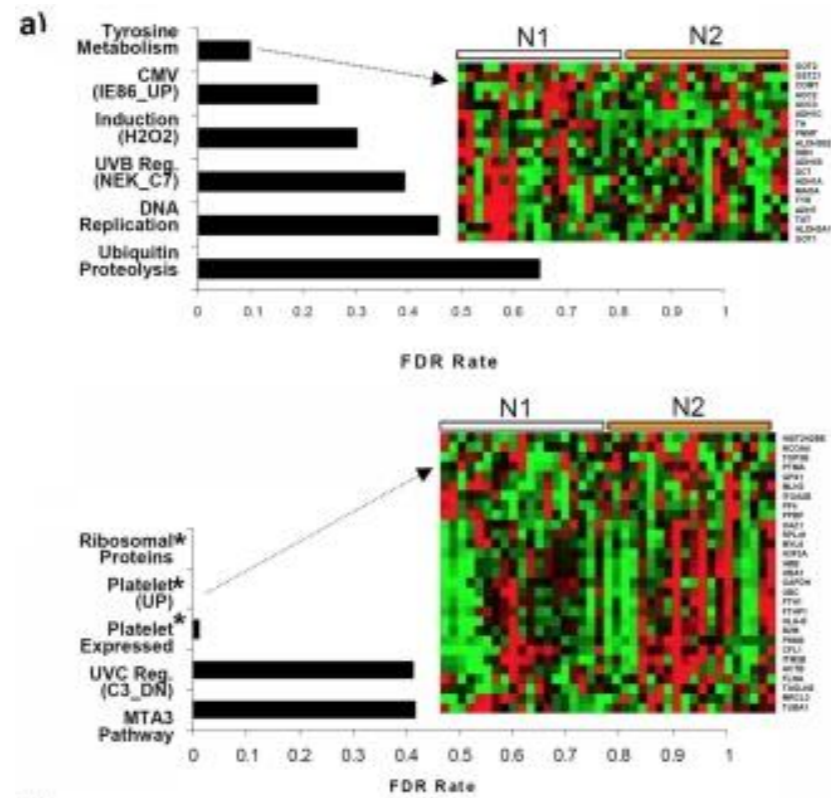


# PAY ATTENTION if

- ❖ It is unremitting and constant
- ❖ Perceived as uncontrollable
- ❖ You are unable to buffer with relaxation
- ❖ Multiple stressors or chronic stress state
- ❖ You're on autopilot, hamster wheeling
- ❖ Repeated self destructive behaviours
- ❖ Frequent out of proportion reactions.
- ❖ You've started hiding from life
- ❖ Physical symptoms such as feeling tired all the time, recurrent infections, aches and pains, autoimmunity etc..







Transcriptional profiles in 19 healthy long term RR practitioners (M); controls (N1) and 20 individuals who completed 8 weeks of RR (N2- short term practitioners)

Significant alterations in cellular metabolism, oxidative phosphorylation, generation of reactive oxygen species and response to oxidative stress in long-term and short-term practitioners of daily RR practice that may counteract cellular damage related to chronic psychological stress.

**RR elicits specific gene expression changes in short-term and long-term practitioners**

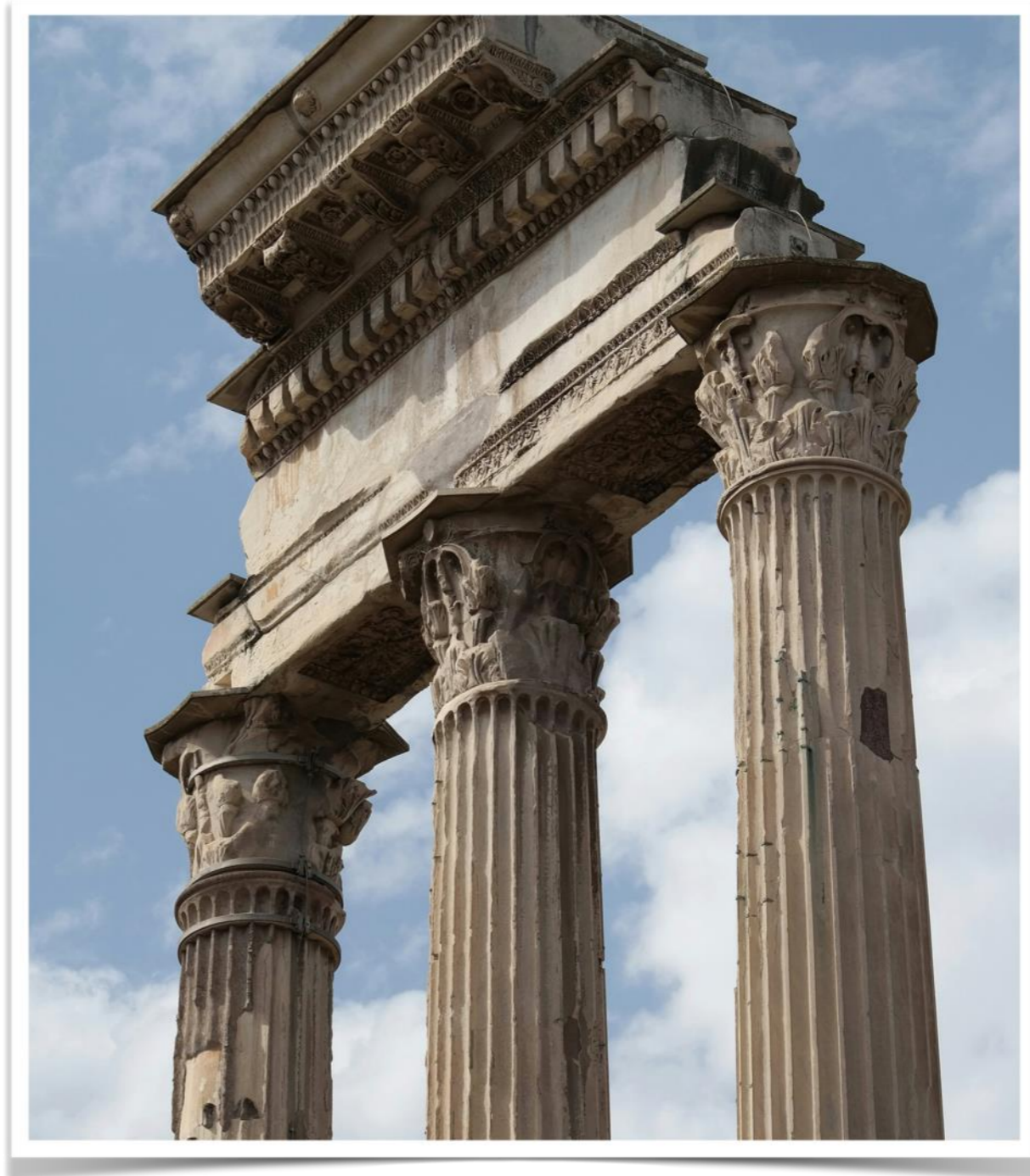


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# My approach

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- ❖ Neuroscience
- ❖ Integrative medicine
- ❖ Somatics
- ❖ Are you completing your cycles?



# Something on somatics

- ❖ Imagine holding something hot
- ❖ What are your options?
  - ❖ SUPPRESS
  - ❖ REPRESS
  - ❖ ESCAPE
  - ❖ DISTRACT
  - ❖ HOLD SPACE, FEEL IT, LET IT RUN ITS COURSE & LET GO
- ❖ Factors to consider
  - ❖ Modelled
  - ❖ Beliefs
  - ❖ Practice
  - ❖ Intergenerational patterns



# How do we test & assess?

- ❖ Physical
  - ❖ Health screens covering each “organ” but looking at the WHOLE BEING
- ❖ Personalised
  - ❖ Genomics
- ❖ Physiological indices
  - ❖ Eg CAR, CRP, Cardiac markers etc
- ❖ Psychological
  - ❖ Full assessment
- ❖ Relational
- ❖ Spiritual “Joie de vivre”
- ❖ Specifics
  - ❖ How we breathe
  - ❖ Mindset and view of the world, self and others



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# Where to start

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- ❖ Awareness
- ❖ Audit
- ❖ Is this serving you?
- ❖ One area (get specific)
  - ❖ Thoughts
  - ❖ Emotions
  - ❖ Behaviour/Action/Inaction
  - ❖ Result
- ❖ What is the story you're telling yourself?

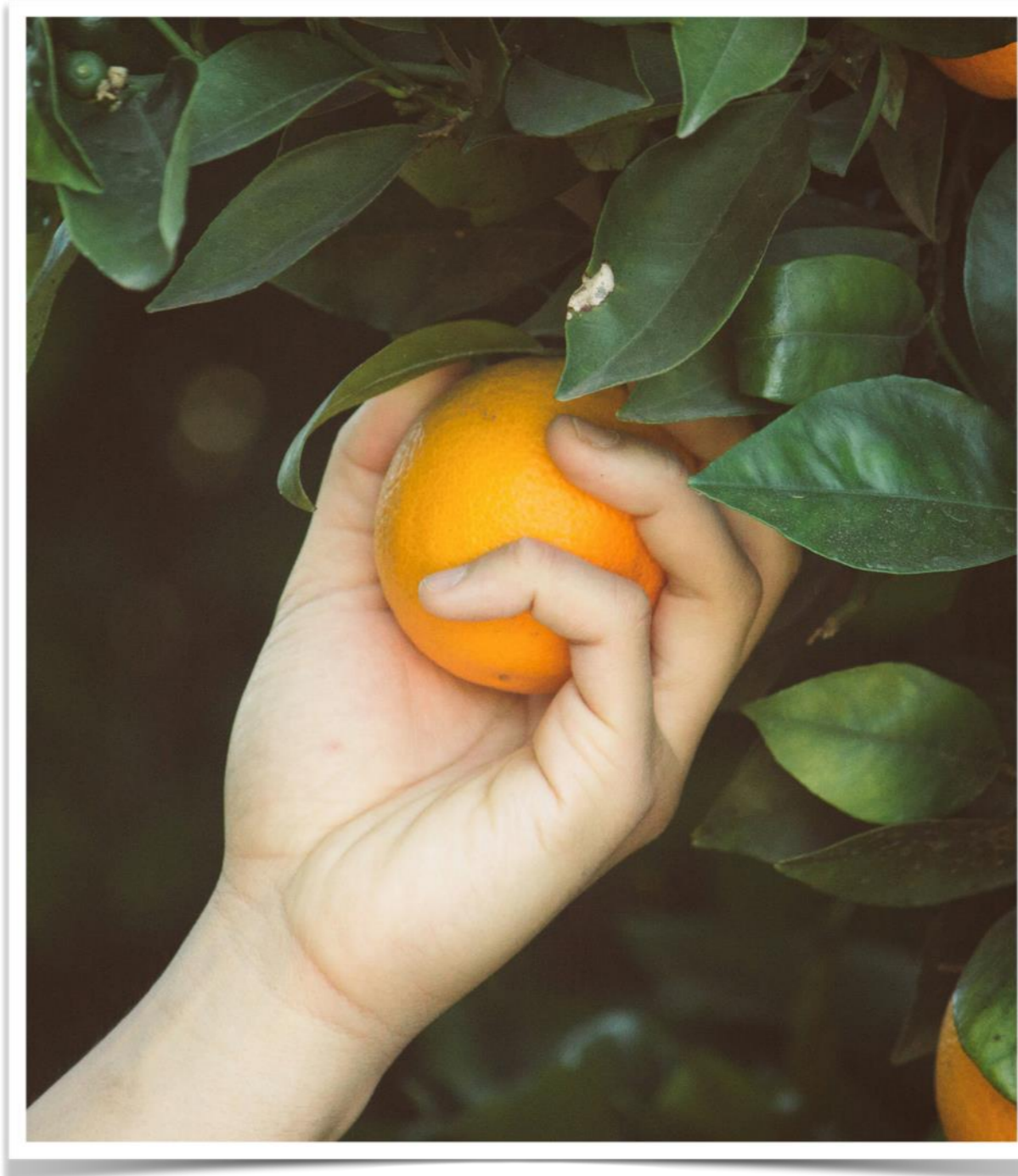


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# Lowest hanging fruit

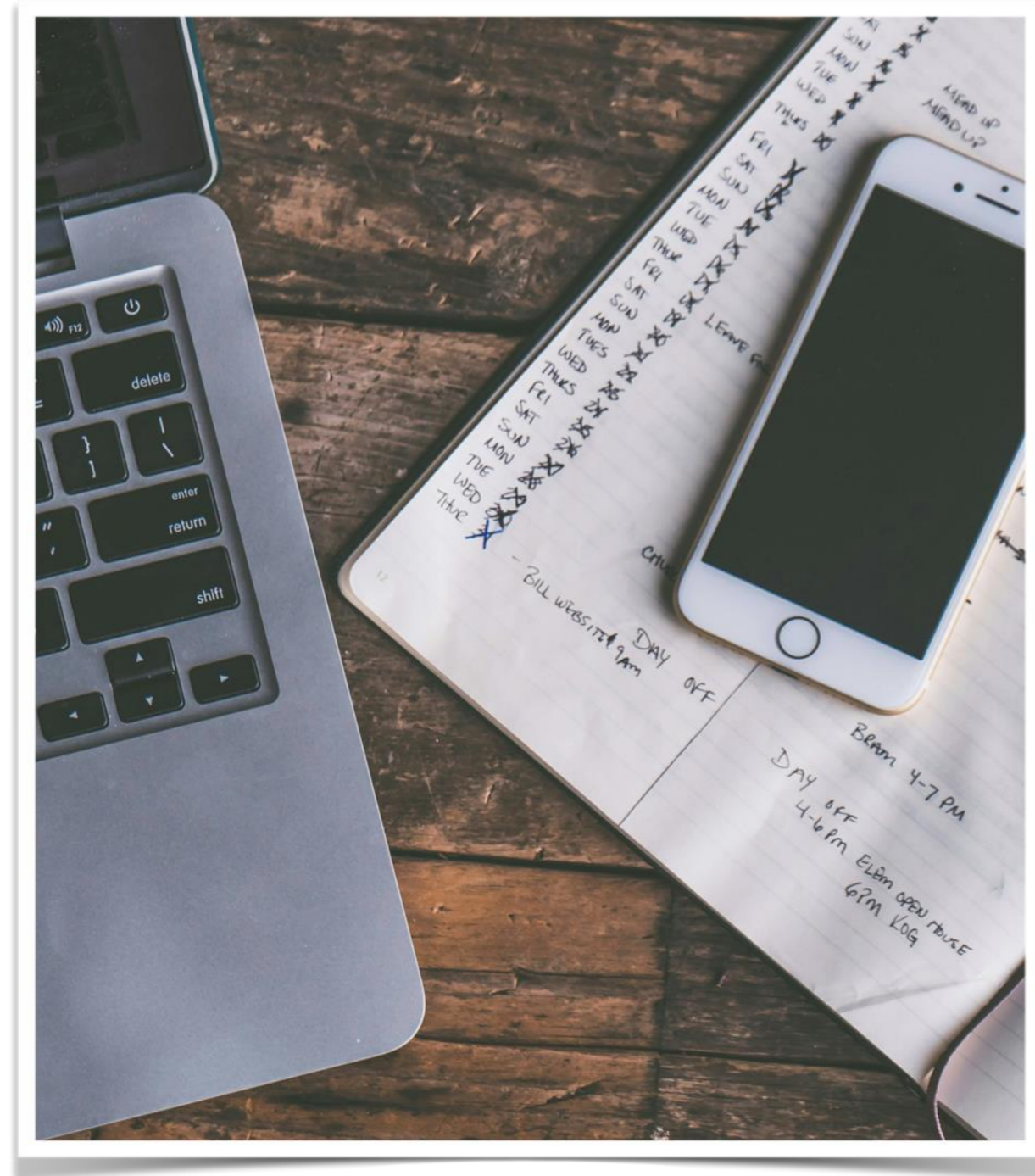
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- ❖ Embed into the day
- ❖ Experiential states
- ❖ Parasympathetic
- ❖ Guard your senses
- ❖ Support
- ❖ Learn how to feel
- ❖ Leverage neuroscience
  - ❖ Expect resistance



# Embed, get creative

- ❖ What does my day look like
- ❖ Power in start & end
- ❖ Where can I embed
  - ❖ Mindful breath
  - ❖ Movement
  - ❖ Hydration
  - ❖ Music & Dance
  - ❖ Laughter
  - ❖ Curiosity & reflection
  - ❖ Presence with others & self

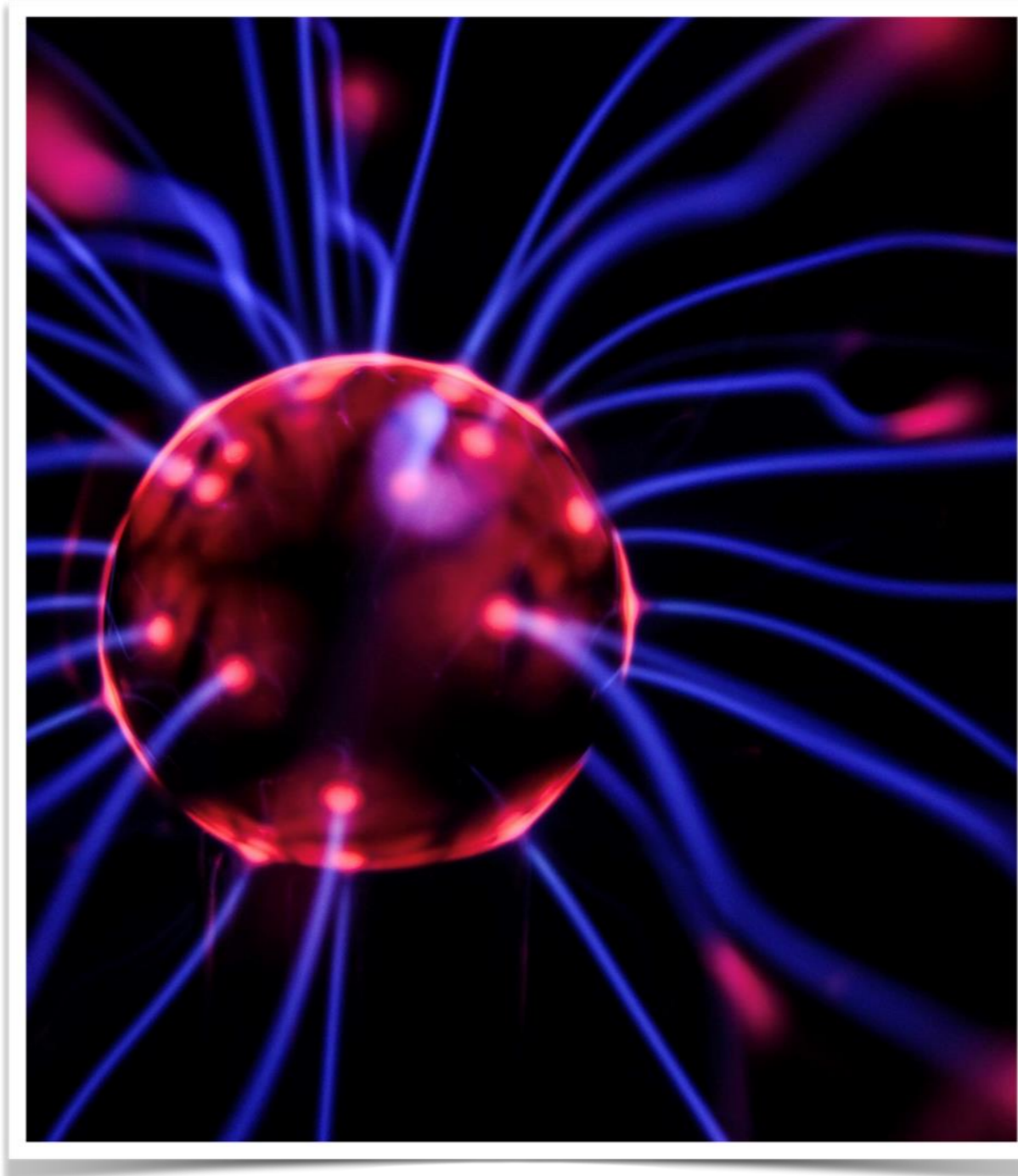


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# Experiential

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- ❖ Altered states mean different brainwave patterns
- ❖ Start with guided
  - ❖ Breathwork
  - ❖ Meditation
- ❖ Yoga, movement
- ❖ Get into body: cold, voice, move



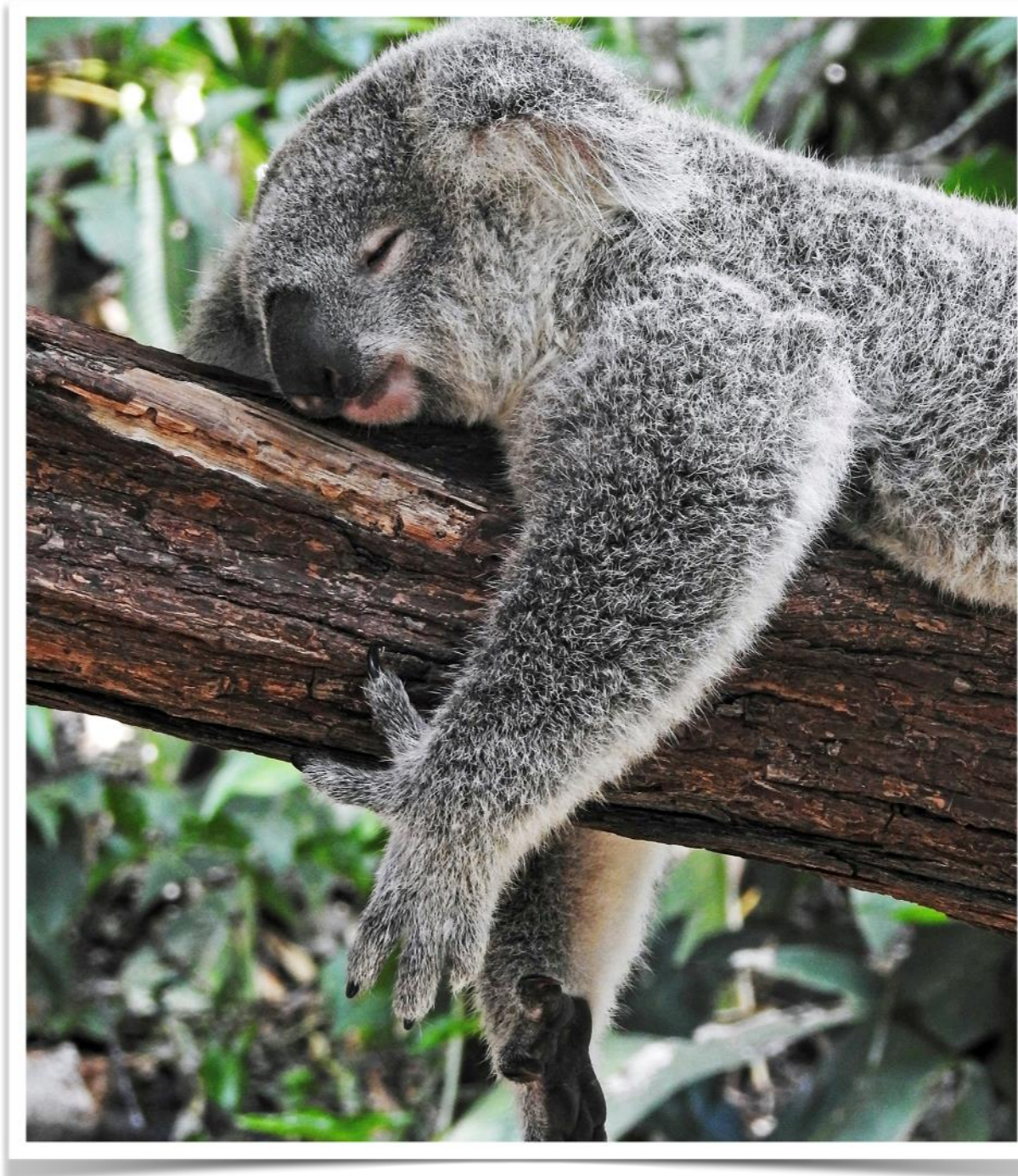


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# Hard hitters

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- ❖ Sleep: repair
- ❖ Movement: BDNF
- ❖ Ability to stay, surrender to physiological state aka feelings
- ❖ Connection
- ❖ Optimising hormone & gut health
- ❖ Support: therapist, coach, dr, etc

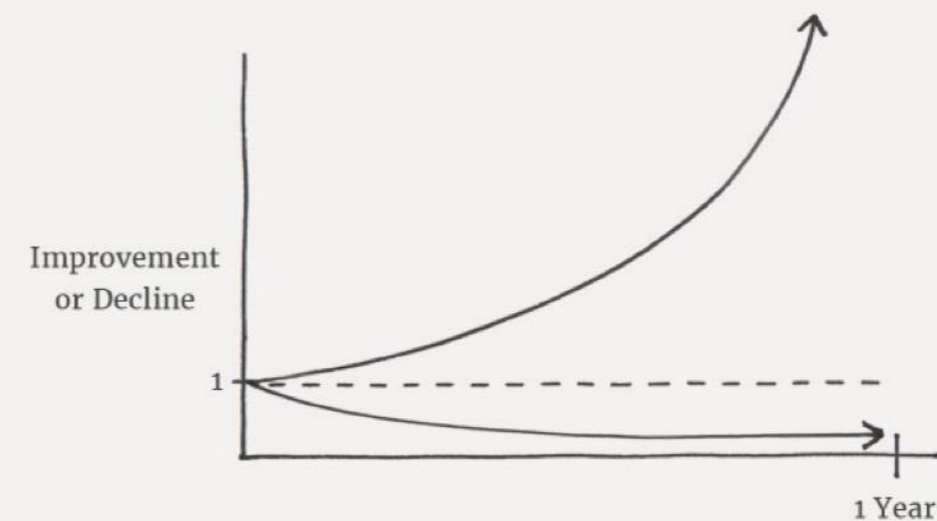


# 1%

- ❖ 1 thing you learnt today
- ❖ How does your body handle stress currently?
- ❖ How are you completing your cycles?
- ❖ Any evidence of wear and tear? AKA allostatic overload
- ❖ 1 tiny thing/reframe that can easily be implemented NOW
- ❖ How do you grieve?
- ❖ How can you start?

## The Power of Tiny Gains

1% better every day  $1.01^{365} = 37.78$   
1% worse every day  $0.99^{365} = 0.03$



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# Thank you

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## Questions?

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