



# Stress Management / Work-Life Balance

# Psychology of Mental Health and Well-being

**Department of Psychology and Psychosomatics  
Faculty of Medicine, Masaryk University**

Autumn semester 2019



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[upp.med.muni.cz](http://upp.med.muni.cz)

**Private practice** (counselling, therapy, assessment, coaching)

[www.p-s-y-c-h-o-l-o-q.cz](http://www.p-s-y-c-h-o-l-o-q.cz)



# **Stress vs. Well-Being**

Work-Life Balance

## **The Nature of Stress**

basic information, sources, links



Are you stressed?

Are you feeling the stress just now?

Are you aggressive?

Have you been aggressive today? Destructive?



# Focus on Principles

Stress is anytime & anywhere

Stress works for us; Stress is functional

We're able to **influence the duration & intensity**,  
not the start-point of the stress reaction

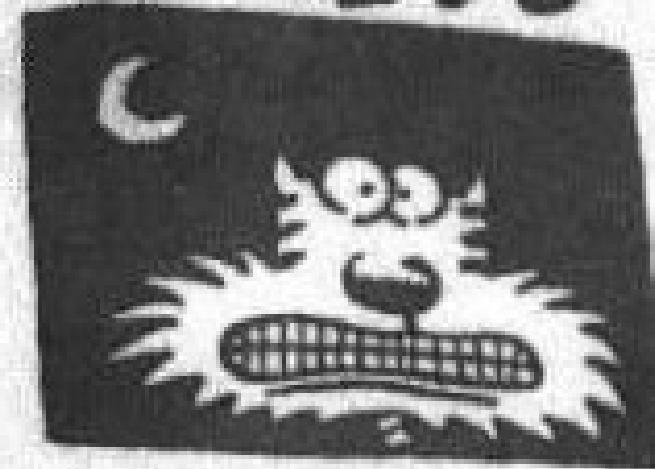
**Don't worry about stress ...**

**... anyway ... it's anytime & anywhere .**





**THERE ARE ONLY  
TWO TIMES  
I FEEL STRESS :**



**DAY AND NIGHT.**

# STRESS - Psychophysiology

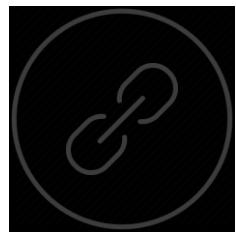
basic information, sources, links

short version

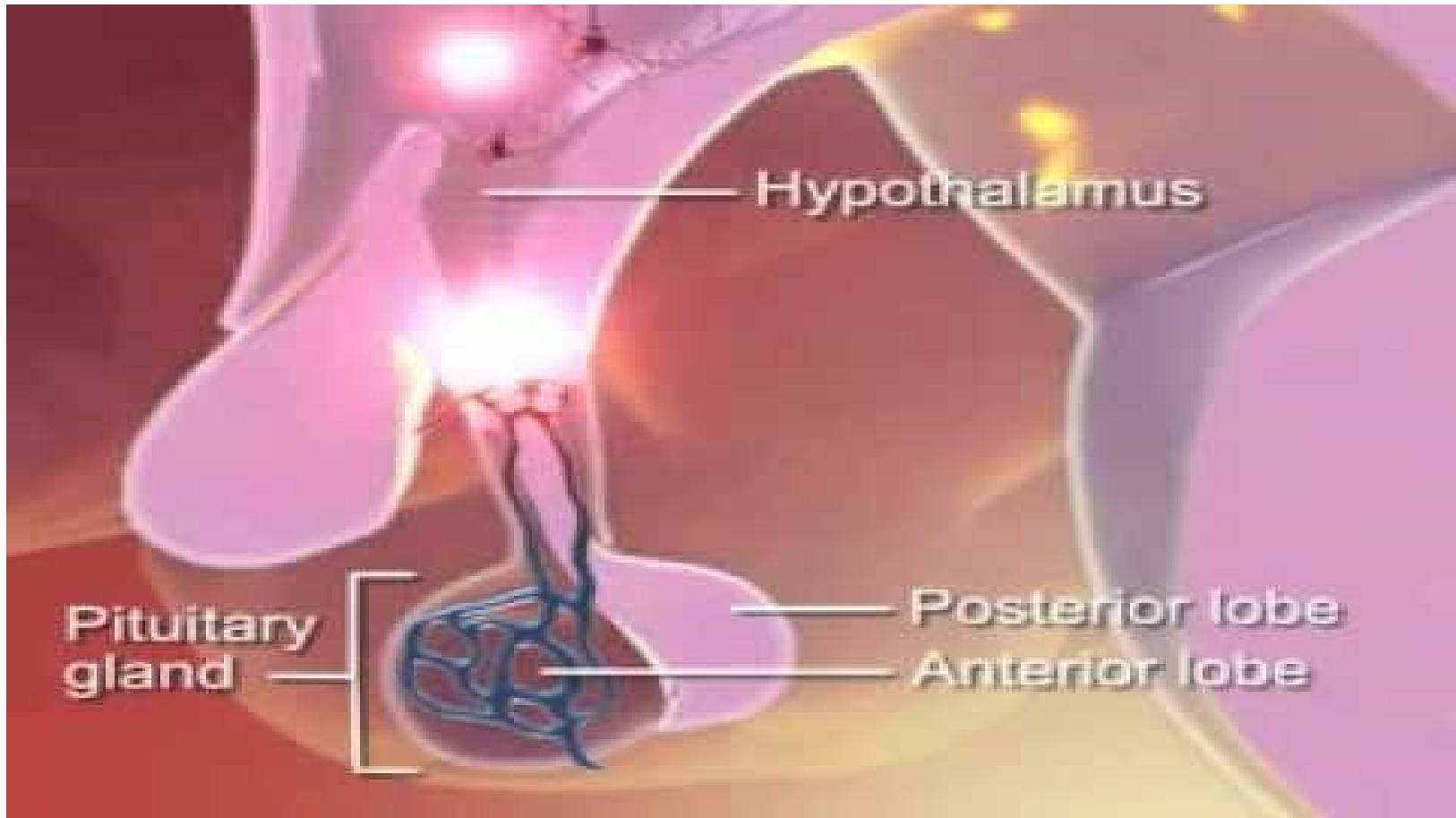
# Stress Definition

Stress is a state of psychological and physical tension produced when an individual perceives that they are unable to cope with the demands imposed on them by a stressor.

The consequent state of tension can be adaptive (eustress) or maladaptive (distress)

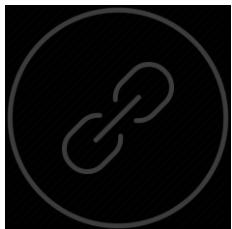


# Short info video

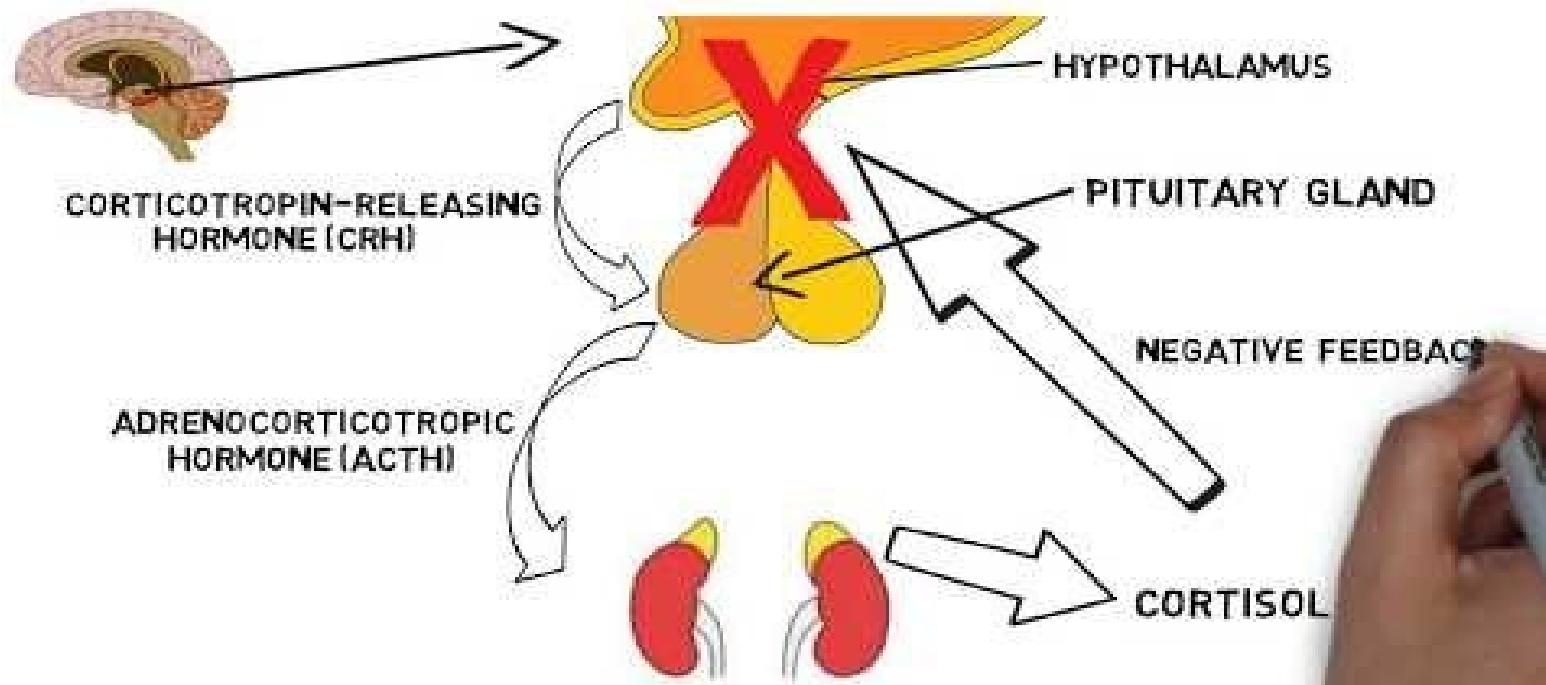


<http://www.youtube.com/watch?v=BIfK0L8xDP0>

YouTube



# HPA Axis





How stress affects your body



How stress affects your brain



... link between stress and memory

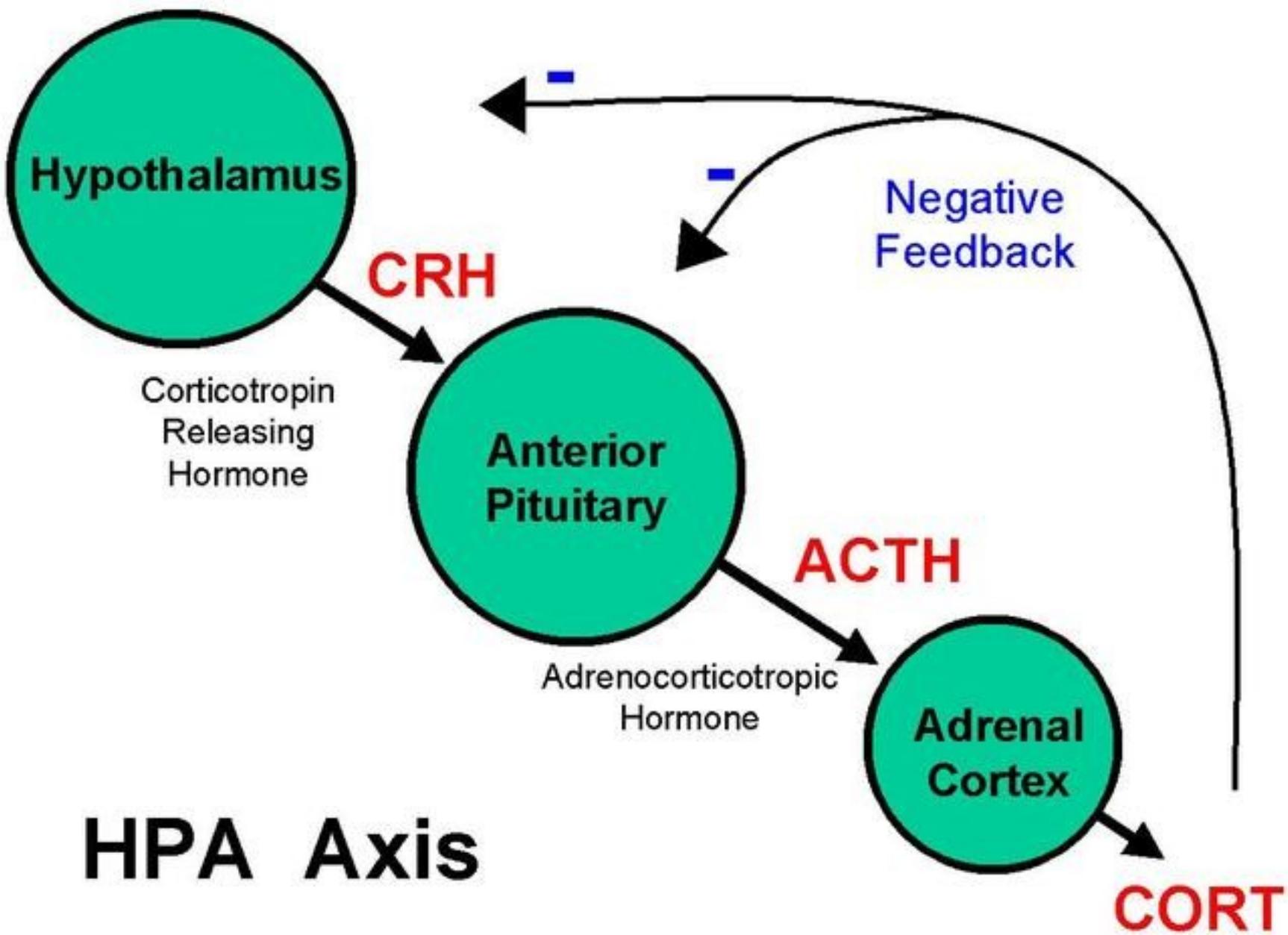
**TEDEd**

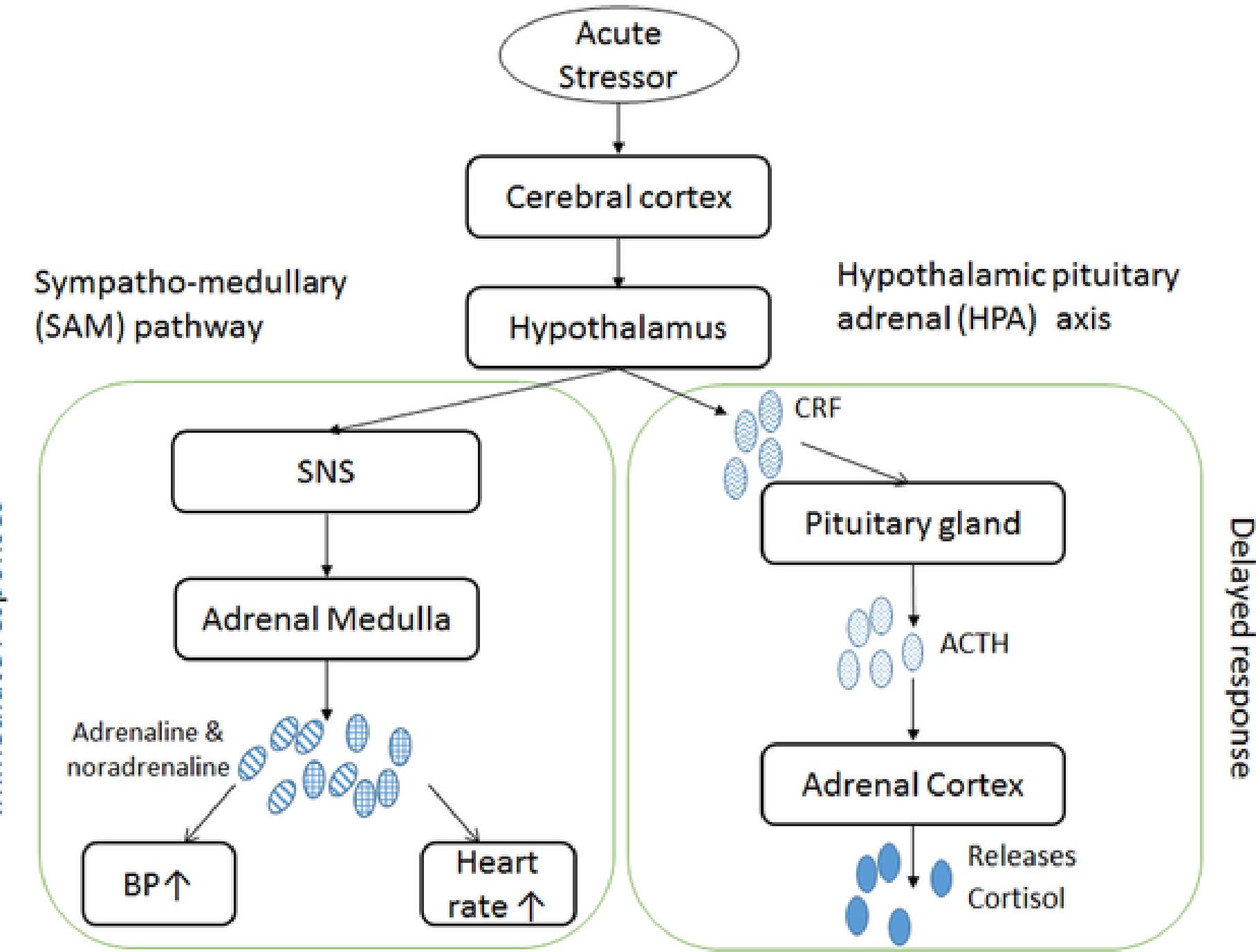
Sharon Horesh Bergquist | TED-Ed: **How stress affects your body**

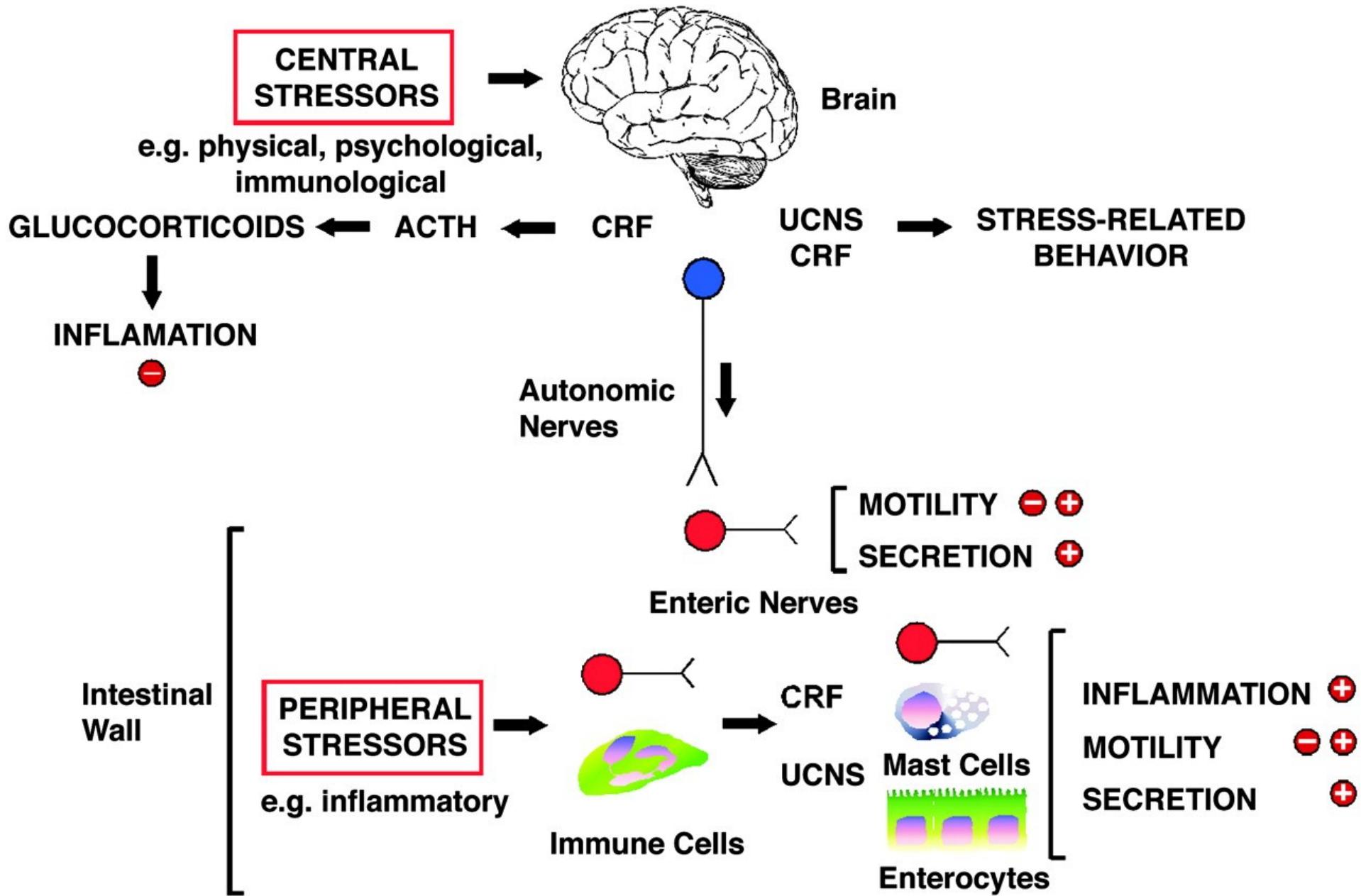
Madhumita Murgia | TED-Ed: **How stress affects your brain**

Elizabeth Cox | TED-Ed: **The surprising link between stress and memory**

# ADRENAL STRESS RESPONSE







**STRESS**

**STRESS**

**EU x DI**

**ACUTE x CHRONIC**

**HYPER x HYPO**

# Acute Stress(ors)

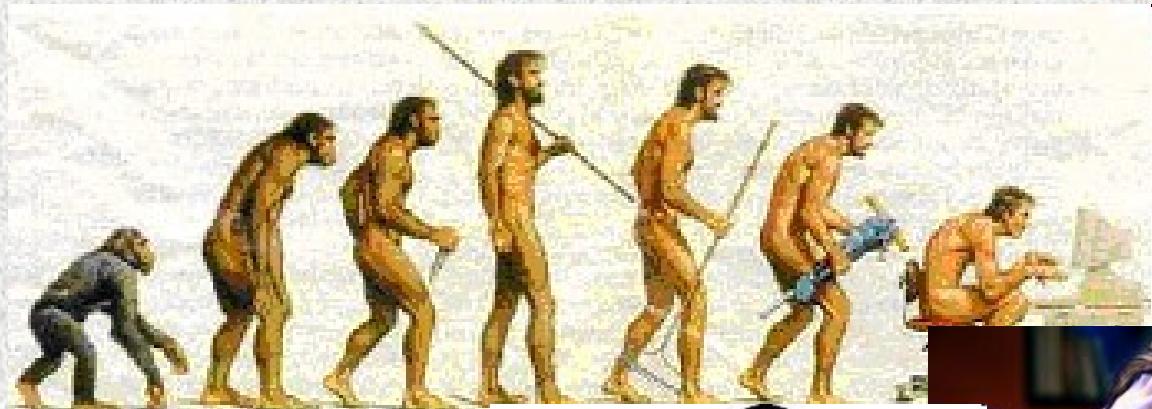


Short-Term; quick decisive action required for survival

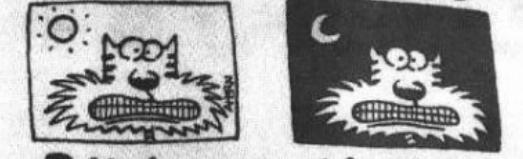
# Chronic Stress(ors) = Long term, Persistent

Physical, Emotional, Sexual Abuse  
Poverty, Malnourishment

Demanding Job  
Depression, Anxiety



THERE ARE ONLY  
TWO TIMES  
I FEEL STRESS :  
DAY AND NIGHT.



# More of Energy?

Just EFFECTIVITY!



# Fight or Flight

In the 1915, **Walter Cannon** recognized that the autonomic nervous system is activated in response to stress and suggested that stress mobilizes the body's responses in readiness for either attacking (**fight**) or fleeing (**flight**) an enemy or threatening situation.

Although such responses may have promoted survival when they evolved in human history, they are not productive given the longer periods of stress exposure common in modern life. Such enterprises as keeping a job, going to school, and playing on the soccer team require more complex responses.

# Fight or Flight

- Walter B. Cannon (1915)
- Four stages:
  - Stage one: Stimulus
  - Stage two: Threat determination
  - Stage three: Arousal
  - Stage four: Return to homeostasis

# Effects of stress

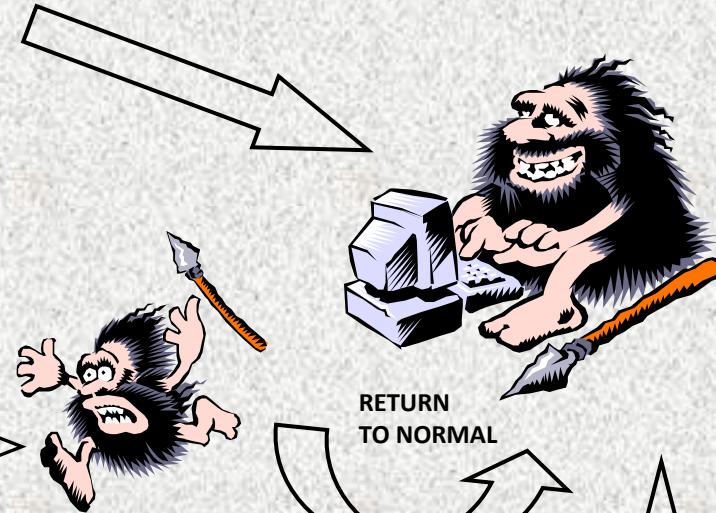
## STRESSORS

- Family Relations
- Disagreements
- Money Worries
- Need to Succeed
- Exams
- Friends
- Decisions
- New Situations

FIGHT



FLIGHT



COPING

## Coping Skills



COPING STRATEGIES



## RELAXATION

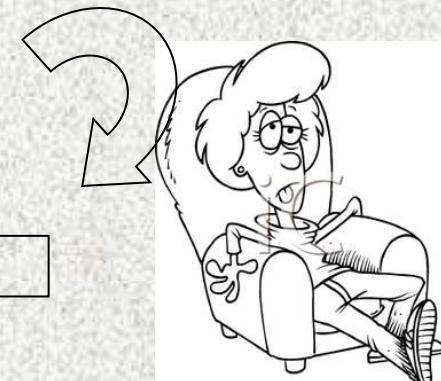
Active / Passive

NOT COPING

Worrying is like a rocking chair.  
It gives you something to do but  
it doesn't get you anywhere.

—Van Wilder

EXHAUSTION

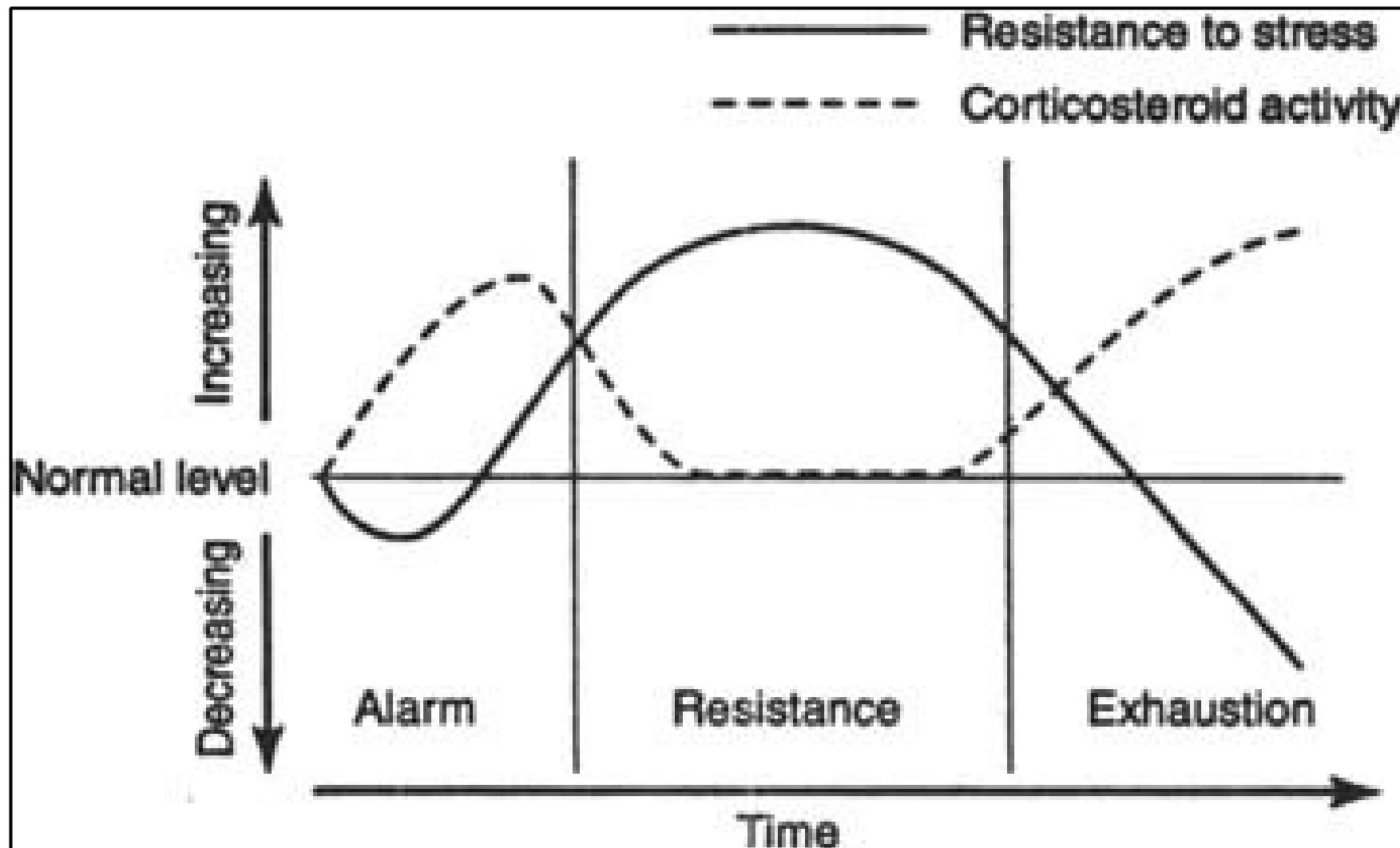


POOR DIET  
NO EXERCISE  
NEGATIVE  
THOUGHTS  
...



# GAS

## The general adaptation syndrome. Hans Selye

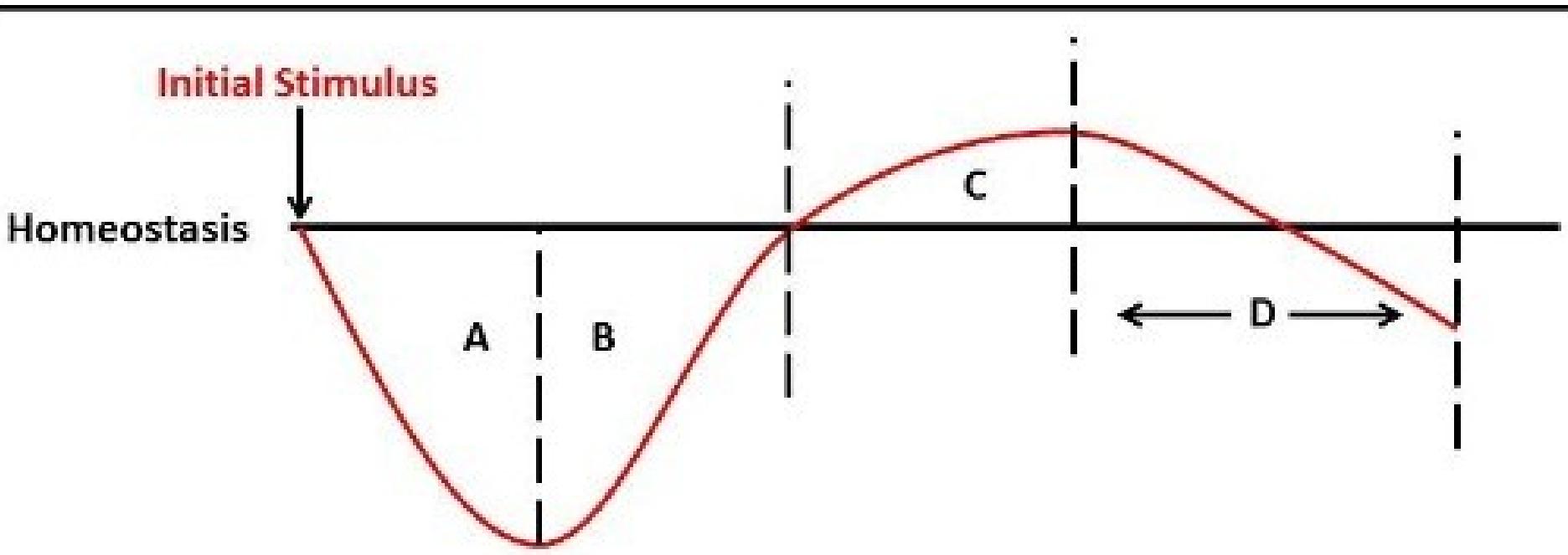


# GAS

**Alarm:** The body first organizes physiological responses (similar to fight/flight resp.) to threat.

**Resistance:** Stress-activated responses continue, stabilizing the body's adaptations to stress.

**Exhaustion:** The body has depleted its reserves and can no longer maintain responses to the stressors.



## Legend:

A = Alarm Phase

B = Resistance Phase

C = Supercompensation Phase

D = Exhaustion or Detraining Phase

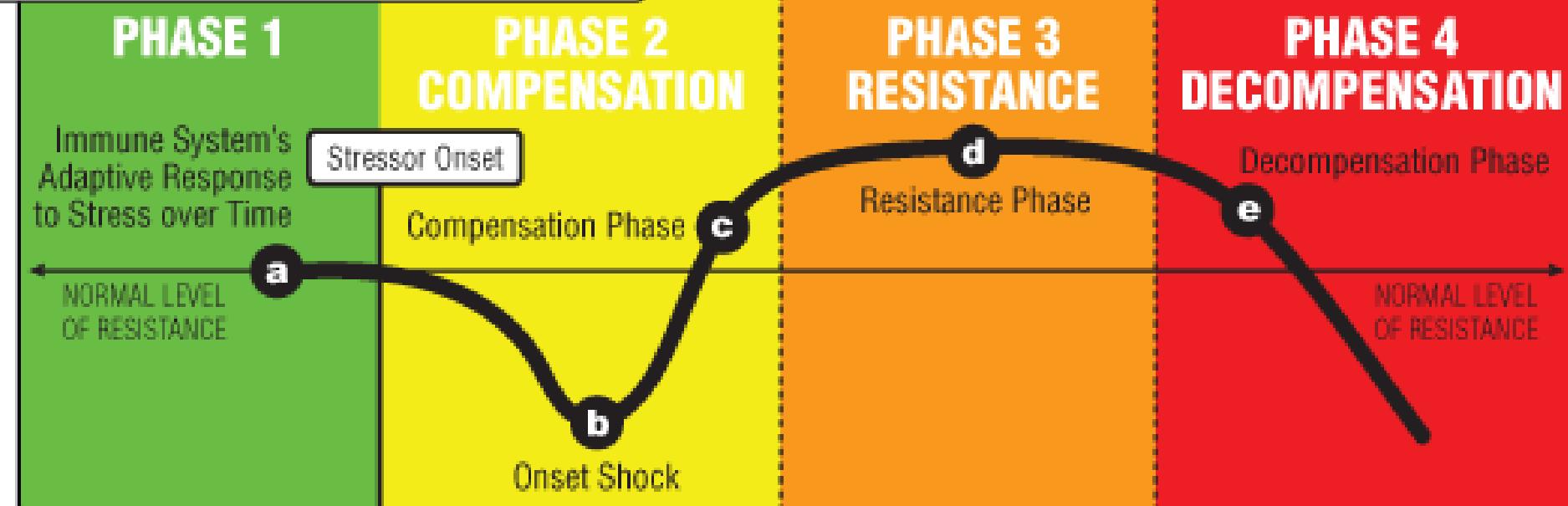
# GAS

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**Resistance:** Stress-activated responses continue, stabilizing the body's adaptations to stress.

**Exhaustion:** The body has depleted its reserves and can no longer maintain responses to the stressors.

## General Adaptation Syndrome



and other opiate drugs used in the modulation of pain.



**Don't worry about stress ...**

**... we're able to influence  
the duration & intensity!**

**... we're able to deal with it ...**

**... it would help us!**





# Links – text (CZE/ENG)

**CZE**

<http://www.wikiskripta.eu/index.php/Port%C3%A1l:Fyziologie>

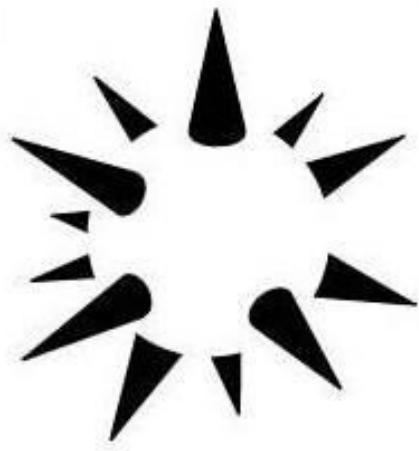
[http://fyziologie.lf2.cuni.cz/uceni/stress\\_WEB.pdf](http://fyziologie.lf2.cuni.cz/uceni/stress_WEB.pdf)

**ENG**

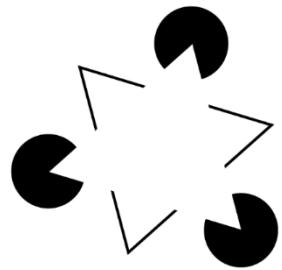
[http://en.wikipedia.org/wiki/Stress\\_\(biology\)#Nervous\\_system](http://en.wikipedia.org/wiki/Stress_(biology)#Nervous_system)

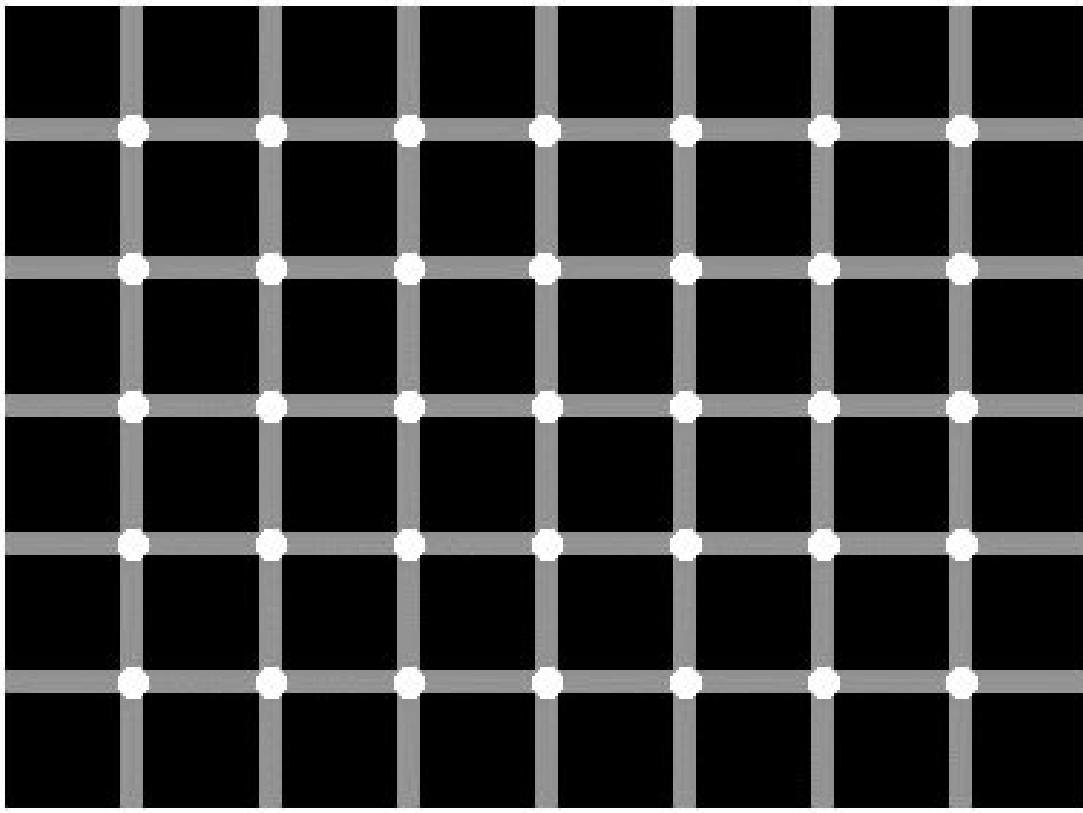
# **Self-regulation & Mind control**

**Do you believe (in) your senses?**



[www.scientificpsychic.com/graphics/](http://www.scientificpsychic.com/graphics/)





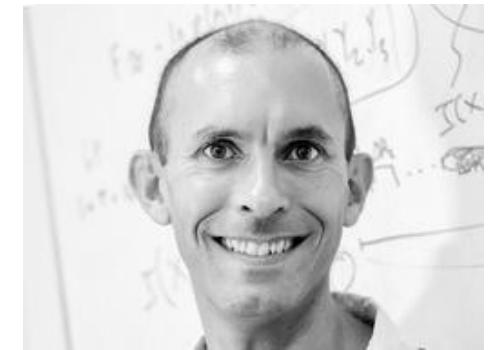


# Audio illusions



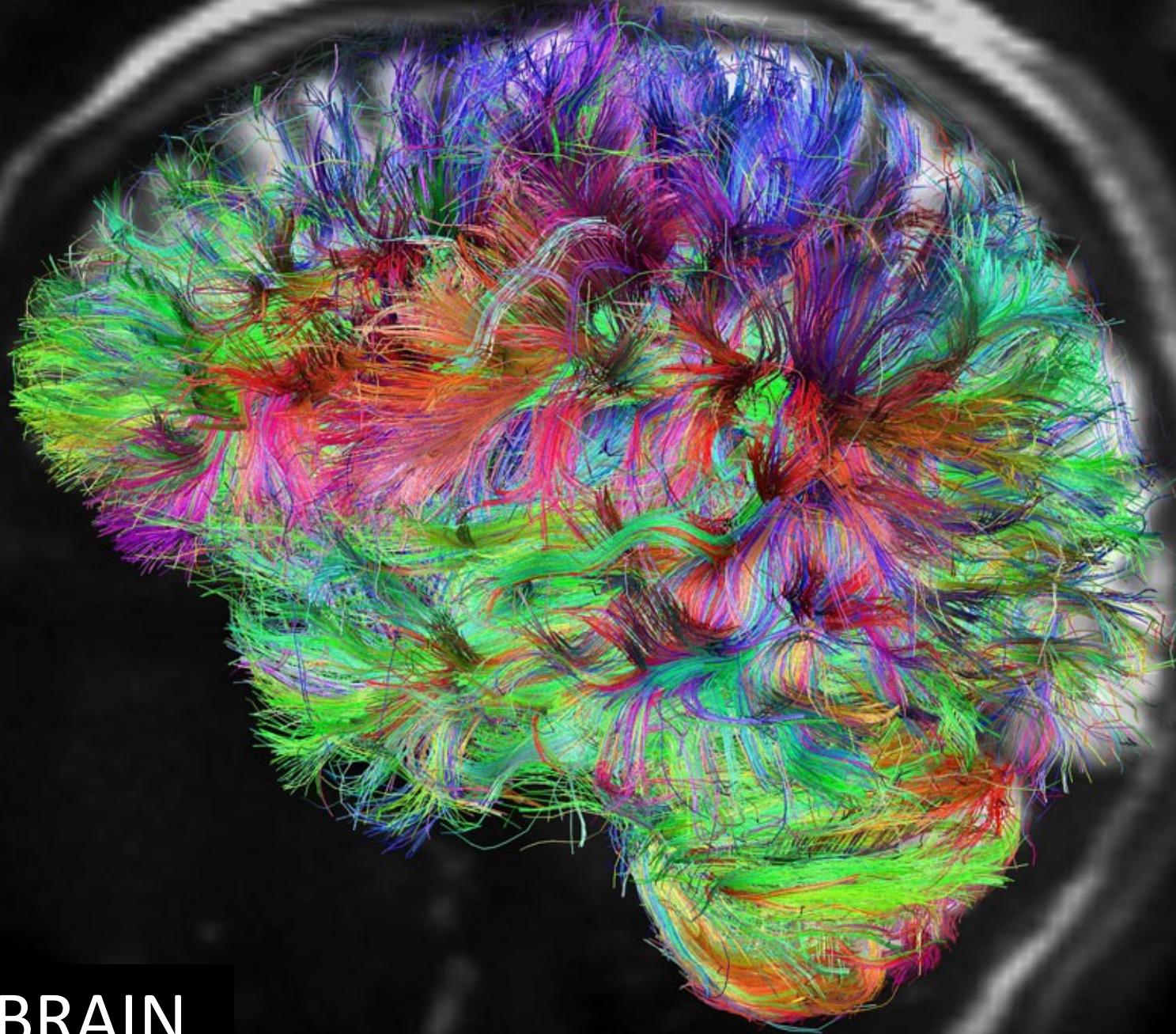
<https://www.youtube.com/watch?v=kzo45hWXRWU>

# Video inspiration

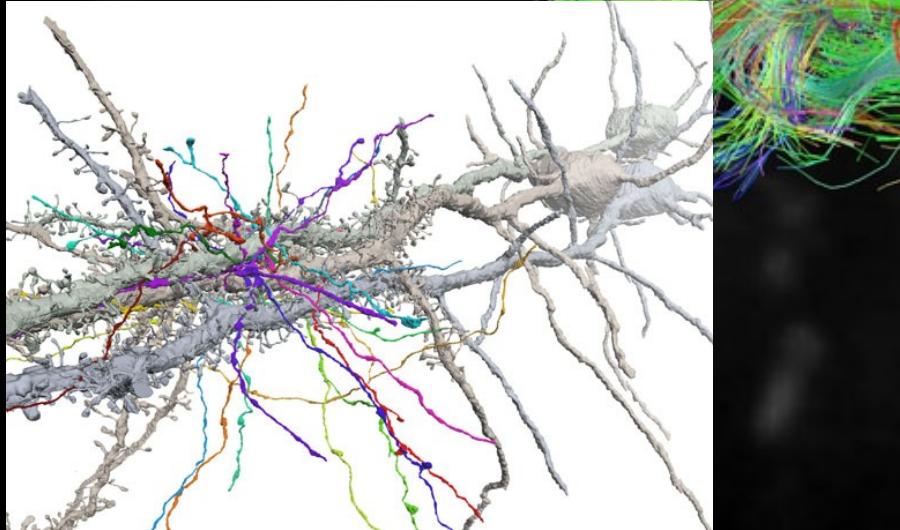
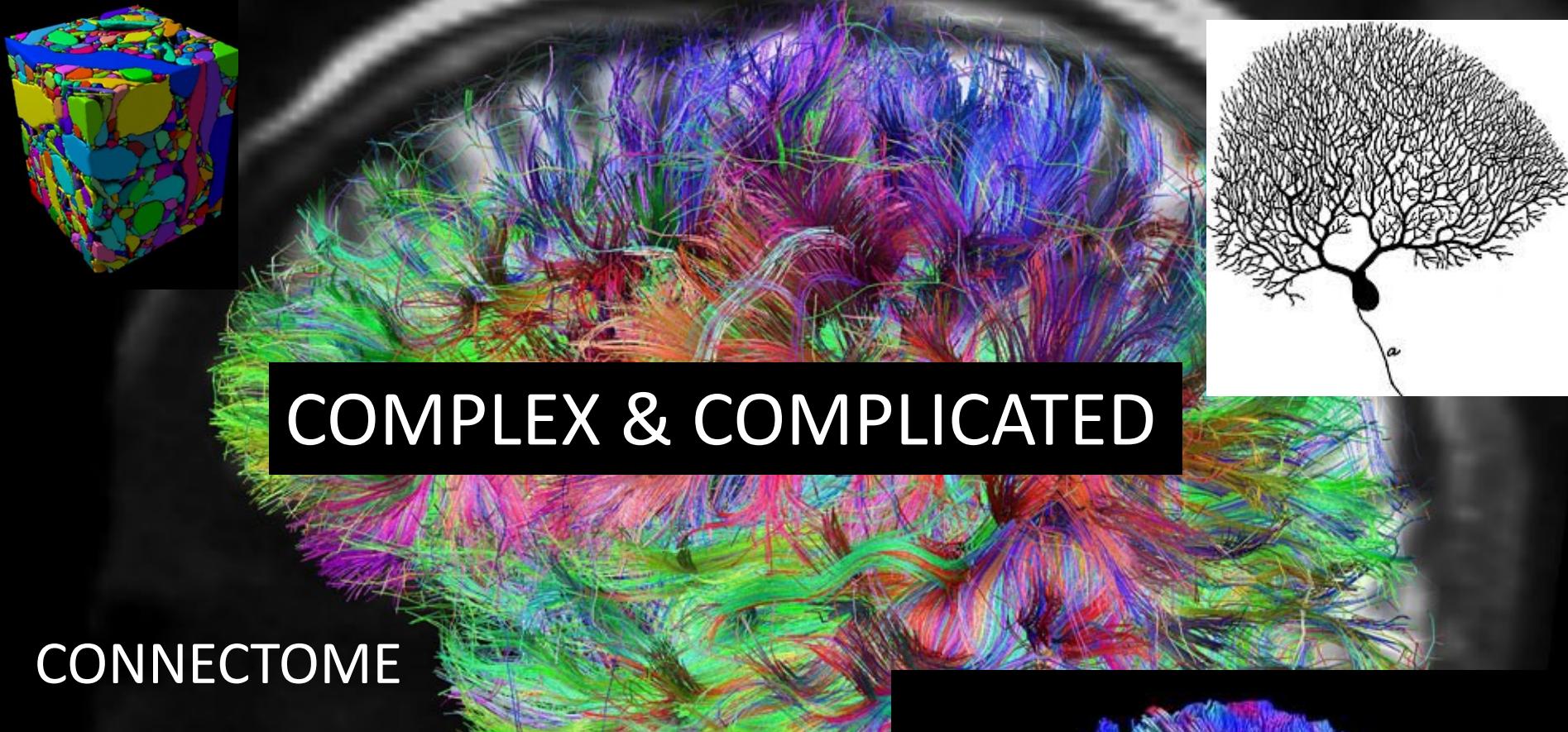


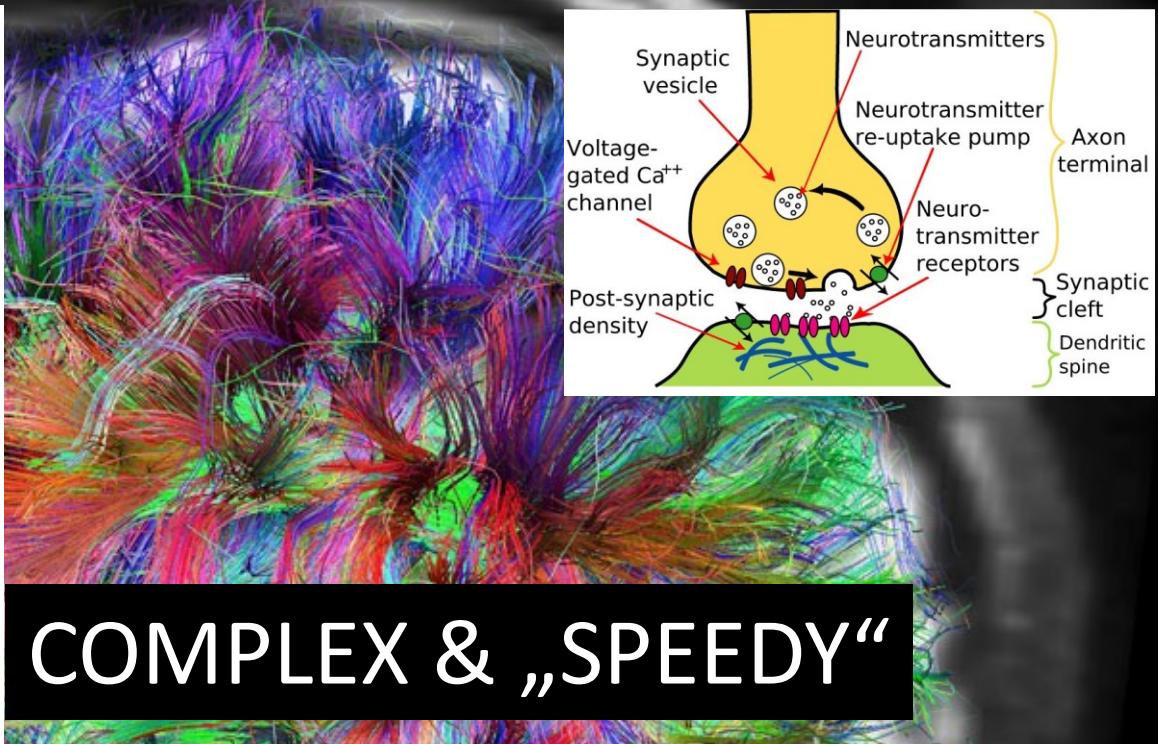
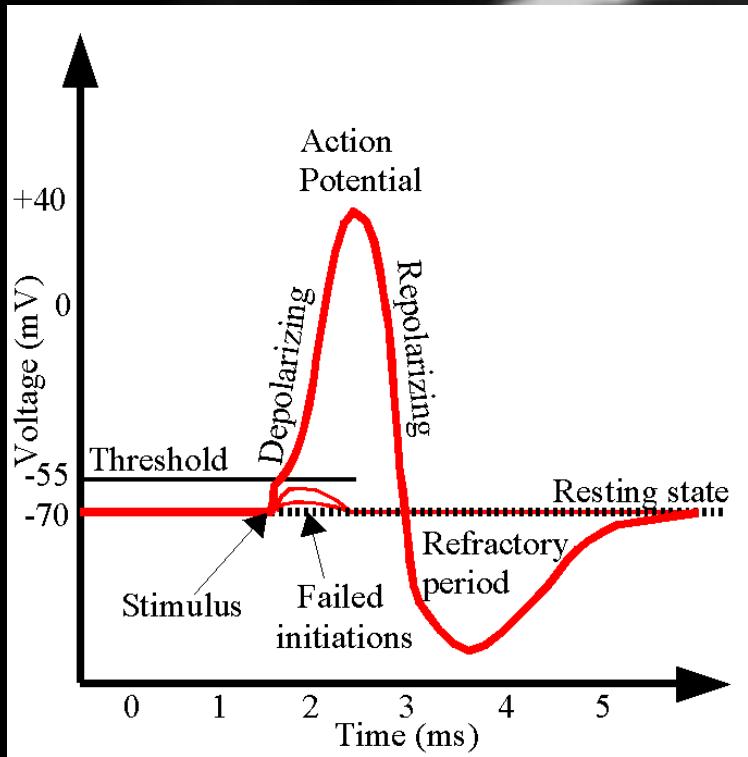
**Anil Seth**

**Your brain hallucinates your conscious reality**



THE BRAIN





CONNECTOME

**myelinated axon**  
speed up to **120 m/s**

432 kph



**non-myelinated axon**  
speed up to **2 m/s**

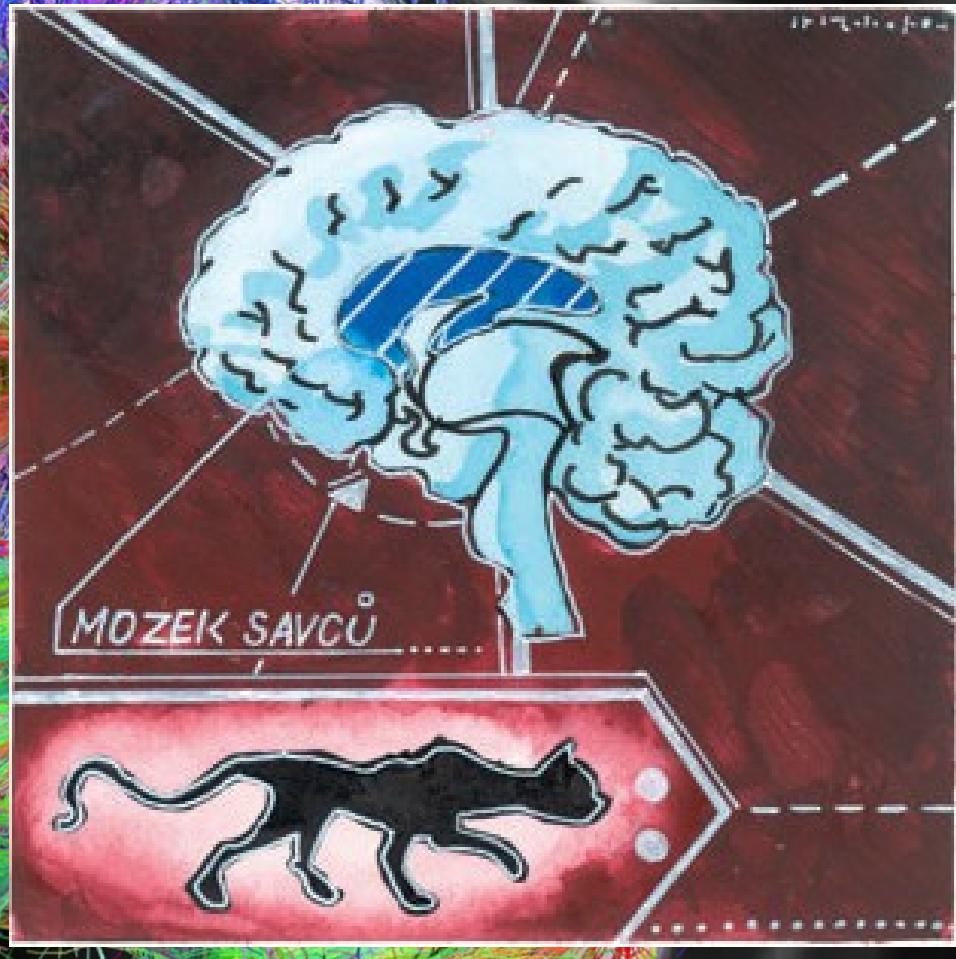
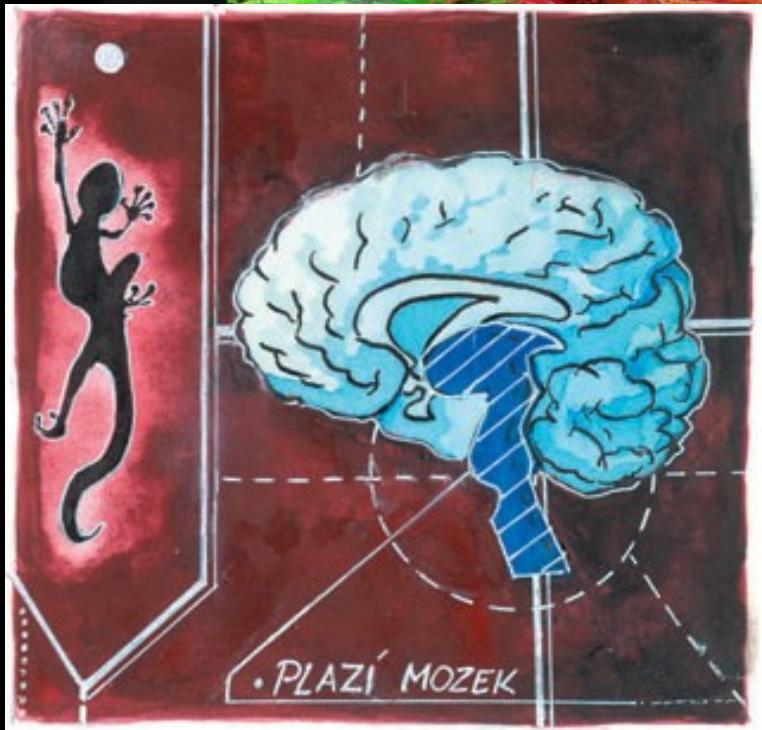
7,2 kph

# Video inspiration

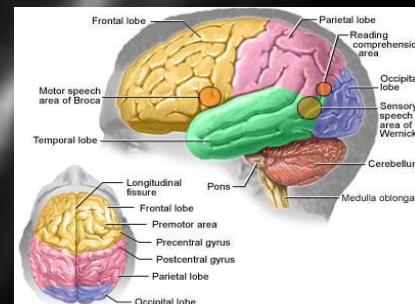
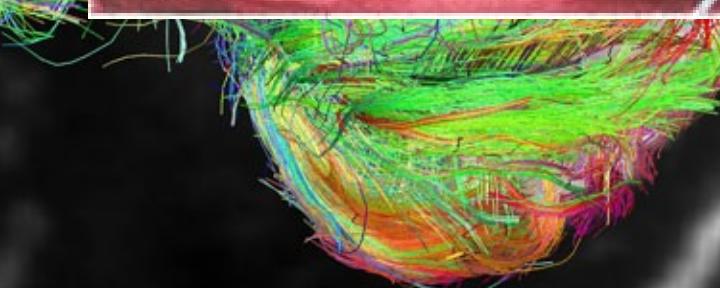


**Allan Jones**

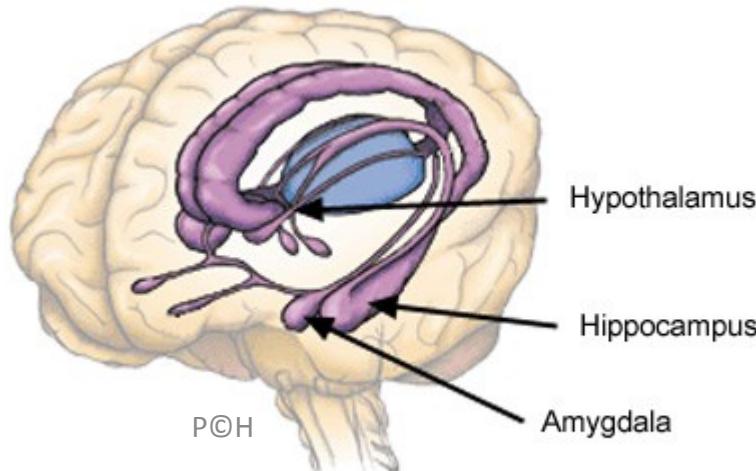
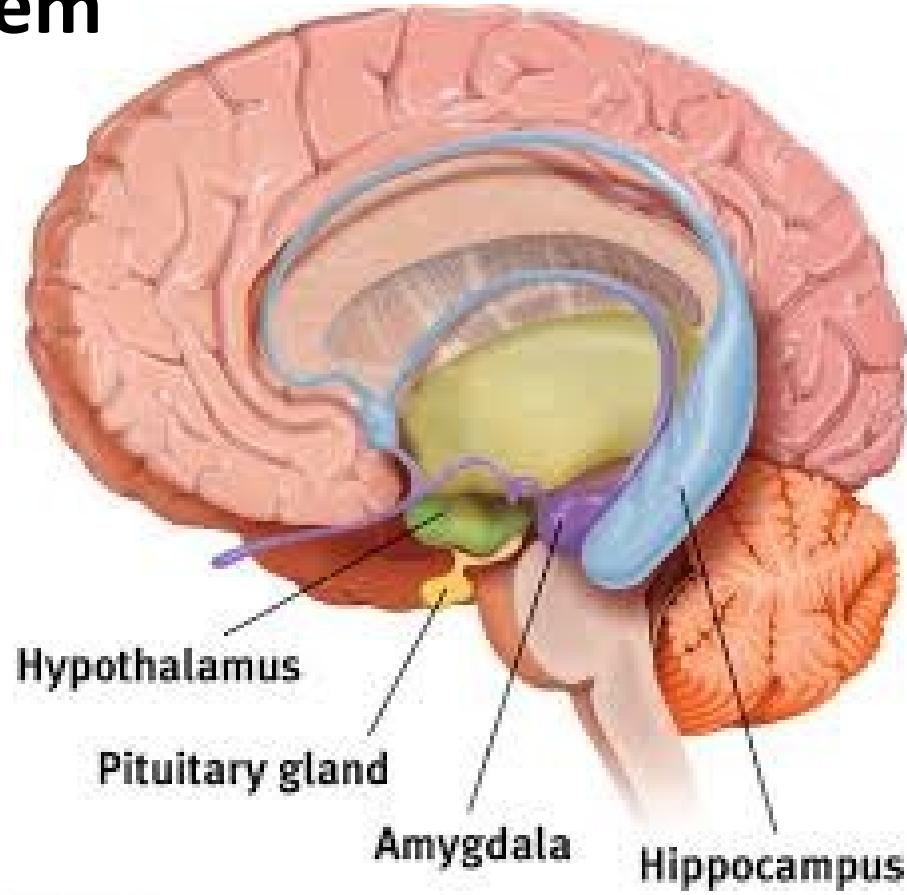
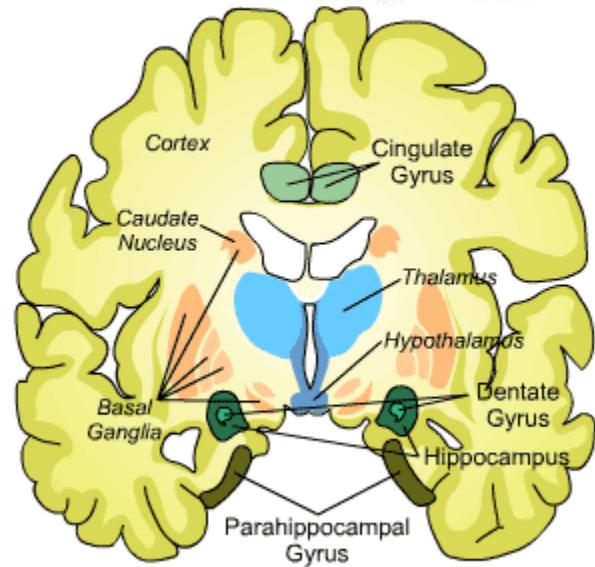
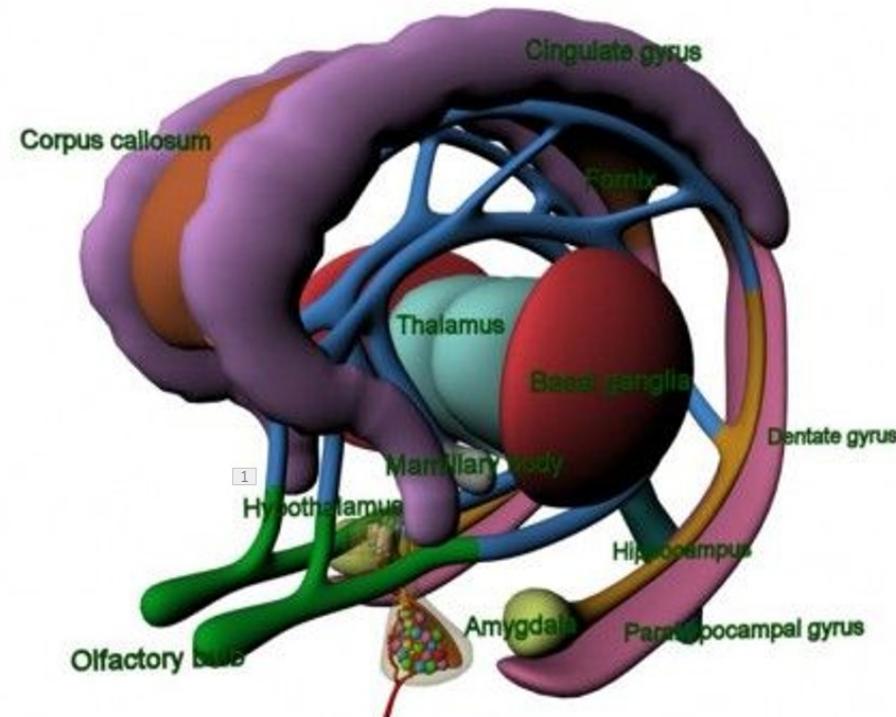
**A map of the brain**



# Triune theory - Paul McLean



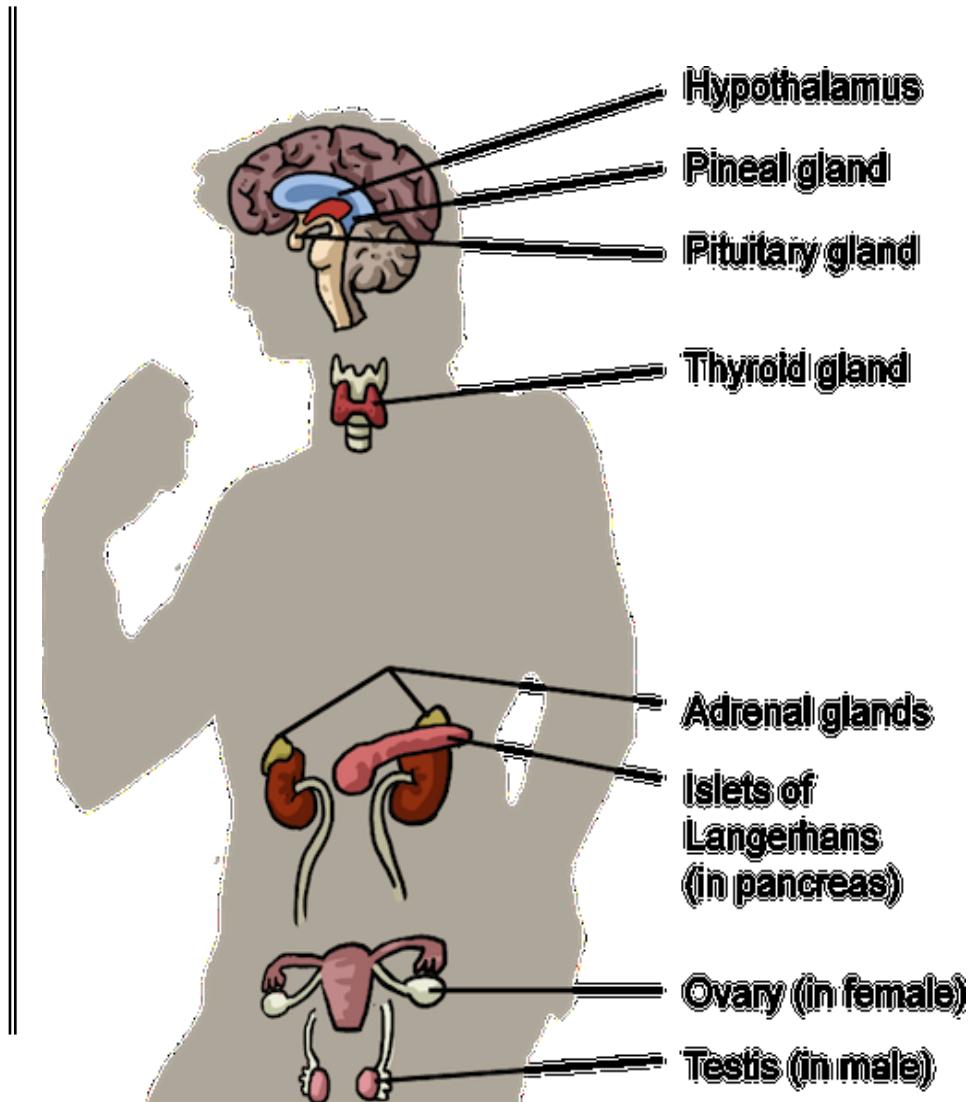
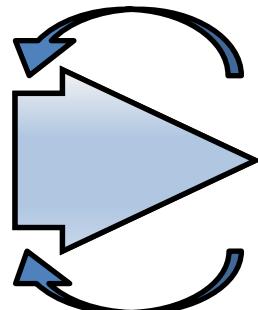
# Limbic system



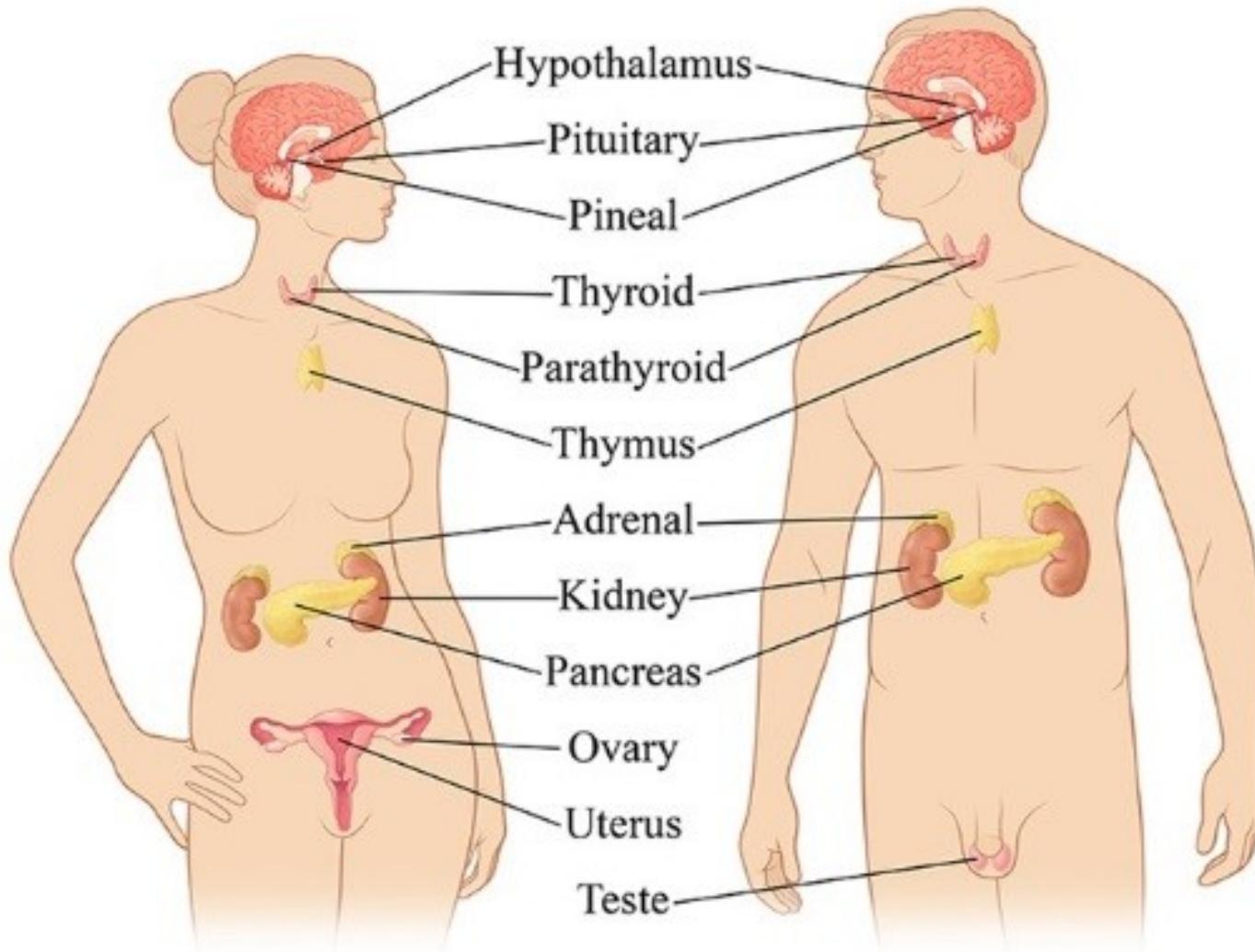
# Autonomic Nervous System & Endocrine System

Two systems working together during immediate stress:

- Sympathetic
  - (responsible for expending energy)
- Parasympathetic
  - (responsible for conserving energy)

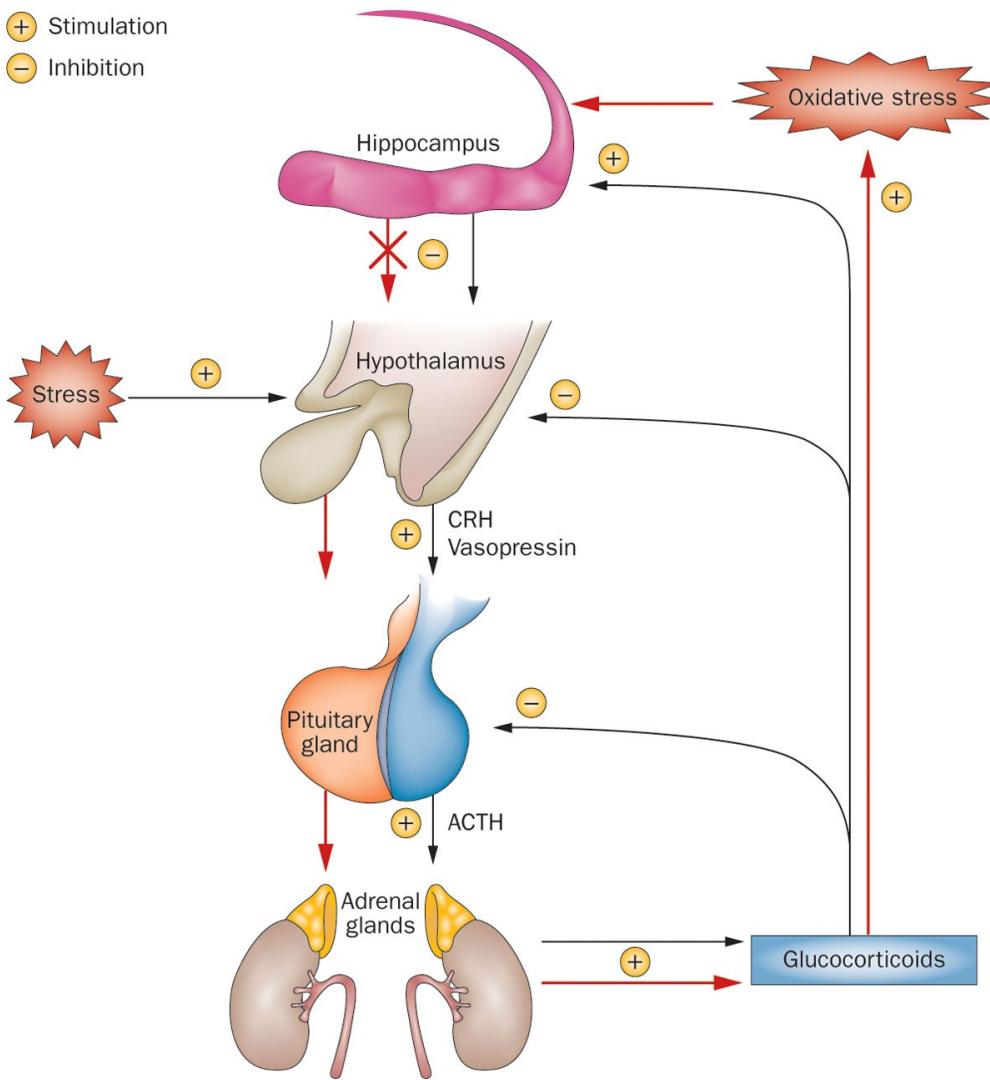


# Endocrine System



<http://www.hormone.org/hormones-and-health/the-endocrine-system>

# Schematic diagram showing the potential role of oxidative stress in the progressive dysfunction of the hypothalamic–pituitary–adrenal (HPA) axis observed with ageing



# Autonomic Nervous System

- Stressor → Adrenal glands secrete adrenaline
- Sympathetic vs. Parasympathetic
- Sympathetic Physiological response
  - Heart rate increases; Muscles tense; Blood pressure rises; Pupils dilate; Breathing increases; Perspiration ...

# Endocrine System

Stressor → Hypothalamus → CRF released → Pituitary gland → ACTH → Bloodstream → Adrenal glands → Produce adrenaline and glucocorticoids → Physiological response

# The “Response” Flow Chart

- Life
- A Perceived threat
- Hippocampus (Alarm)
  - Alarm, you will have an emotion
- Limbic System (Seat of Emotions)
  - Emotional response will lead to a physical one
- Reticular Activating System
  - Connection between mind/body
- Hypothalamus (Supervisor)
  - Turns on Endocrine and Autonomic systems

# The “Response” Flow Chart (cont.)

- Endocrine System (Hormones)
  - Vasopressin-helps move blood through by increasing water in the blood
  - Cortisol-increases blood glucose for battle. Also suppressed T-Cells, more likely to become ill.
- Autonomic Nervous System
  - Sympathetic System- “ON” switch, increases energy level
  - Parasympathetic System- “OFF” switch, decreases energy level

# Endocrine System

- **Vasopressin** (pituitary gland)
  - Increases blood permeability to water
  - Increases blood volume
  - Increases blood pressure
- **Cortisol-** primary glucocorticoid (adrenal gland)
  - Increases blood sugar/ gluconeogenesis (mobilizes free fatty acids)
  - Decreases T-lymphocyte production
- **Thyroxin**(hypothalamus)
  - Accelerates heart rate
  - Increases gastrointestinal motility
  - Increases anxiety
  - Increases blood pressure



# Focus on Principles

## Habituation helps & harms ...

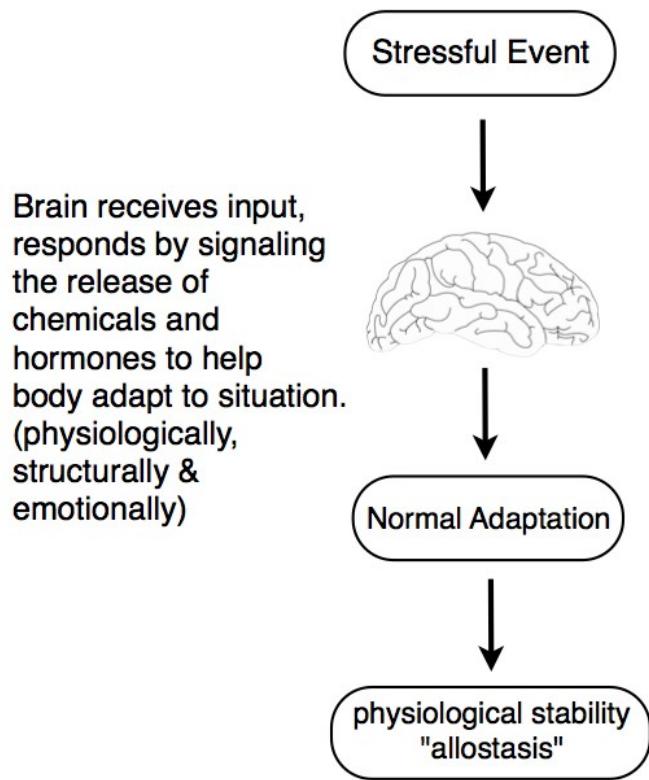


**Focus, concentrate, pay attention, be aware .  
& stay calm, healthy and alive.**

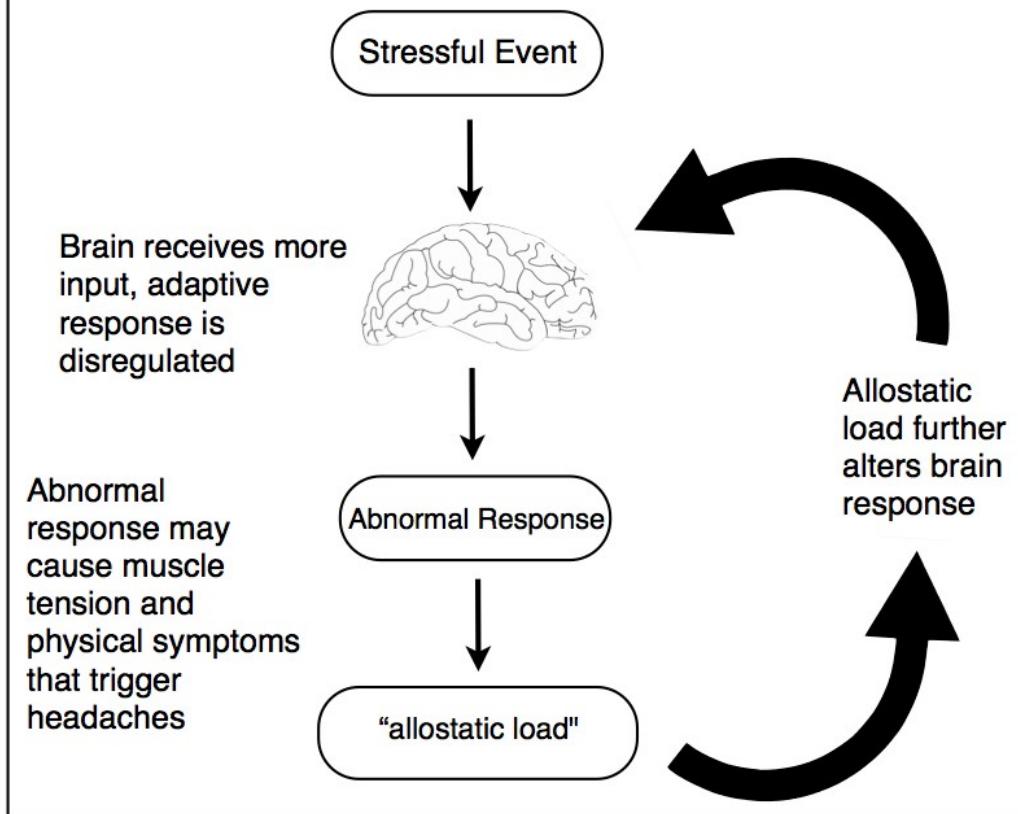


# Homeostasis vs. Allostasis

## Normal Stress



## Severe or Too Frequent of Stress



# **The brain is playing a game, let's play together**

**Brain Tricking**

**Blind spot**

**Through the palm**

**Hand – Leg / Eye-Tongue**

**Left-Right, Up-Down**

**Subtraction on One Leg** (deduct 7 from 1000)





①



②



③



# Focus on Principles

If you do something,

**FOCUS**

**&**

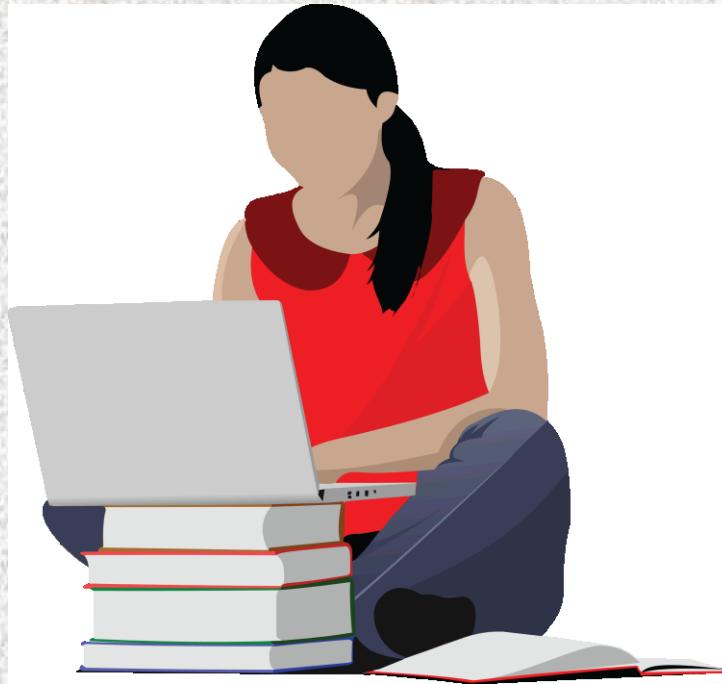
**DO IT FOR 100%!**





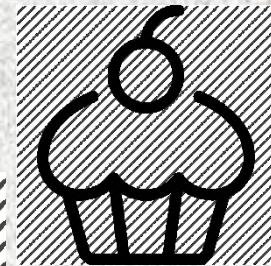
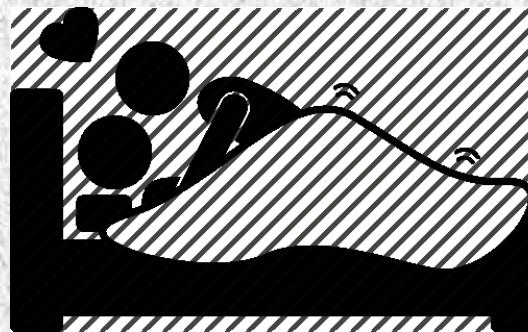
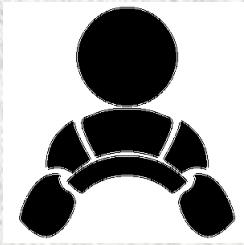
# FOCUS & DO IT FOR 100%!

## FOCUS vs. DISTRACTORS





# FOCUS & DO IT FOR 100%!





# Focus on Principles

**Neuroplasticity works for us ...**

**... for the whole life.**

**Use it, or lose it!**



# Dealing with stress

basic information, sources, links

short version

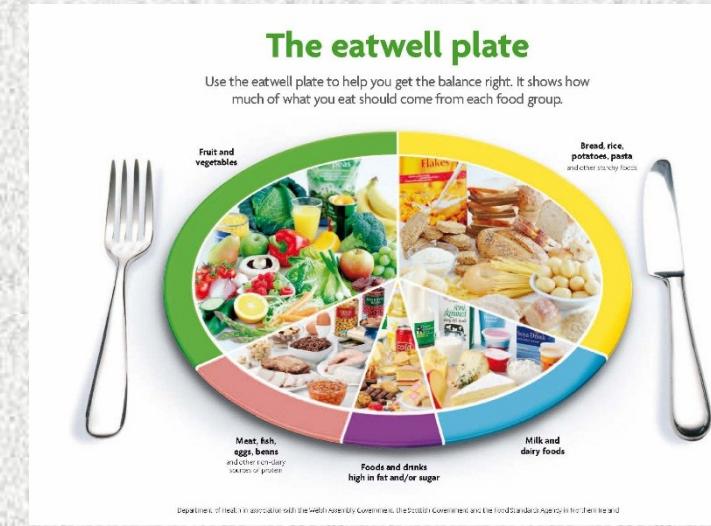


What kinds of everyday activities  
are the most important **to feel fine**  
and stay **healthy**?

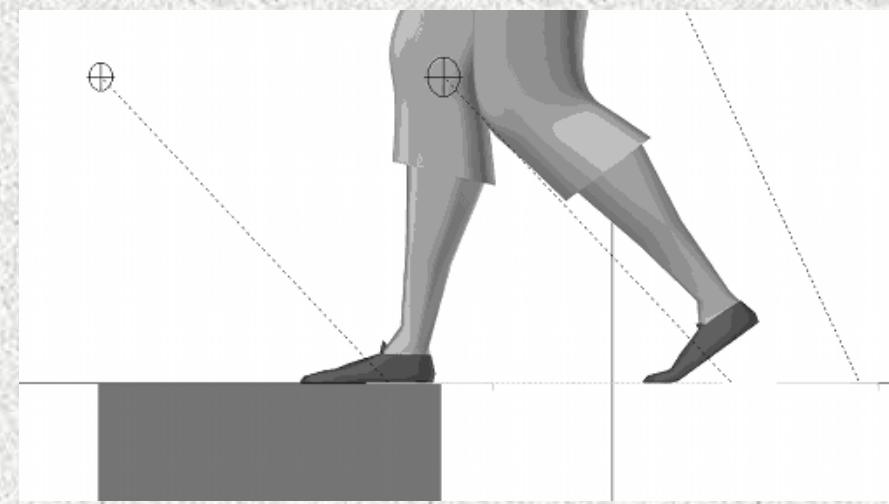
What kinds of everyday activities  
are **necessary to stay alive**?



# Just a few „things“



## in good order, regularity, regime





# Focus on Principles

How to deal with the stress in everyday life?

**What is the most important**  
to stay healthy or for recovery?

# DrEaMS





## HOMEOSTASIS & PREVENTION

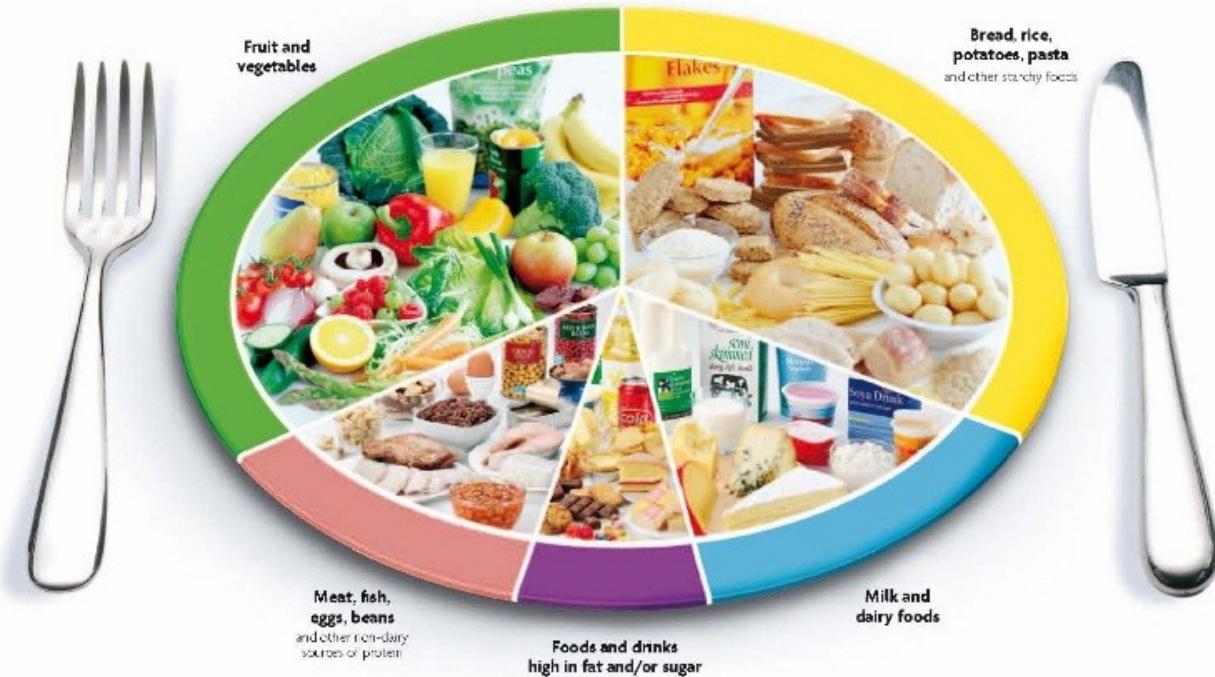


individual daily need  
best is water  
(non carbonated, non sparkling)  
mostly between  
2 & 3,5 liters per a day

Verification:  
**pure/clear/transparent colour of urine  
in the afternoon (2-5 p.m.)**

# The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



Department of Health in association with the Welsh Assembly Government, the Scottish Government and the Food Standards Agency in Northern Ireland

# HOMEOSTASIS & PREVENTION

## The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.



**A varied diet with plenty of nutrients:  
carbohydrates, proteins, fats;  
vitamins, minerals and enzymes;  
roughage/fiber**

## semínka a ořechy / seeds & nuts



Brown flax see



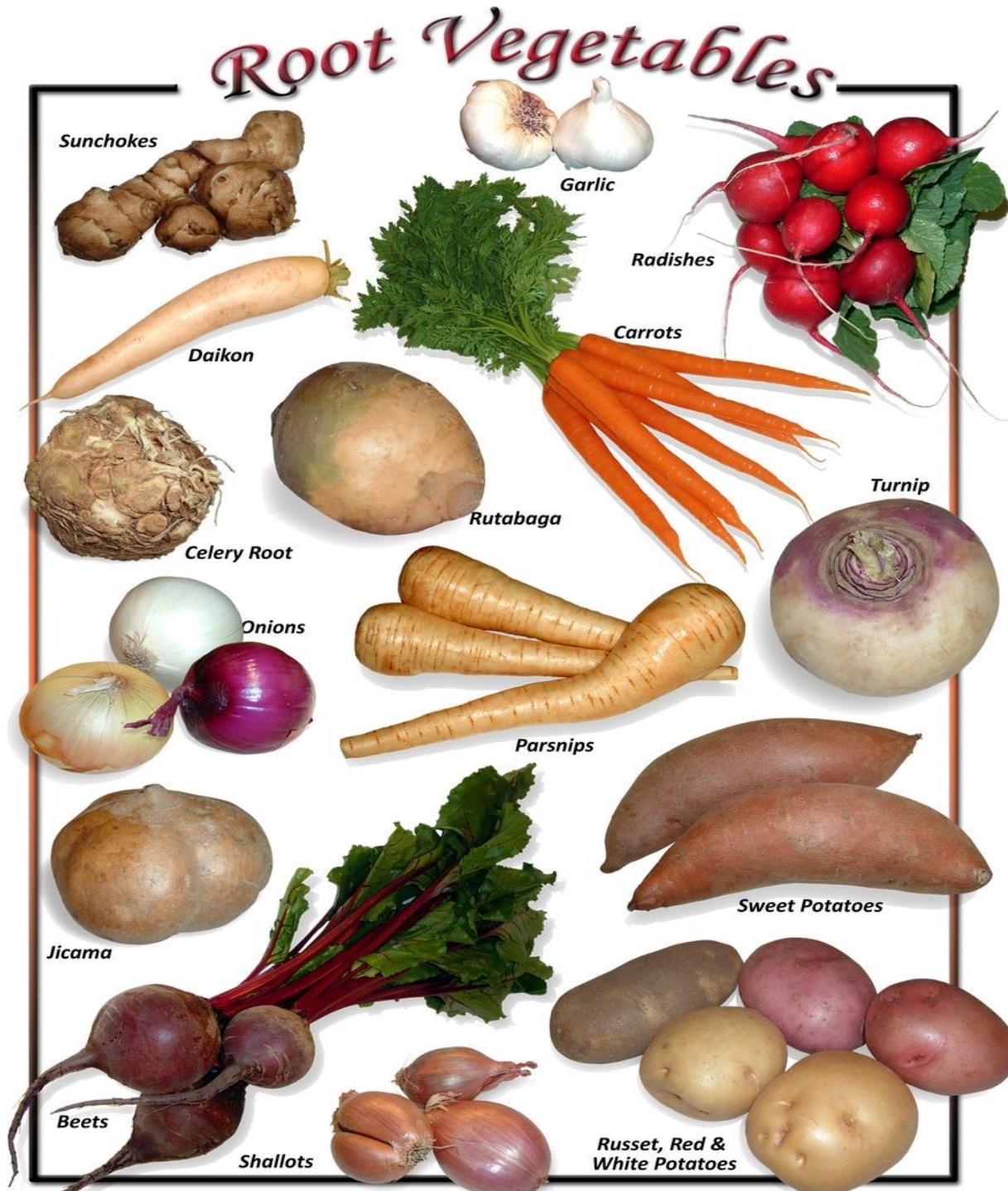
Pistachios



Hazelnuts



Golden flax see



Light Red Bean



Mix Bean



Mung Bean



Soy Bean

## Iuštění / legumes

# MICROBIOME

Rob Knight:

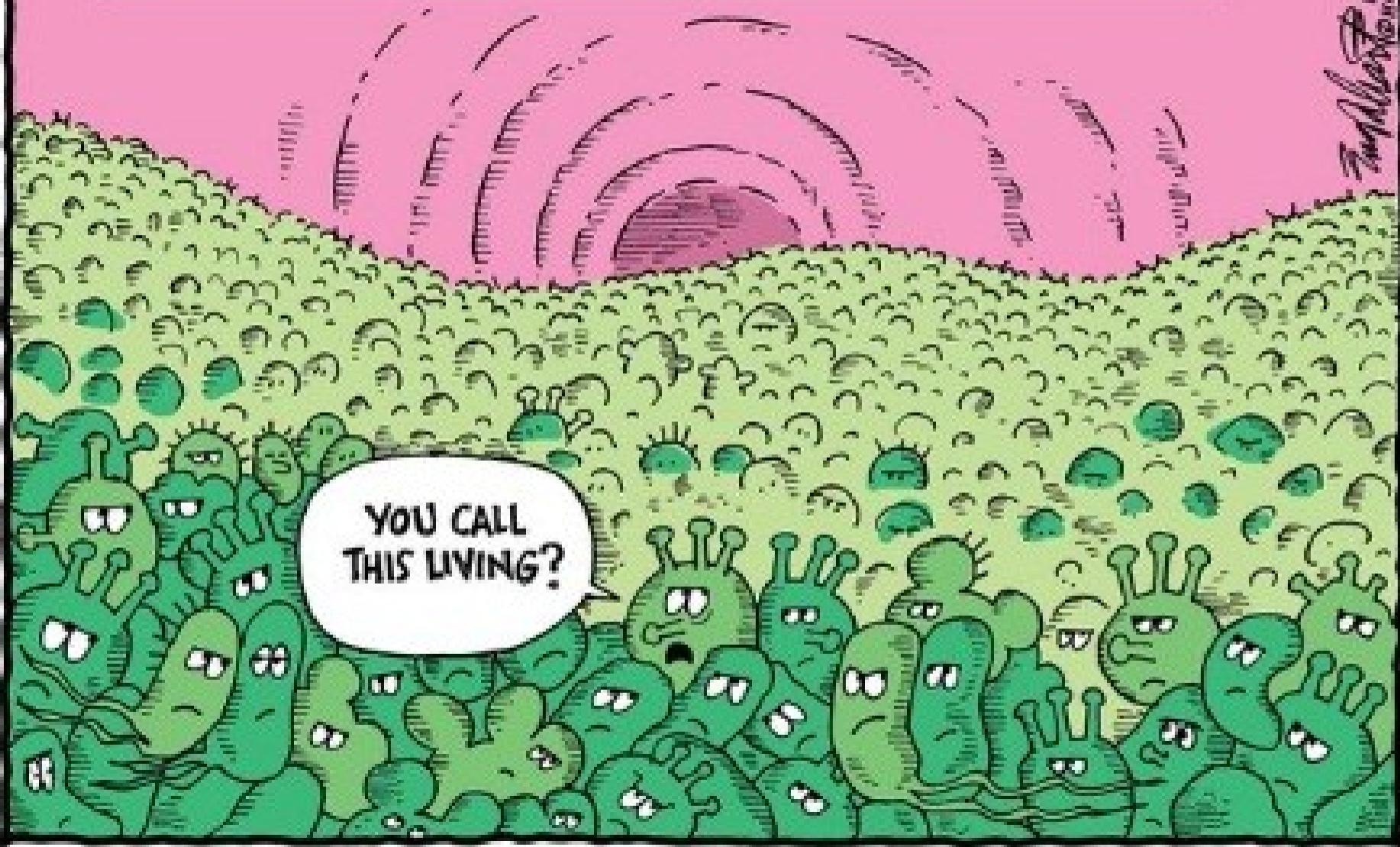
**How our microbes make us who we are**

[www.ted.com/talks/rob\\_knight\\_how\\_our\\_microbes\\_make\\_us\\_who\\_we\\_are](http://www.ted.com/talks/rob_knight_how_our_microbes_make_us_who_we_are)

**TED** Ideas worth  
spreading



THE HUMAN MICROBIOME PROJECT SAYS THE HUMAN BODY HAS 100 TRILLION MICROSCOPIC LIFE FORMS LIVING IN IT.





[amandapair.com](http://amandapair.com)

individual daily need

mostly **7,5 +/- 1,5** hours per a day



amandapair.com

Verification:

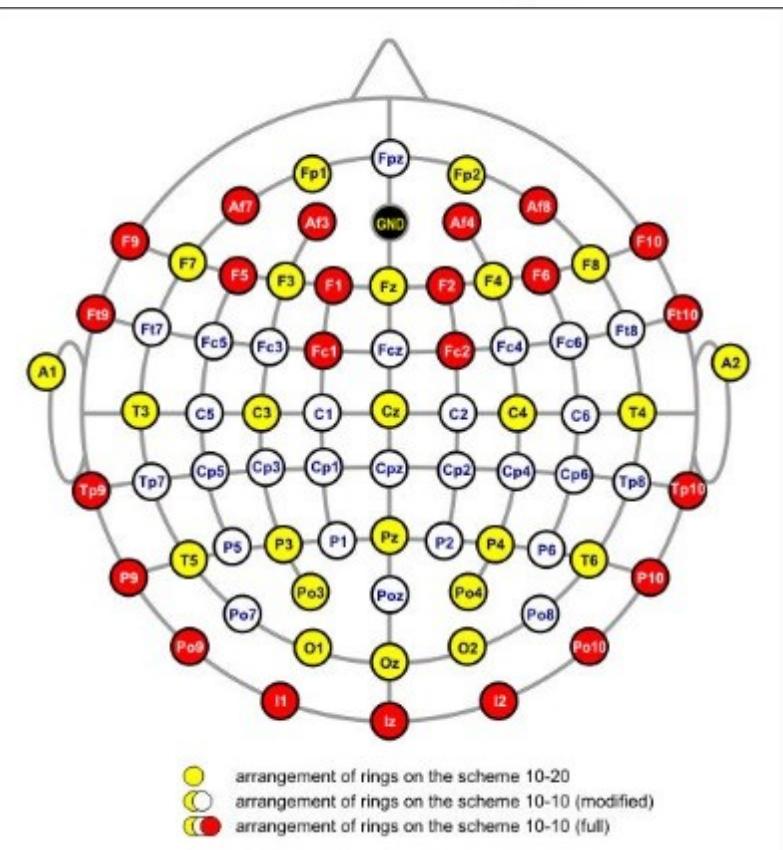
**re/fresh/ed feeling  
soon after awakening  
(best more than 3-5 hours)**

EEG

Awake

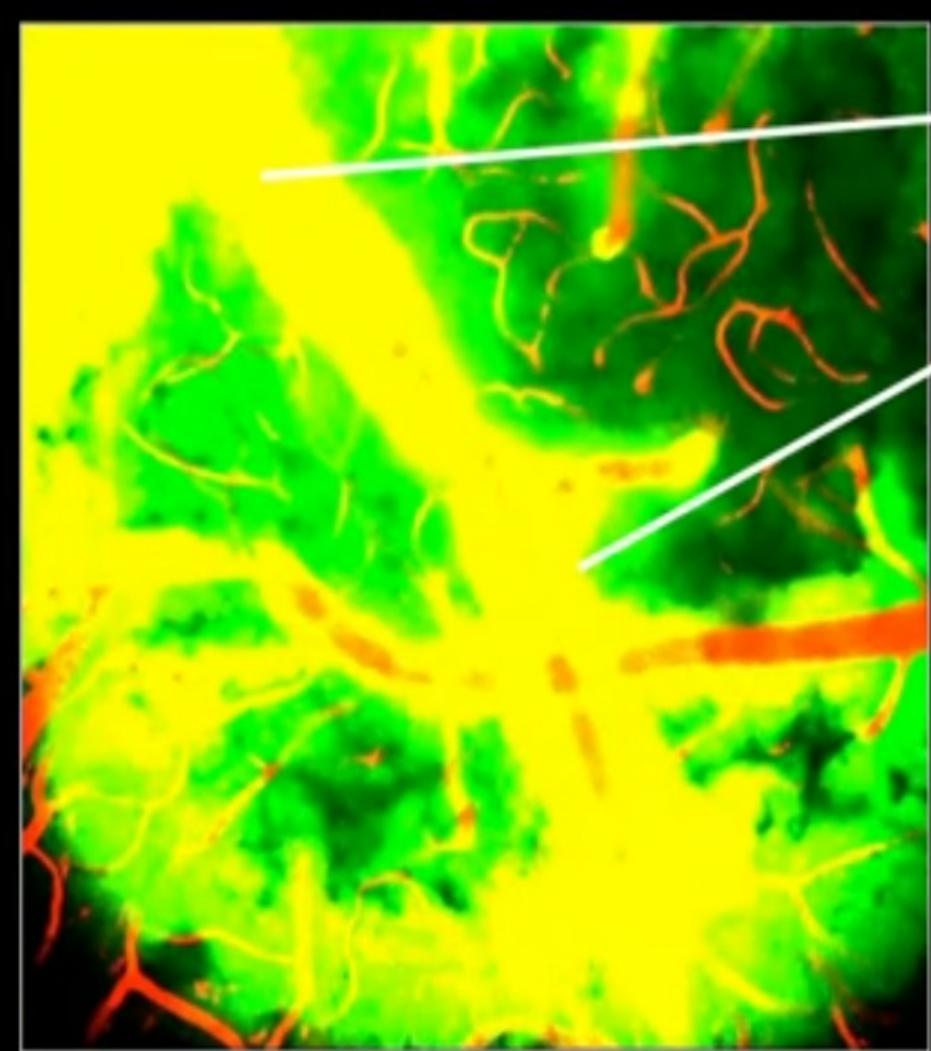


Sleep stage 1



REM





Blood Vessels

Cerebrospinal Fluid  
(CSF)

... and inside the brain

Imaging at the brain surface



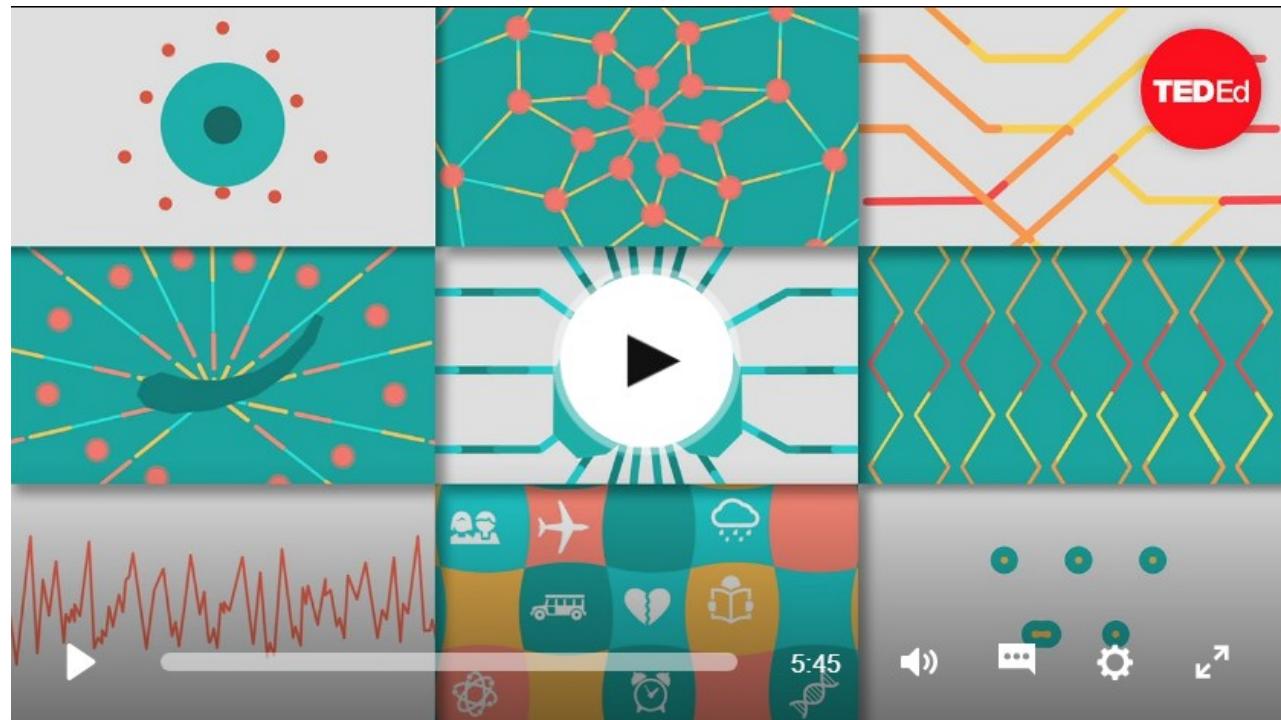
<http://psychologon.cz/component/content/article/20-psychologon-recherche/425-jeff-iliff-o-duvod-vic-proc-se-dobre-vyspat>

[http://www.ted.com/talks/jeff\\_iliff\\_one\\_more\\_reason\\_to\\_get\\_a\\_good\\_night\\_s\\_sleep](http://www.ted.com/talks/jeff_iliff_one_more_reason_to_get_a_good_night_s_sleep)

Shai Marcu

|

## TED-Ed: The benefits of a good night's sleep



**TED** Ideas worth  
spreading

[https://www.ted.com/talks/shai\\_marcu\\_the\\_benefits\\_of\\_a\\_good\\_night\\_s\\_sleep](https://www.ted.com/talks/shai_marcu_the_benefits_of_a_good_night_s_sleep)

# Video inspiration

The image shows a screenshot of a TED talk video player. In the top left corner, the TED logo and the tagline "Ideas worth spreading" are visible. The top right features navigation links for "WATCH", "DISCOVER", and "ATTEND". On the left side of the video frame, a man with glasses and a blue shirt is speaking. On the right side, there is a thumbnail image of many airplanes in flight. Overlaid on the video frame are several social media sharing icons: "Share", "Add to list", "Like", and "Recommend". At the bottom of the video frame, the text "Mathias Basner | TEDMED 2018" is displayed, followed by the title "Why noise is bad for your health — and what you can do about it". A play button icon is centered in the middle of the video frame. At the very bottom, there is a control bar with a play button, a progress bar, volume and subtitle controls, and other video settings.



**Mathias Basner**

**Why noise is bad for your health — and what you can do about it**

# Circadian rhythm - Morning-Evening Types

Morningness and Eveningness („lark“ and „owl“) describe a person's individual circadian profile.

- Morning people usually prefer to rise between 5 a.m. and 7 a.m., and retire between 9 p.m. and 11 p.m.
- Evening people tend to prefer both a later wake up (9 a.m. to 11 a.m.) and a later bed time (11 p.m. to 3 a.m.).
- Morning people also tend to be more rigid in their circadian rhythms.
- Evening people find adjustment to new schedules somewhat easier.
- Most people fall somewhere between these two types.



Cornell University

Sidelights:

# Circadian rhythm

- Circadian rhythms are **physical, mental and behavioral changes that follow a roughly 24-hour cycle**, responding primarily to light and darkness in an organism's environment. They are found in most living things, including animals, plants and many tiny microbes. The study of circadian rhythms is called chronobiology.



The classic phase **markers** for measuring the timing of a mammal's circadian rhythm are:



- melatonin secretion by the pineal gland
- core body temperature minimum, and
- plasma level of cortisol

# Circadian rhythm vs. Technology

## Set your display for night time in Windows 10

Your display emits blue light—the kind of light you see during the day—which can keep you up at night. To help you get to sleep, turn on the night light and your display will show warmer colors at night that are easier on your eyes. The night light isn't available if your device uses certain drivers (DisplayLink or Basic Display), or if it uses HDR. To schedule night light so it turns on automatically:

1. Select Start  > Settings  > System > Display > Night light settings. If your night light toggle above the link is grayed out, you may need to update your display driver. See [Update drivers in Windows 10](#).
2. Under Schedule, toggle Schedule night light to On. Then, either select Sunset to sunrise, or select Set hours and enter custom times for the night light to turn on and off.

### Night light settings

Screens emit blue light, which can keep you up at night. Night light displays warmer colors to help you sleep.

Off until sunset (5:55 PM)

[Turn on now](#)

Color temperature at night



### Schedule

Schedule night light

On

Sunset to sunrise (5:55 PM — 6:47 AM)

Set hours

### Night light settings

Screens emit blue light, which can keep you up at night. Night light displays warmer colors to help you sleep.

On until sunrise (6:47 AM)

[Turn off now](#)

Color temperature at night



### Schedule

Schedule night light

On

Sunset to sunrise (5:55 PM — 6:47 AM)

Set hours

[Open Night light settings](#)

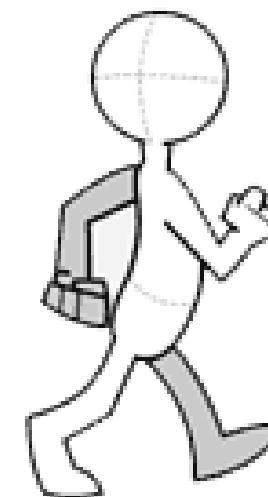


## **HOMEOSTASIS & PREVENTION**

**to „move“, exercise, walk  
at least twice per a week (between 25 & 45 minutes)  
in „stayer“ way (long durance in low intensity)**

**Verification, body reaction:  
(best more than 25 minutes)**

**miled sweating  
increased heart rate  
inability to speak fluently**

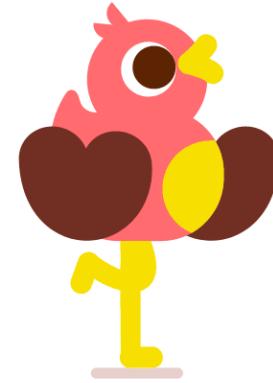


to „move“, exercise, walk

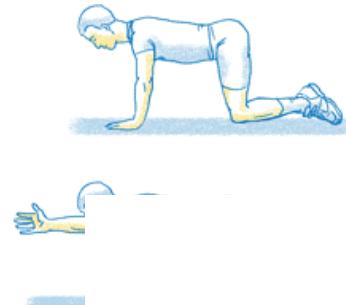


increased heart rate  
inability to speak fluently

enjoy



## HOMEOSTASIS & PREVENTION



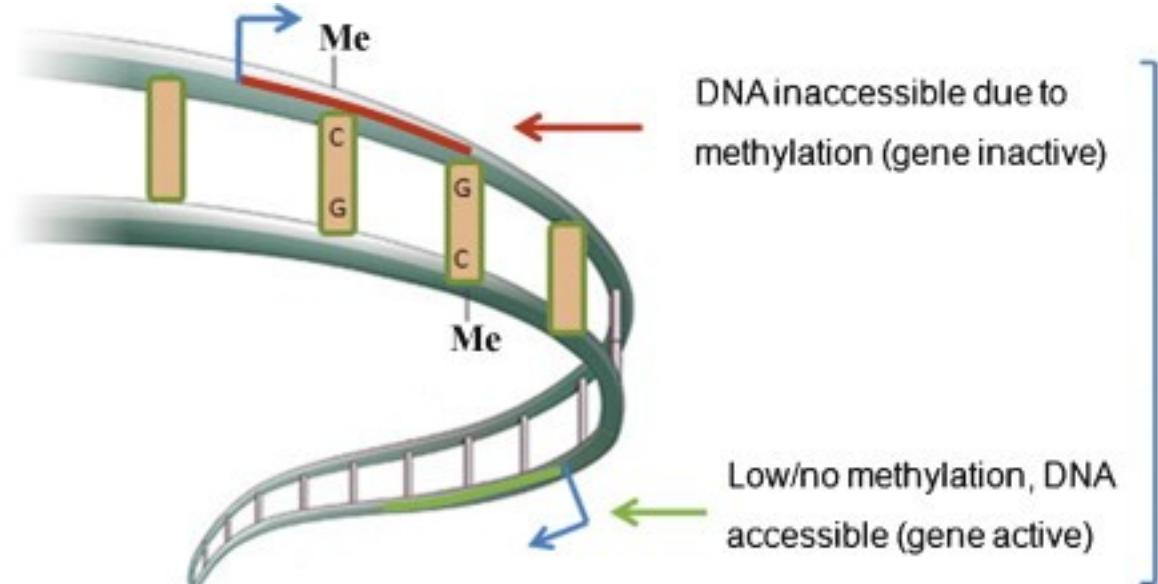
## BALANCE & ISOMETRIC EXERCISE

# Video inspiration



**Wendy Suzuki**

**The brain-changing benefits of exercise**

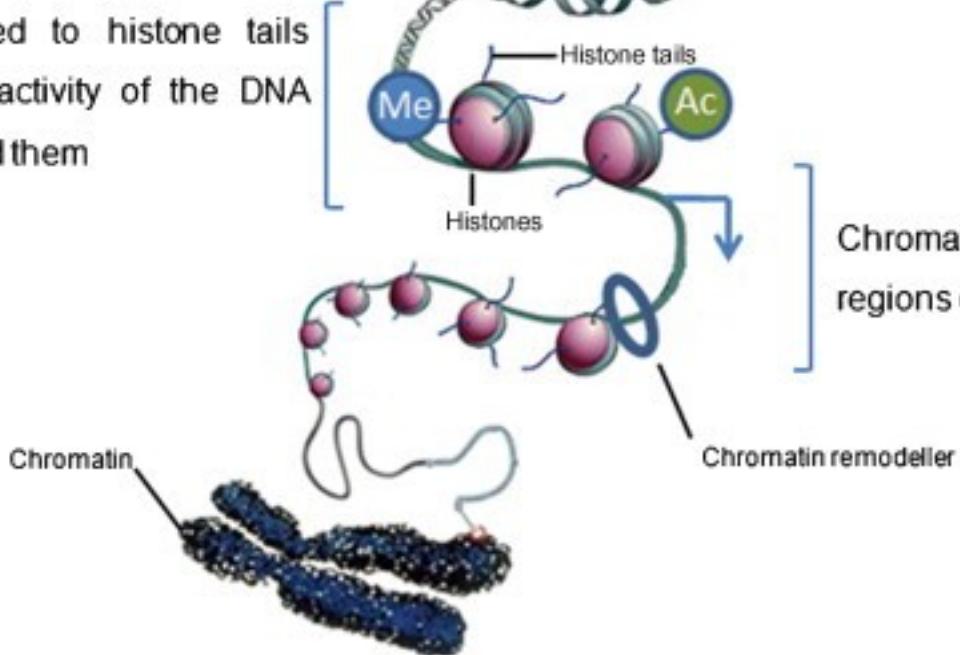


1

Methyl groups attached to the CpG islands regulate gene activity

2

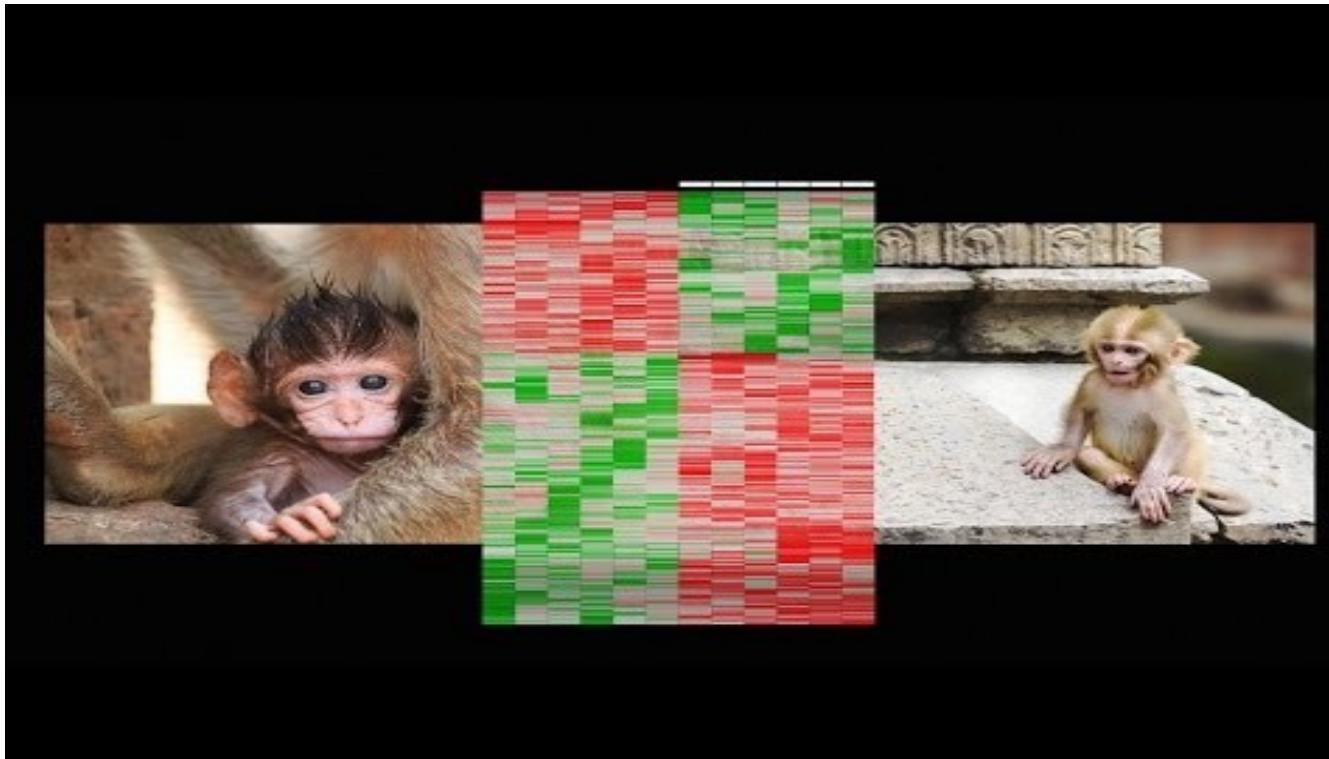
Groups attached to histone tails determine the activity of the DNA wrapped around them



3

Chromatin remodelling makes certain regions of DNA available for transcription

# Video inspiration



**Moshe Szyfat**

**How early life experience is written into DNA**



# Focus on Principles

# DrEaMS

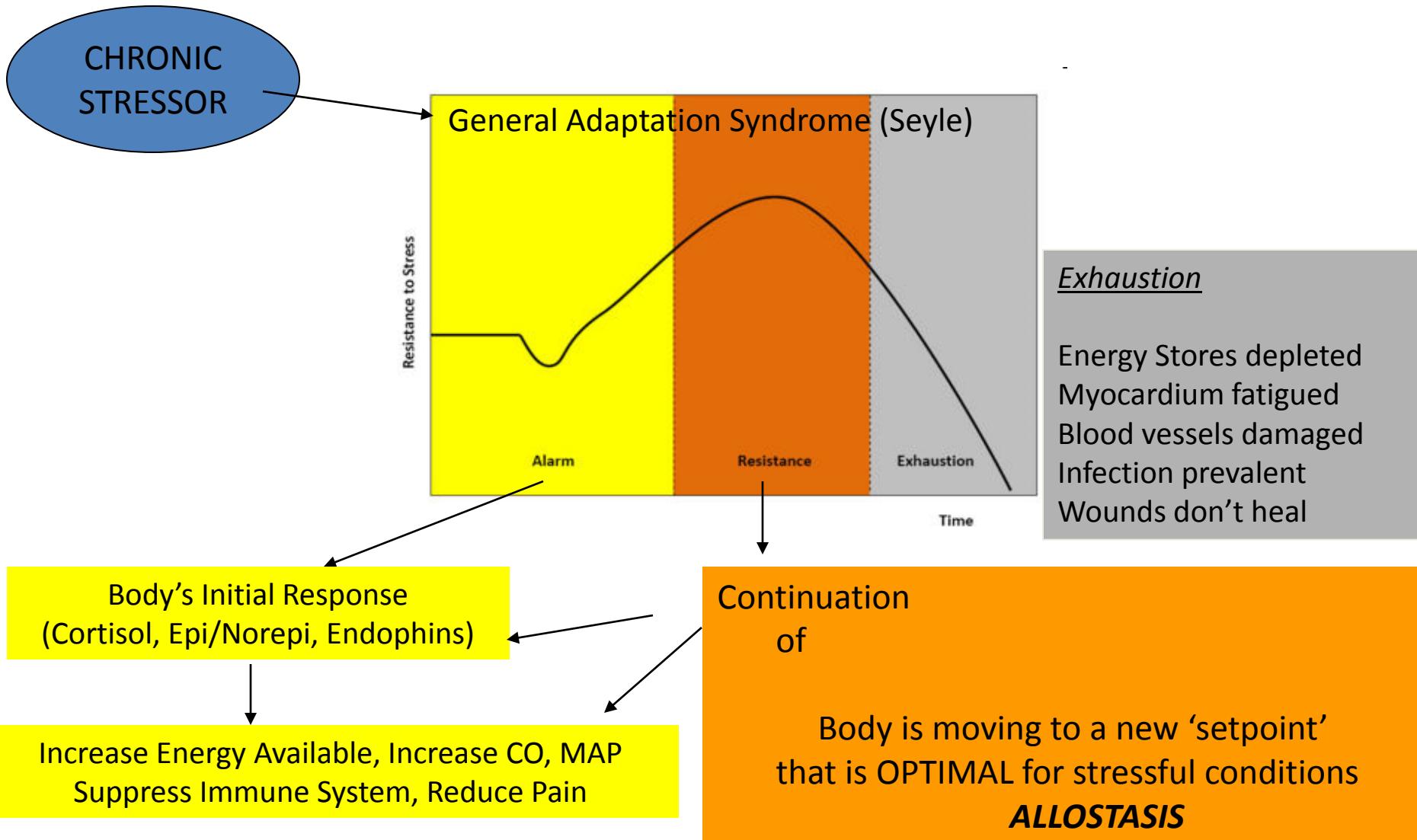


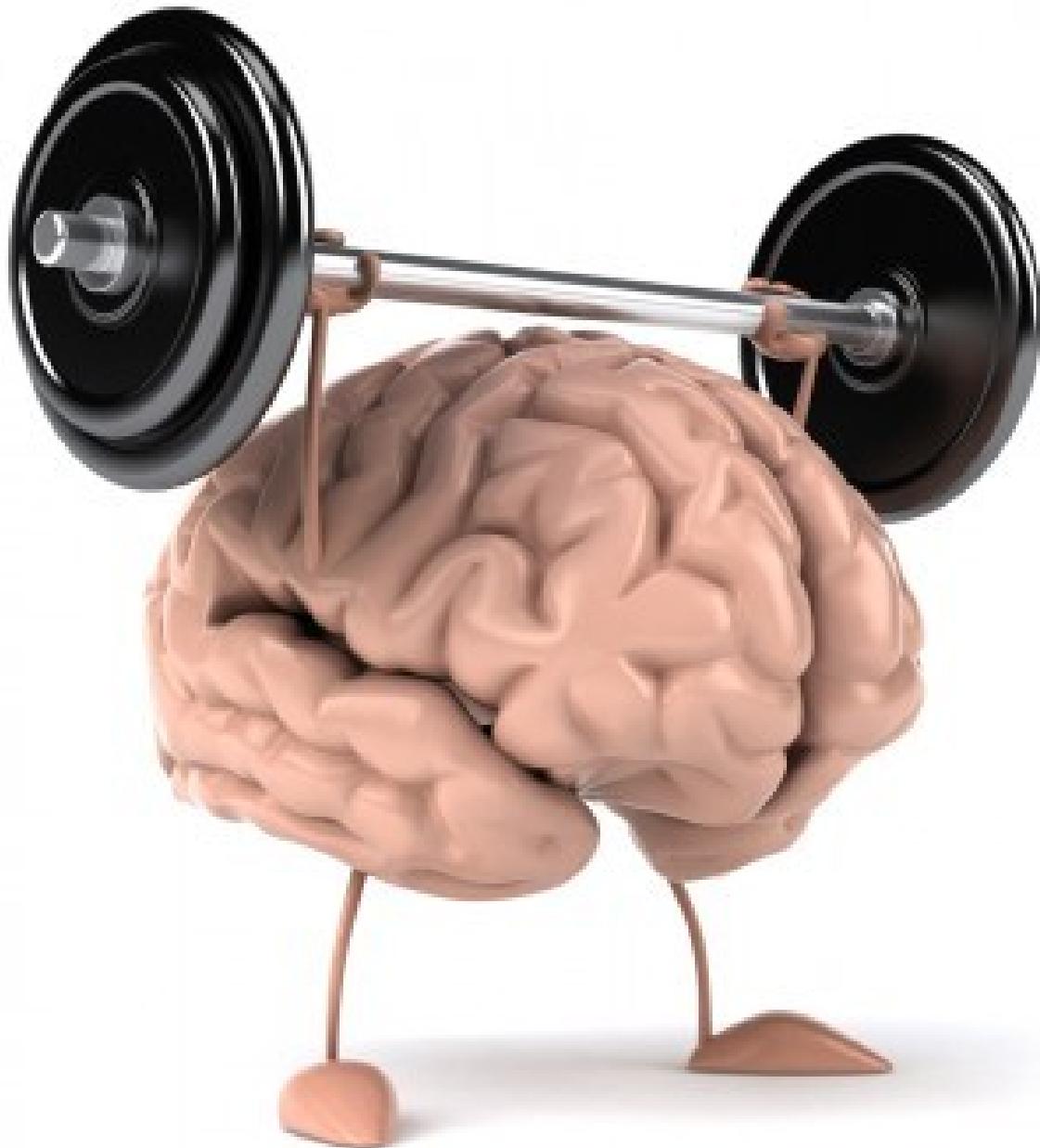


Have you ever heard about  
**HOMEOSTASIS?**

And what about  
**ALLOSTASIS?**

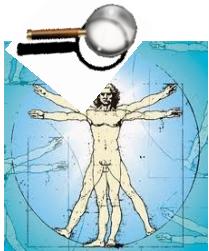
# Chronic Stress Response



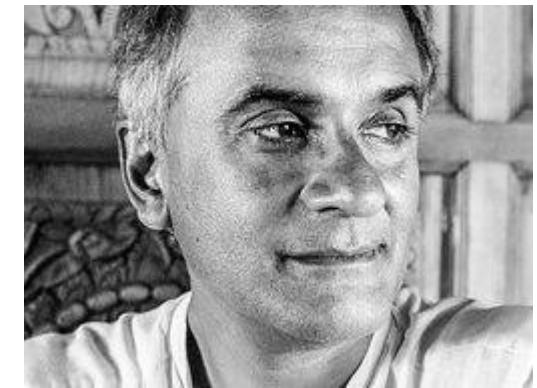


# Introduction & Practical Use of Relaxation Techniques, Self-Experience

basic information, sources, links



# Video inspirace



Pico Iyer

The Art of Stillness

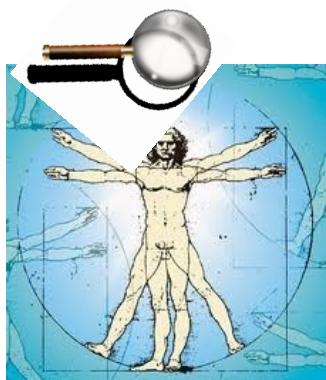
# Video inspiration



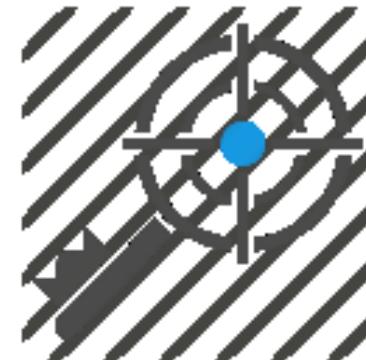
**Amishi Jha**

**How to tame your wandering mind**

# TERMINOLOGY

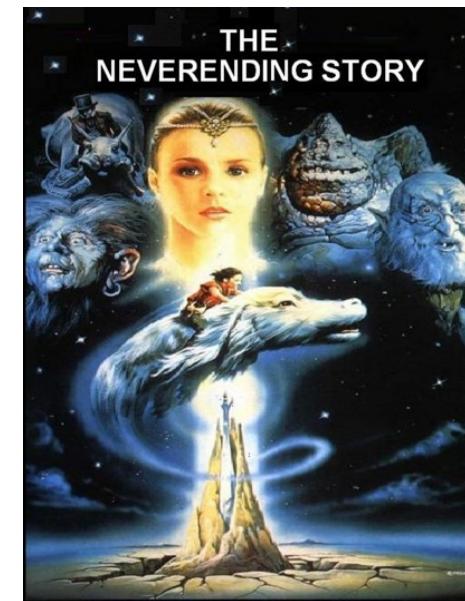


**CONCENTRATION**



**RELAXATION**

**IMAGINATION**



**MEDITATION**



# Focus on Principles

Reasons for practicing relaxation?

## Arousal&Energy

Refreshment

Recovery

Rest



## Attention&Focus

Imagination

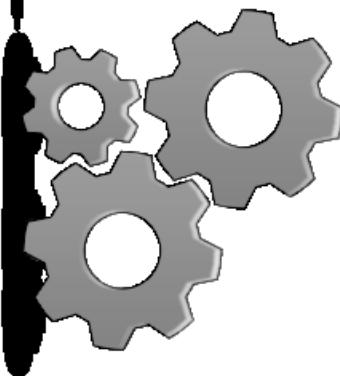
Innovation

Inspiration

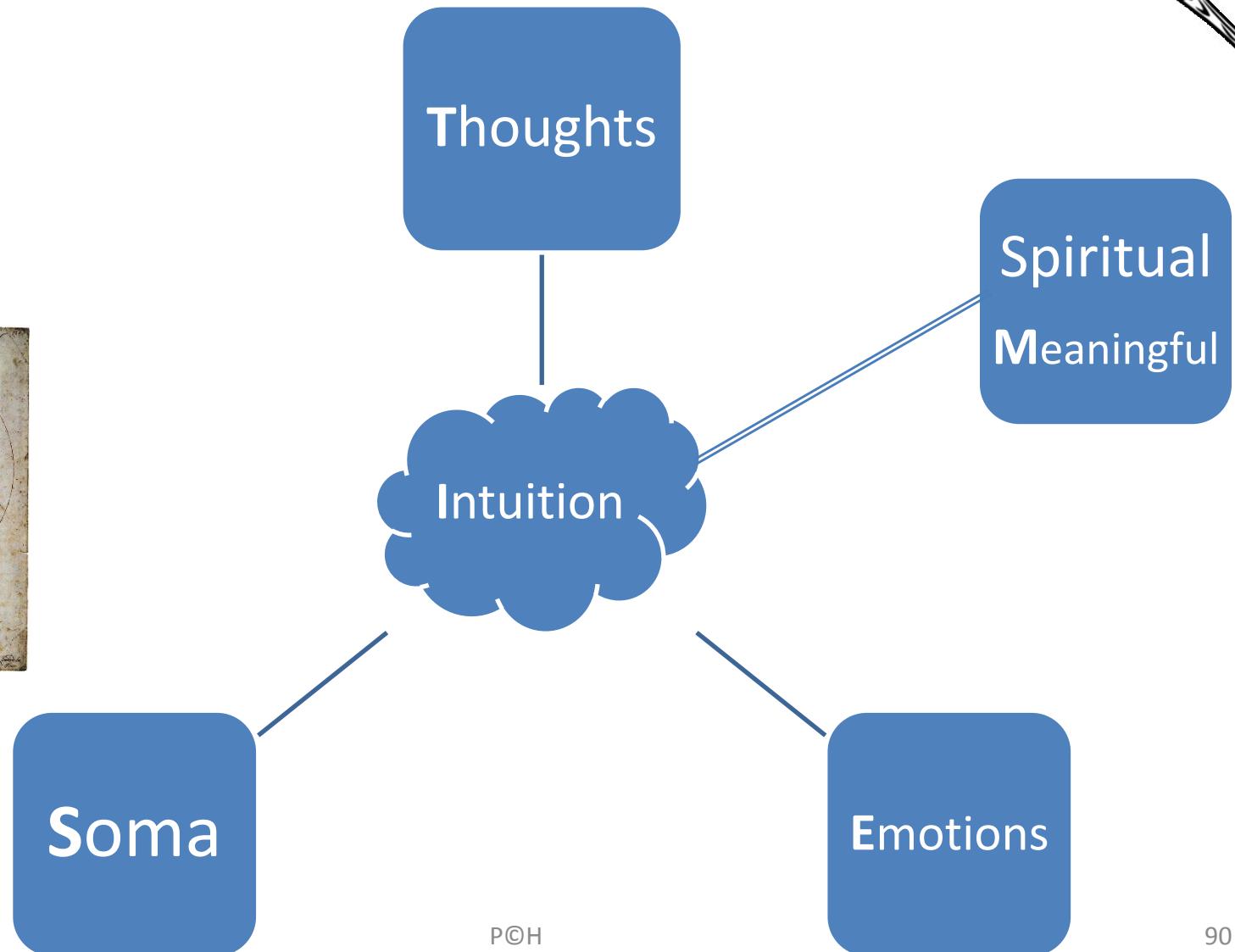
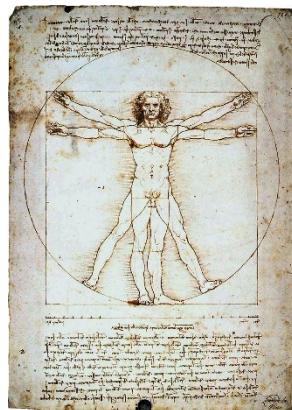
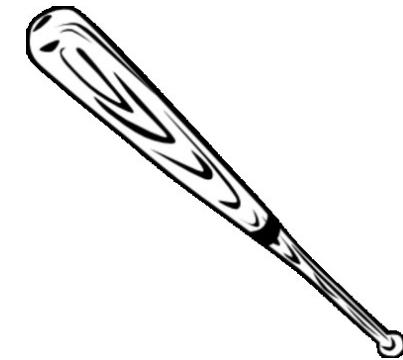


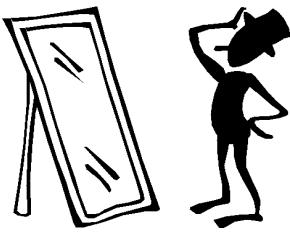
## Feedback: S-E-T





# S-E-T / I-S / B-E-S-T





# Simple questions to improve self-reflection:

**WHAT I** (REALLY) **WANT** (JUST NOW) **?**

**WHAT I** (REALLY) **NEED** (JUST NOW) **?**

# CONCENTRATION



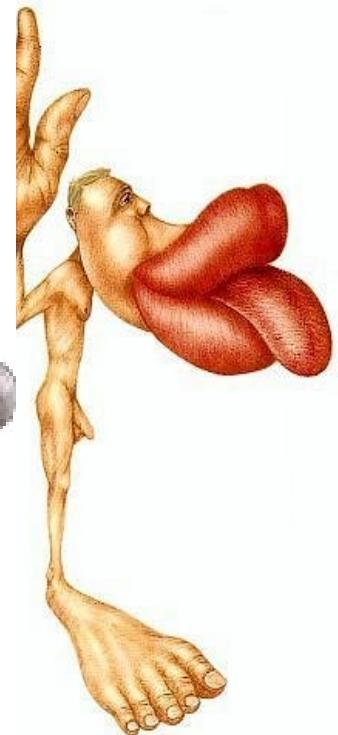


What kinds of senses do we have?

Which one is the most important to feel safe?

# Conscious relaxation/concentration

5  
Senses



# Sight vs. Touching&Hearing

Daniel Kish:

## How I use sonar to navigate the world

[https://www.ted.com/talks/daniel\\_kish\\_how\\_i\\_use\\_sonar\\_to\\_navigate\\_the\\_world](https://www.ted.com/talks/daniel_kish_how_i_use_sonar_to_navigate_the_world)

**TED** Ideas worth spreading



# Conscious relaxation/concentration

## 5 S technique

5 senses

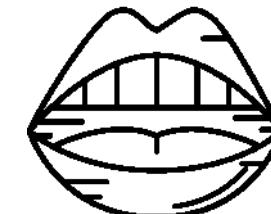
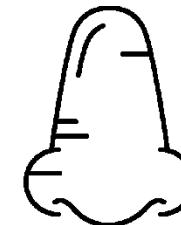
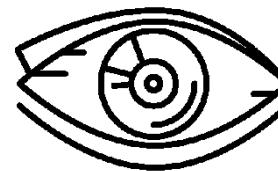
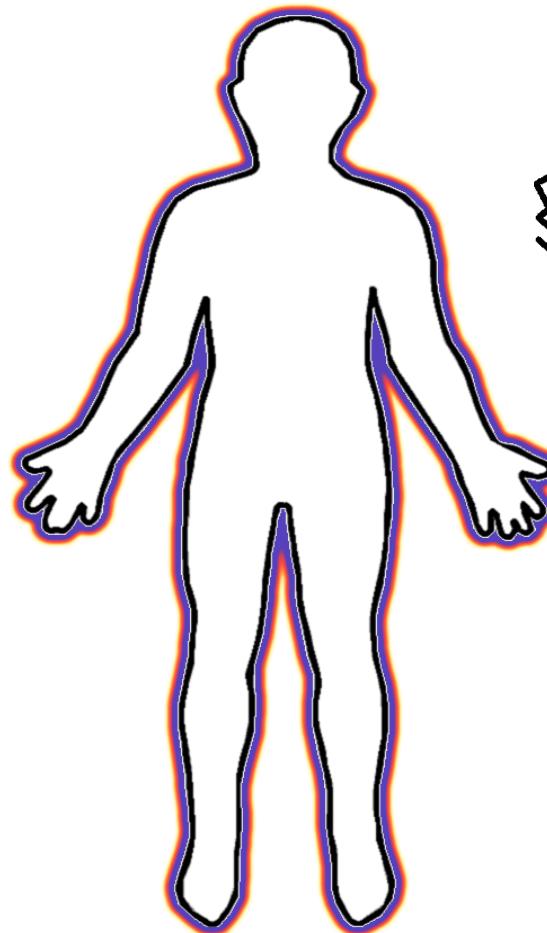
**BODY** (sense of Touch)

**MOUTH** (sense of Taste)

**NOSE** (sense of Smell)

**EYES** (Sight)

**EARs** (Hearing)



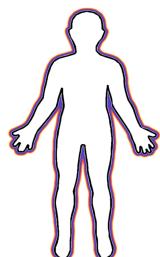
# Conscious relaxation/concentration

## 5 S technique

All I need is working,  
I can enjoy the lesson!

to **GET TOGETHER** (integrate)

**2 channels:**



**FEELINGS & WORDS**

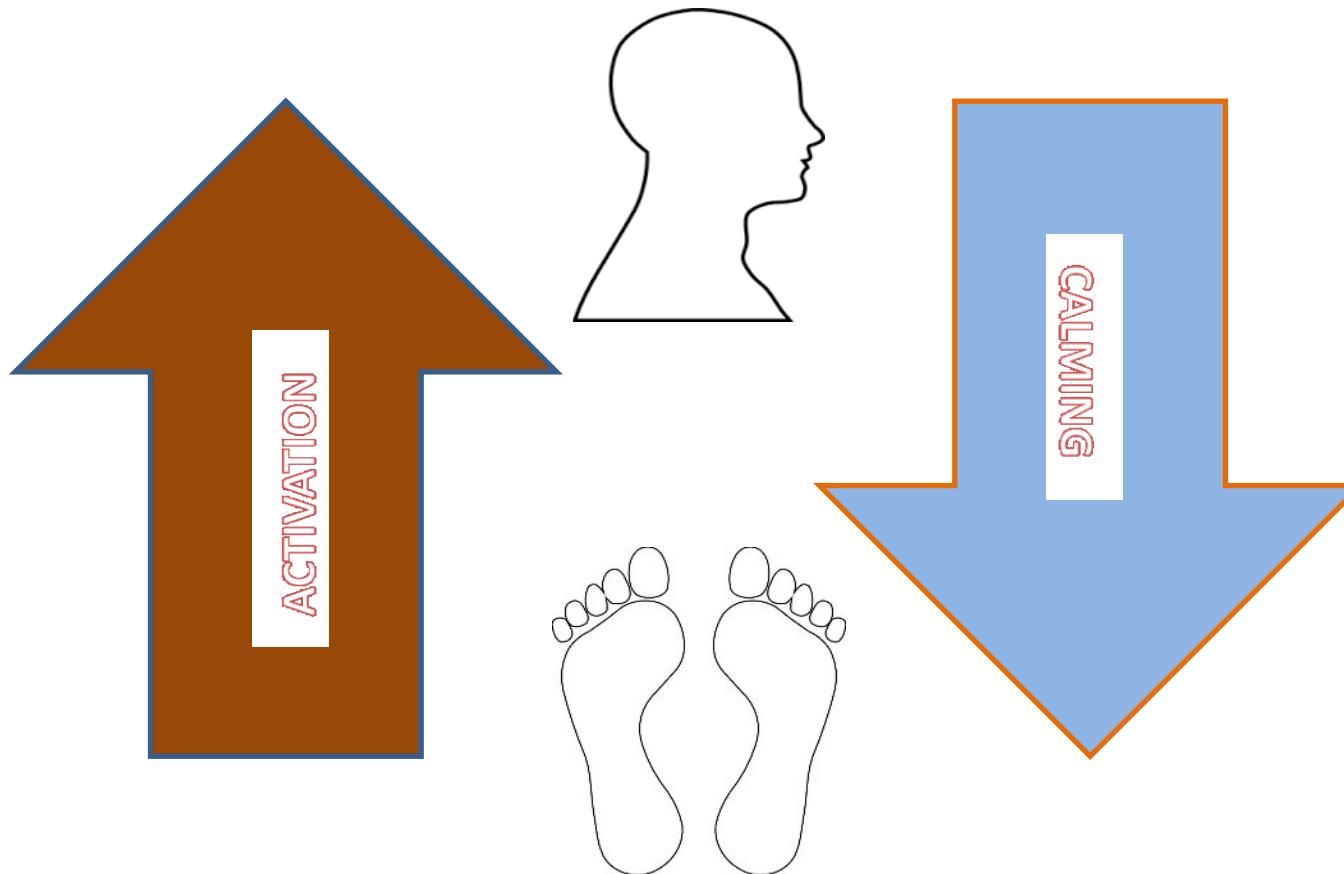
sense & ratio  
color & shape

„That's fine, my sense  
of touch is working.“

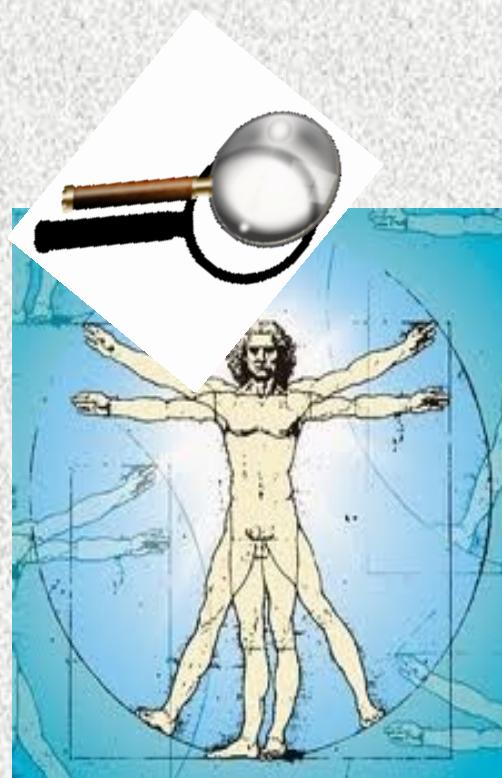
# Conscious relaxation/concentration

## 5 S technique

5 senses



# RELAXATION



# Jacobson's Progressive Muscular Relaxation



WIKIPEDIA  
The Free Encyclopedia



**Tension** – perfusion, muscle activation

**10 seconds**

**vs.**

**10 seconds**

**Releasing** - perception of the relaxation effect



**Attention is paid to the contrast**

**between**

**tension and relaxation**



P©H



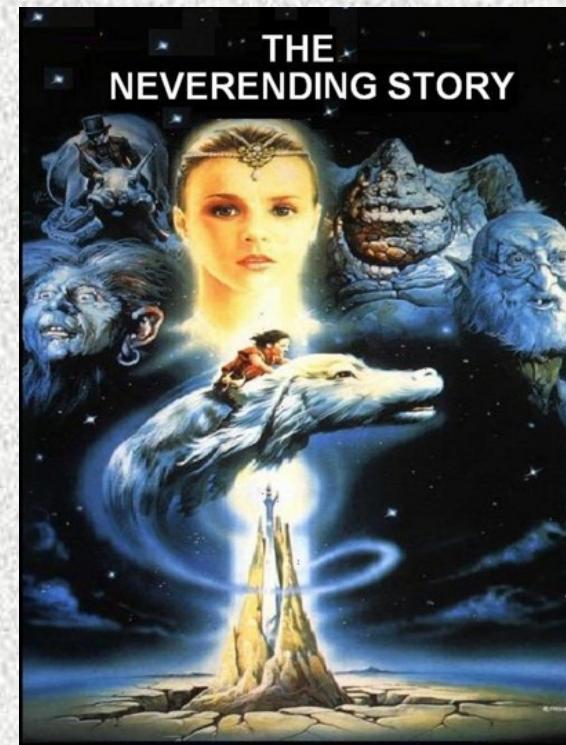
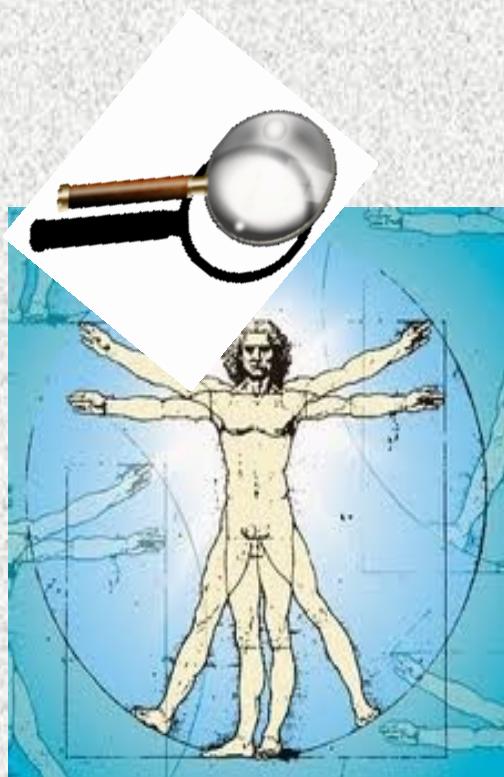
# Progressive muscle relaxation technique



Feel the tension as you hold that position.

[www.youtube.com/watch?v=xqKljKyElmo](https://www.youtube.com/watch?v=xqKljKyElmo)

# RELAXATION & IMAGINATION



# Conscious relaxation/concentration

## Autogenic training

- **Muscle relaxation**
- **Body warming** from shoulders towards hands and feet
- *Calm breathing*
- *Calm pulse*
- **Warmth in the abdomen**
- Cold forehead



BRITISH AUTOGÉNIE SOCIETY

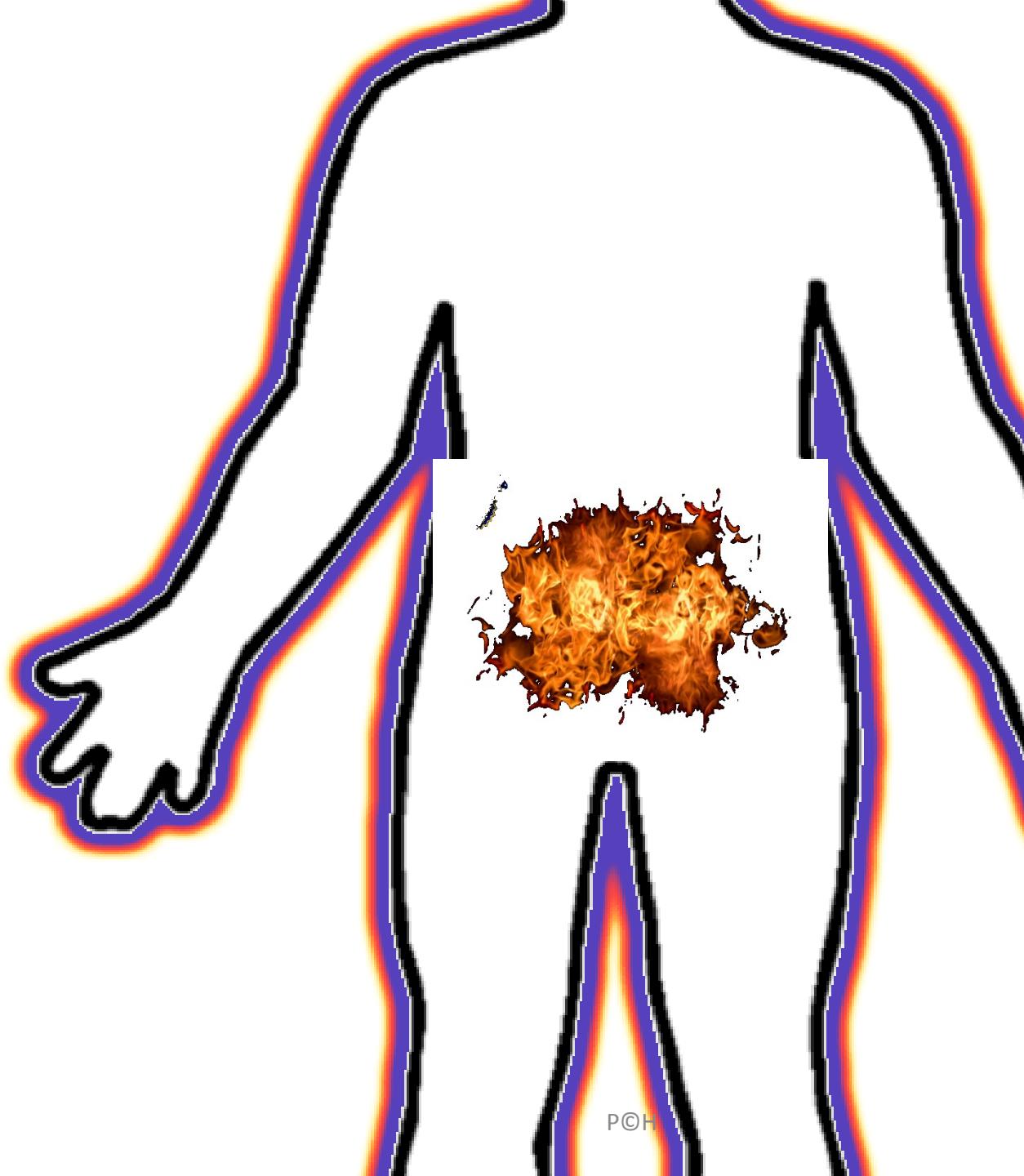


# AT - Muscle relaxation



# AT - Body warming

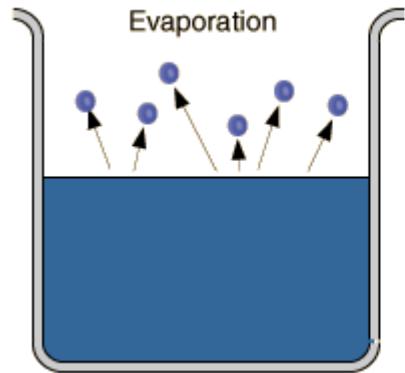




P©H

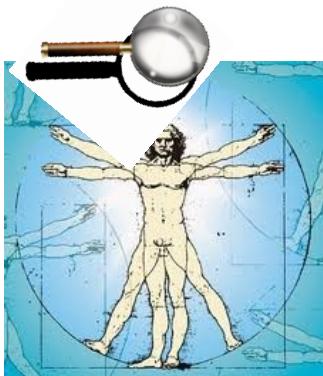


# AT - Cold forehead





# Practical Use of Relaxation Techniques, Self-Improvement

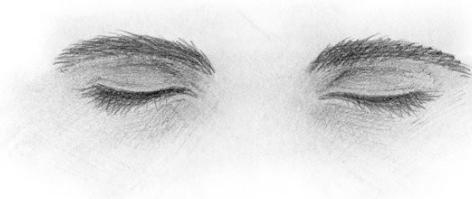
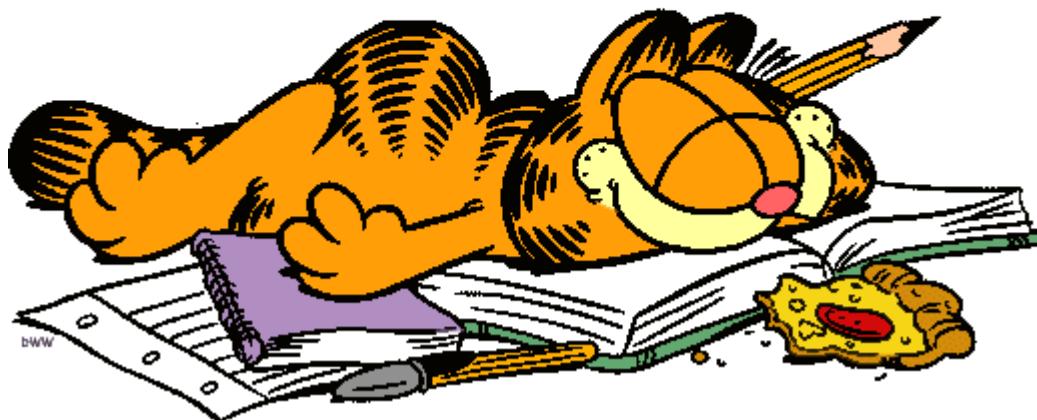


# Take a nap

Just



times per a day.



With closed eyes.



# Focus on Principles

Relaxation? Easy!

**Relaxed Muscles & Comfortable Warmth**

or

**HW**

**Heaviness & Warmth**





# Focus on Principles

Neuroplasticity works for us ...

HOW

# IMAGINE!

How the brain works, talks, thinks

I use it?



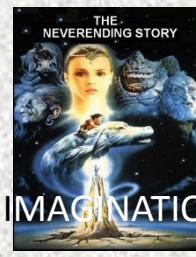
# Why to apply ...



CONCENTRATION



RELAXATION



IMAGINATION



MEDITATION

**sleeping, active refreshment**

**efficiency, adaptation, coping**

(with minimum effort to peak,

**creativity, mental activity**

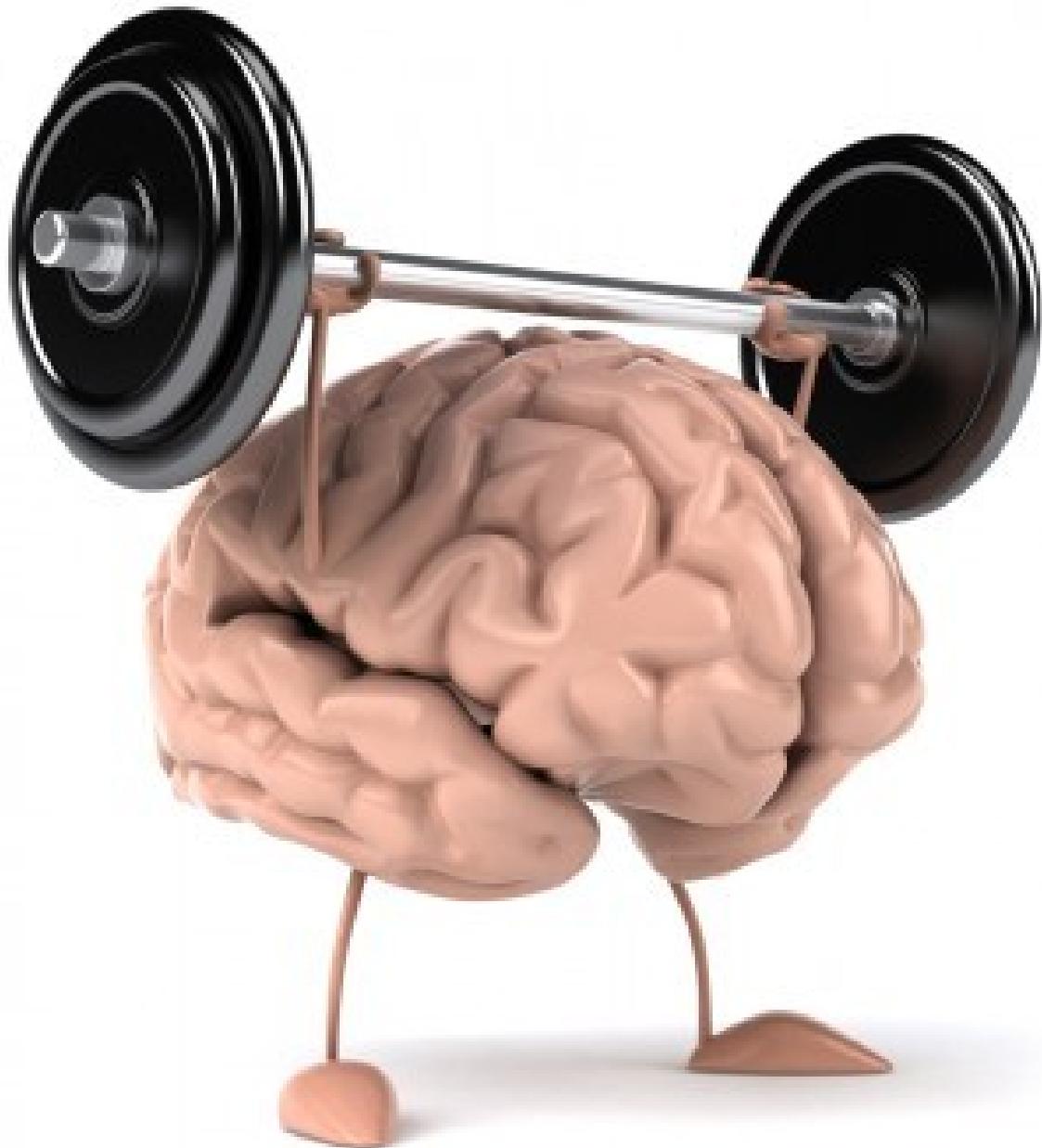
(planning, time management, etc., social relations, self-reflection, memory ...)

**well-being, work-life-balance**

self-improvement

**health**

(bio-psycho-socio-spiritual homeostasis/balance)



# **Stress and Coping Strategies. Successful stress management.**

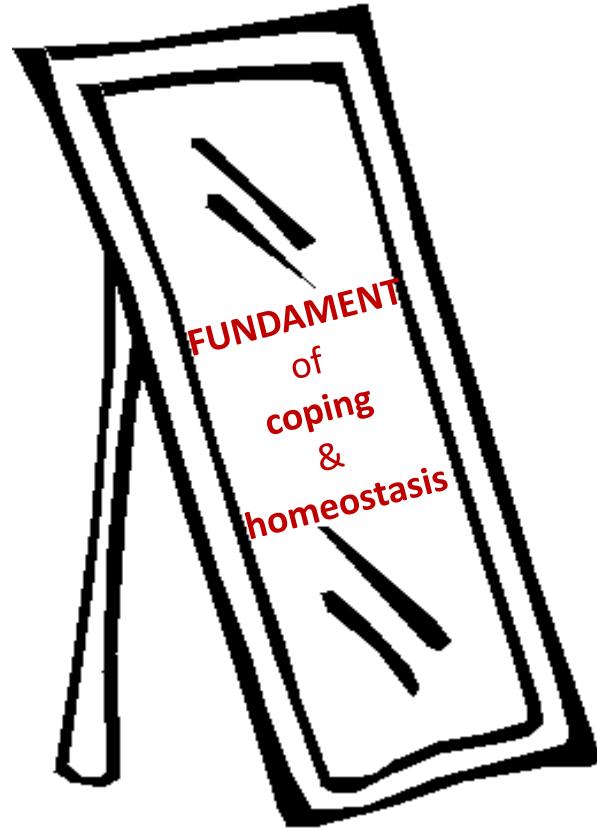


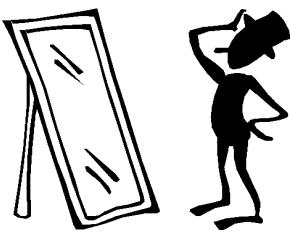
# Focus on Principles

# FEED BACK



# Self- Reflection

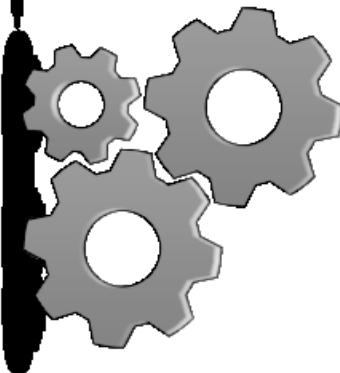




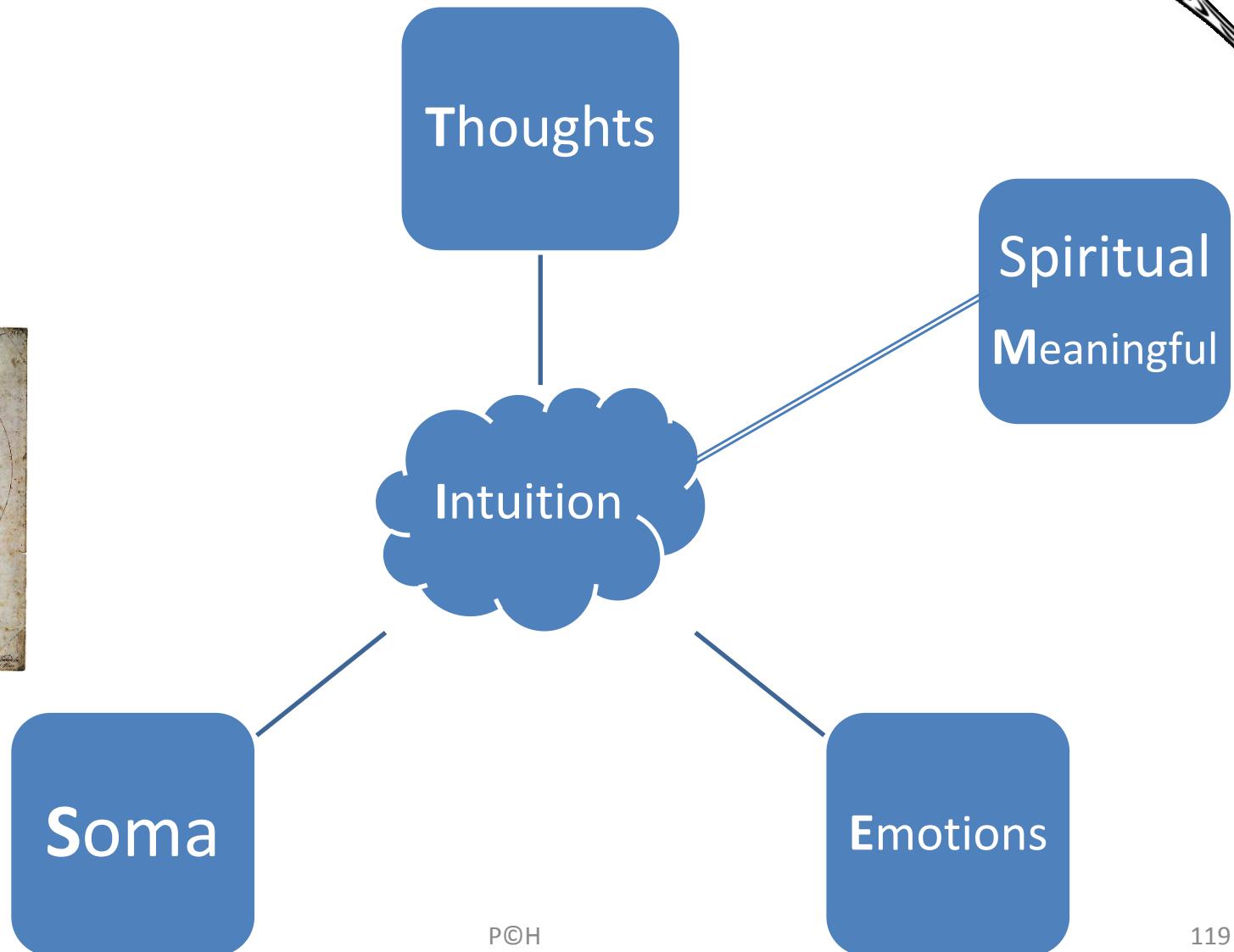
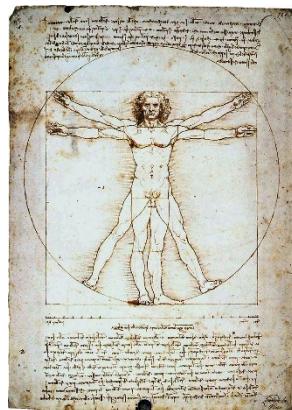
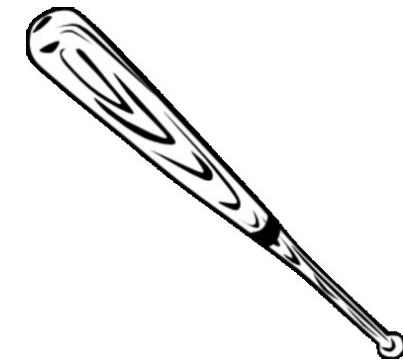
# Simple questions to improve self-reflection:

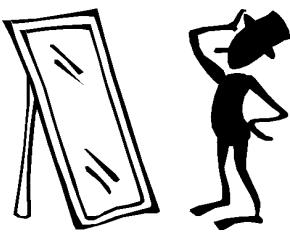
**WHAT I** (REALLY) **WANT** (JUST NOW) **?**

**WHAT I** (REALLY) **NEED** (JUST NOW) **?**



# S-E-T / I-S / B-E-S-T





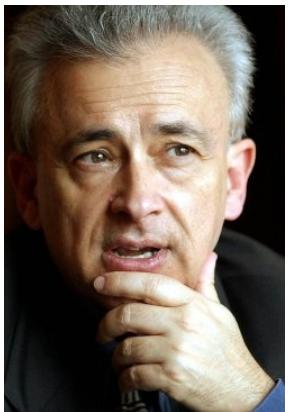
# Simple questions to improve self-reflection:

**WHAT I** (REALLY) **WANT** (JUST NOW) **?**

**WHAT I** (REALLY) **NEED** (JUST NOW) **?**

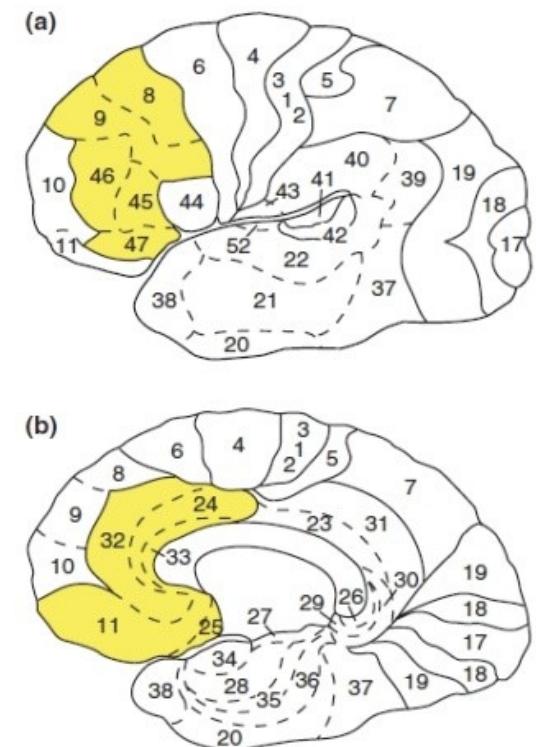


# INTUITION in neuropsychology



António Damasio

Somatic markers



[https://www.ted.com/speakers/antonio\\_damasio](https://www.ted.com/speakers/antonio_damasio)



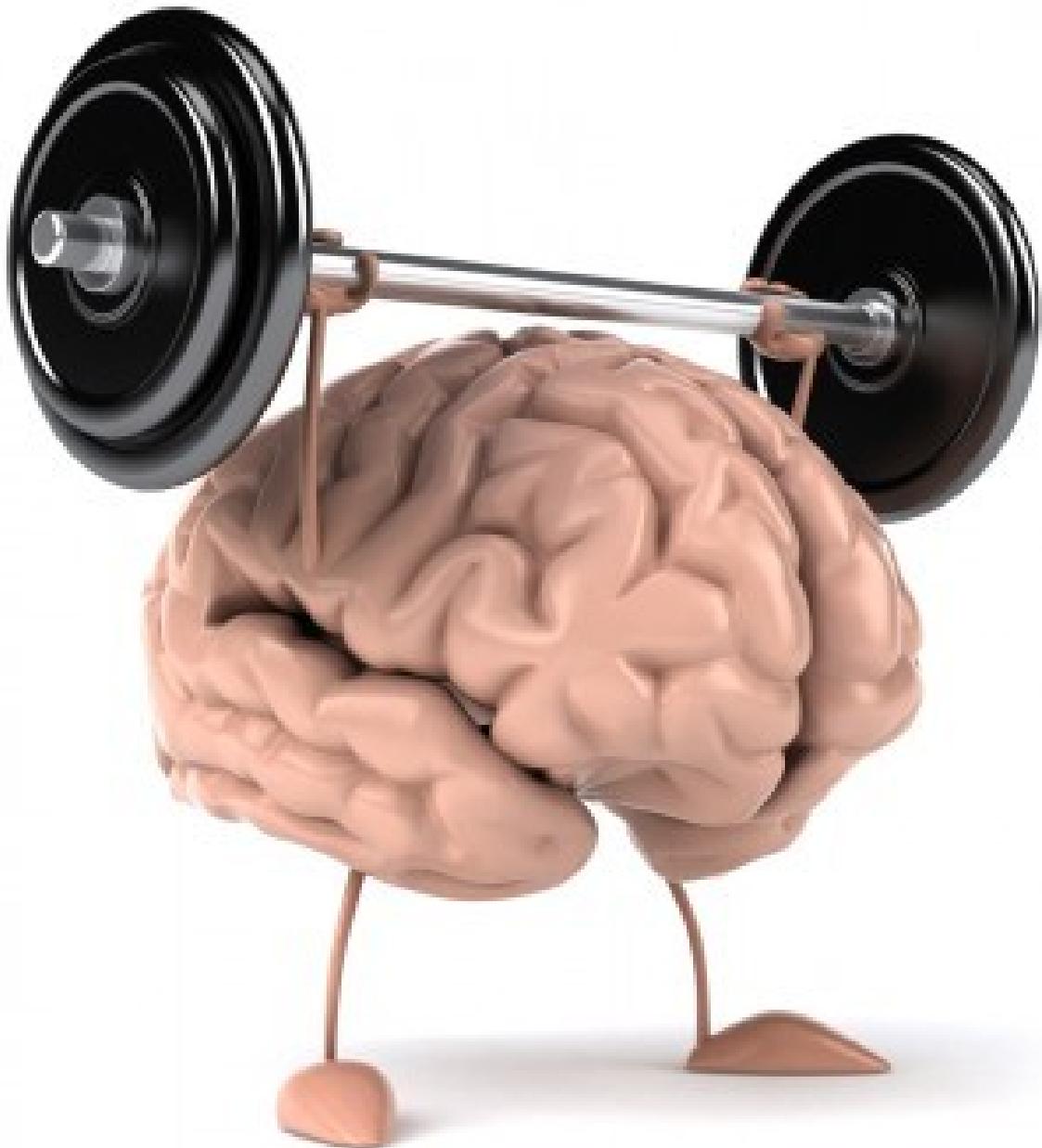
# Focus on Principles

**Listen to your BODY & emotions ...**

**... and allow it/them to live  
together with you  
and your conscious thinking**

**Consciousness is not so strong  
as we assume**





# PSYCHOSOMATICS

basic information, principals, sources, links

short version



# HISTORICAL OVERVIEW

population of indigenous nations





# Psychosomatic Medicine: History

- ▶ Not very informative:
  - “As old as medicine”, “since antiquity”
- ▶ More informative:
  - “counter reformation” against natural science preponderance in late 19<sup>th</sup> century medicine
- ▶ But:
  - two very different forms of “counter reformation” at the beginning of 20<sup>th</sup> century



# HISTORICAL OVERVIEW



## Sigmund Freud



## Franz Alexander



## Thure von Uexküll

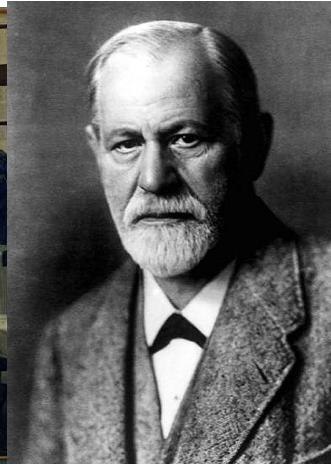


Psychosomatic Medicine  
(journal)



# Psychosomatic Medicine: History

- ▶ Psychogenetic tradition (Psychoanalysis!)
- ▶   ▶ body as theatre of the soul ("puzzling leap" – "conversion")





# Psychosomatic Medicine: History

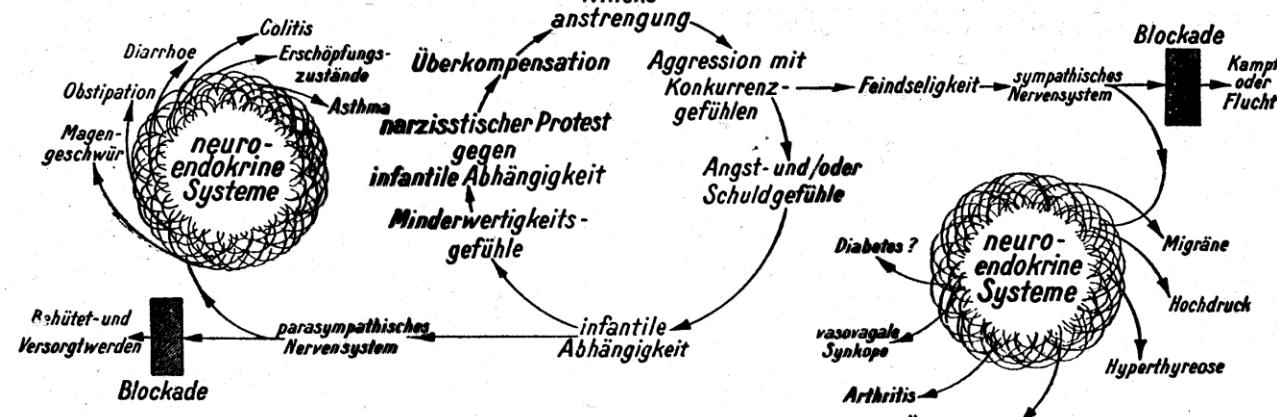


1891-1964

## ► Psychogenetic tradition

» e.g. **Franz Alexander**: Psychosomatic Medicine ("The medical value of psychoanalysis"); corrective emotional experience

Abb. 1. Schematische Darstellung des Spezifitätsbegriffs bei der Ätiologie von vegetativen Funktionsstörungen.



Das Schema zeigt die beiden Arten von vegetativen Reaktionen auf emotionale Zustände. Auf der rechten Seite sind diejenigen Zustände dargestellt, die sich entwickeln können, wenn die Abfuhr feindseliger aggressiver Antriebe (Kampf oder Flucht) blockiert und im Oberflächenverhalten vermieden wird; auf der linken Seite erscheinen diejenigen Zustände, die sich entwickeln, wenn die abhängigen hilfesuchenden Strebungen blockiert sind.



# Psychosomatic Medicine: History

- ▶ Psychogenetic tradition
  - **problem:** dualistic approach, less acceptable to patients ("either-or")  
"Medicine for bodies without souls and for souls without bodies"
  - **advantage:** - clear (psycho-)therapeutic strategies,
    - takes part in development of (psychodynamic) psychotherapies since Freud (insight, new emotional experiences, re-structuring of personality)
    - conceptual basis for psychosomatic specialists and departments



# Psychosomatic Medicine: History

- ▶ Integrative ("holistic") approach
  - ▶ from Internal Medicine/ Neurology, with background in biology
  - ▶ organism (body and soul) in its interaction with the environment



# Psychosomatic Medicine: History

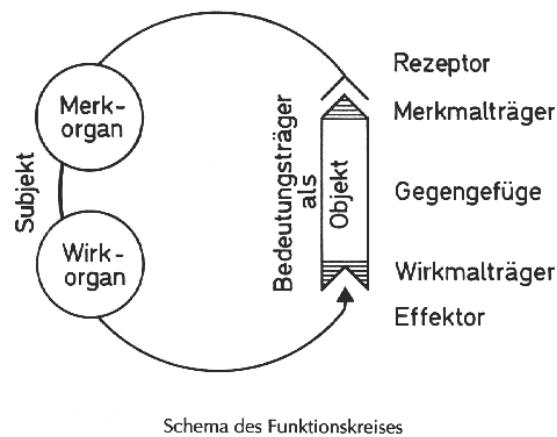


1864-1944

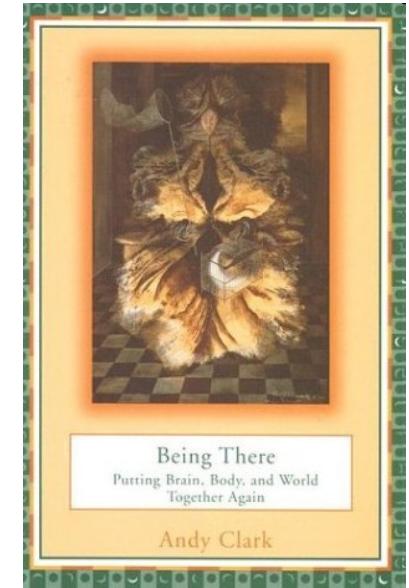
## Biology: Jakob von Uexküll

“Strolls through the environment of animals and humans”

- “relational” instead of “atomistic” approach
- meaning of environment for the organism



Jakob von Uexküll 1910



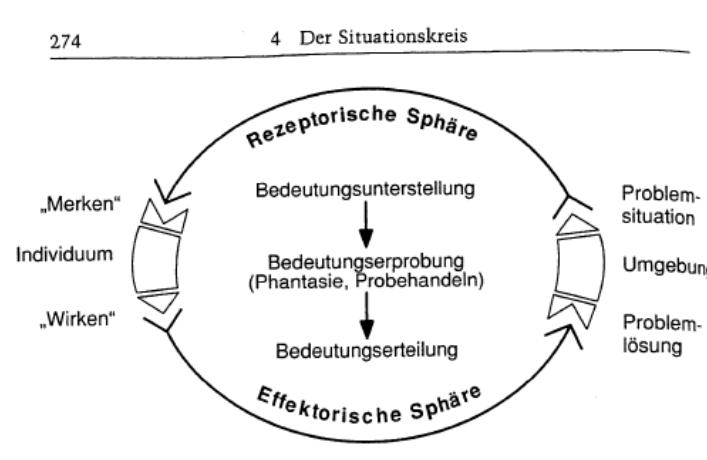


# Psychosomatic Medicine: History

- ▶ Psychosomatic Medicine: **Thure von Uexküll**



1908 - 2004



Thure von Uexküll 1950-70s



# Psychosomatic Medicine today: disorders

- ▶ Primarily concerned with those **bodily distress disorders** which are amenable to psychotherapy
  - ▶ somatoform disorders/ functional somatic syndromes
  - ▶ somato-psychic disorders including psycho-oncology, psycho-cardiology
  - ▶ eating disorders
  - ▶ post-traumatic disorders
- ▶ Overlap with **psychiatry** concerning
  - ▶ Depressive/ anxiety disorders
  - ▶ Personality disorders (e.g. Borderline)



# Psychosomatic Medicine today: aspects of aetiological models

- ▶ Disposition – Trigger - Maintenance
- ▶ Developmental, i.e. early relationship experiences influence attachment patterns and stress resilience (epigenetics)
- ▶ Symptoms as consequence of developmental deficit and of functional/ intentional adaptation
- ▶ Interpersonal context highly relevant for symptom manifestation and maintenance



# **Psychosomatic Medicine today: clinical methods as applied here**

- ▶ **Disorder-oriented psychotherapy** on psychodynamic basis
  - ▶ (bodily) symptom patterns in affective – relational context
  - ▶ explanatory model
  - ▶ personality factors  
(structural deficits/ mentalization, conflicts, resources)
- ▶ **Multi-modal therapy** (day clinic/ in-patients)
  - ▶ psychotherapy – single and group
  - ▶ body psychotherapy/ physiotherapy
  - ▶ art therapy
  - ▶ somatic diagnostics and therapy incl. psychopharmacology
- ▶ **Consil-Liaison-Psychosomatics**
  - ▶ diagnostics, psychoeducation, counseling, team supervision

# Functional Somatic Syndromes

## Gastroenterology

Irritable Bowel Syndrome  
Functional dyspepsia

## Cardiology

Atypical chest pain

## Neurology

Common Headache  
Chronic fatigue syndrome

## Rheumatology

Fibromyalgia  
Complex regional pain syndromes  
(Reflex sympathetic dystrophy)

## Gynaecology

Chronic pelvic pain

## Orthopaedics

Chronic back pain

# Sidelights: Germ layer

The **ectoderm** generates the outer layer of the embryo, and it forms from the embryo's epiblast. The ectoderm develops into the surface ectoderm, neural crest, and the neural tube.

**The surface** ectoderm develops

into: epidermis, hair, nails, lens of the eye, sebaceous glands, cornea, tooth enamel, the epithelium of the mouth and nose.

**The neural crest** of the ectoderm develops into: peripheral nervous system, adrenal medulla, melanocytes, facial cartilage, dentin of teeth.

**The neural tube** of the ectoderm develops into: brain, spinal cord, posterior pituitary, motor neurons, retina.

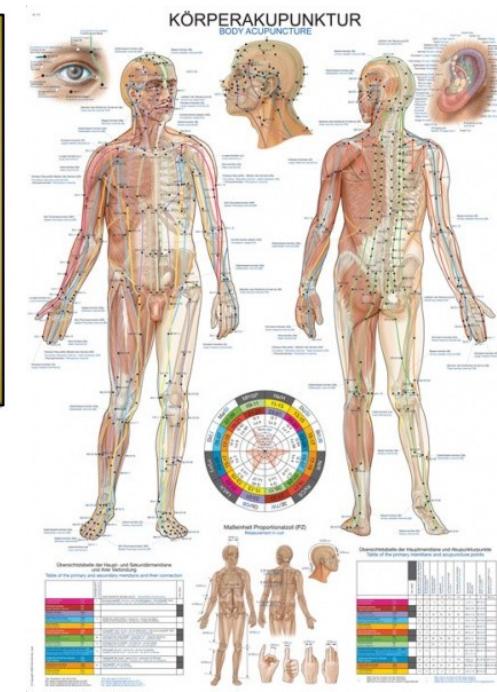
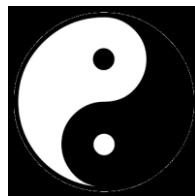
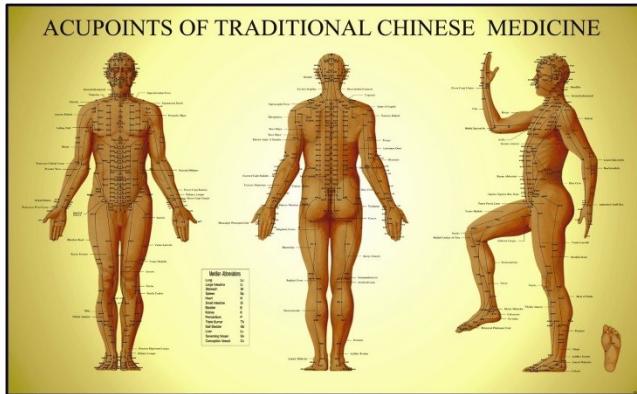
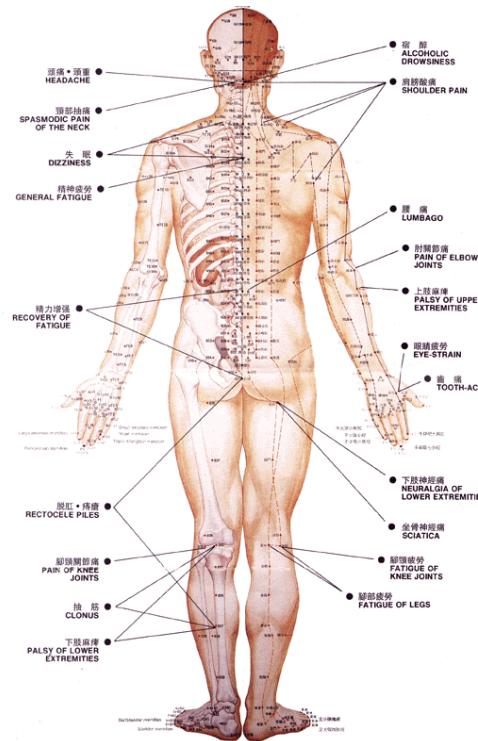


# Sidelights: Acupuncture

... is the stimulation of specific acupuncture points along the skin of the body involving various methods such as penetration by thin needles or the application of heat, pressure, or laser light...



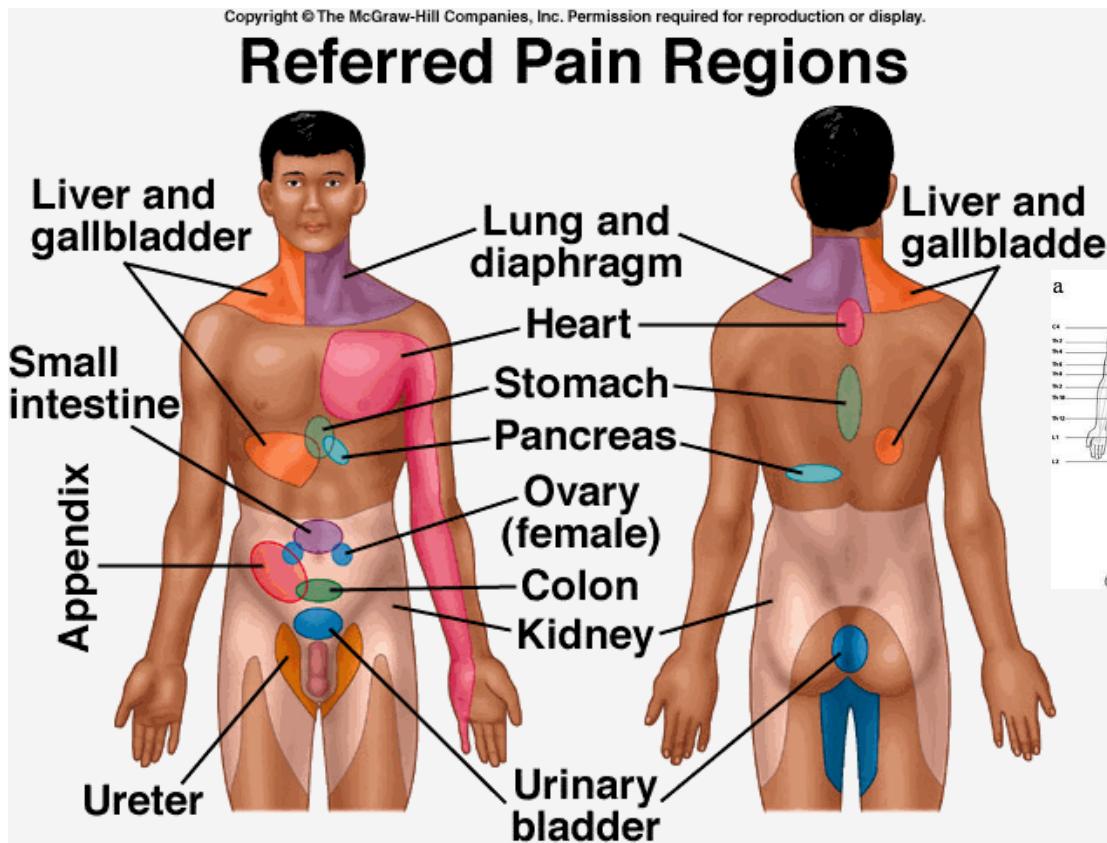
WIKIPEDIA  
The Free Encyclopedia



Sidelights:

# Head's zones

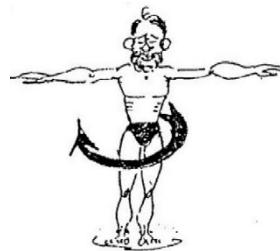
- **Referred pain**, also called **reflective pain**, from visceral organs tends to be expressed on the specific area of body surface, called as Head's zone.
- Sympathetic referred pains of viscera appear on the body trunk.



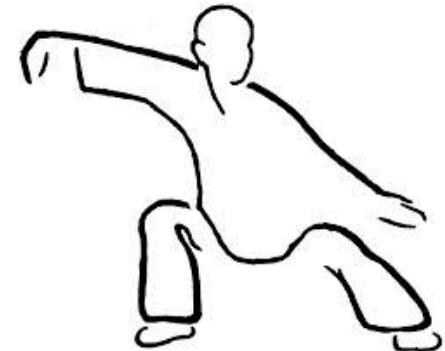
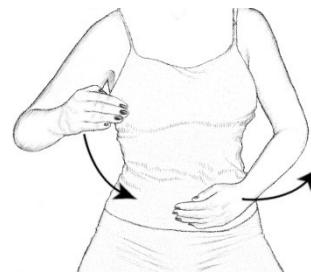
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The Free Encyclopedia

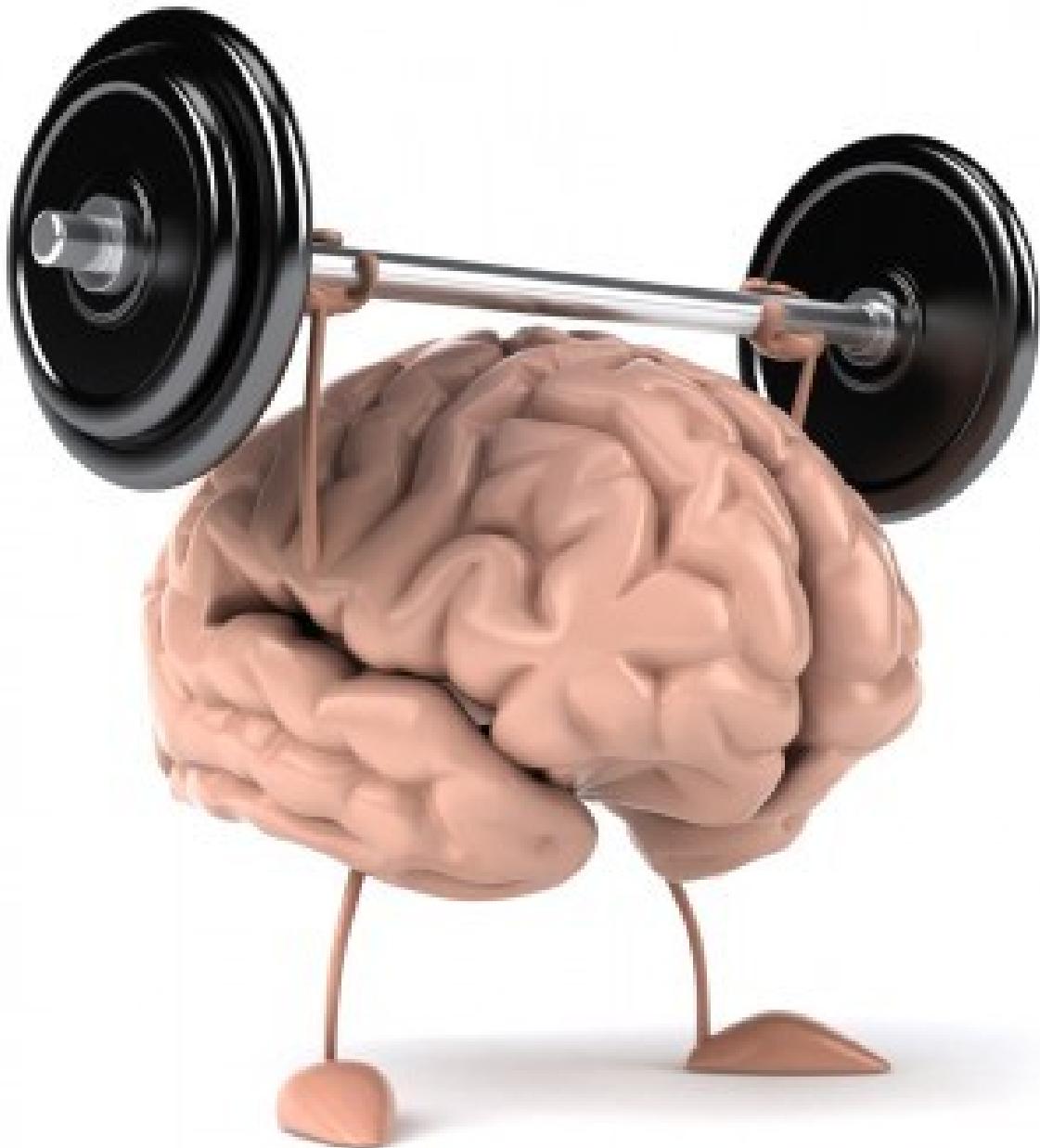
# Relaxation/Concentration/Movements

## 5 Tibetans



## Yoga / Cchi-kung / Tai-chi





# Self-improvement - tips

**maximaze effect with minimal effort**

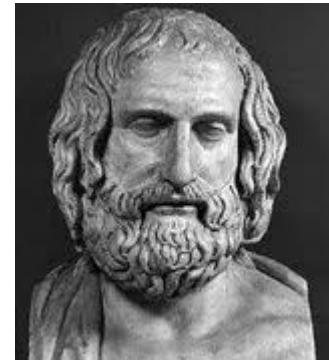


# Man is the measure of all things:

of things which are,  
that they are,

and of things which are not,  
that they are not.

Prótagorás z Abdér



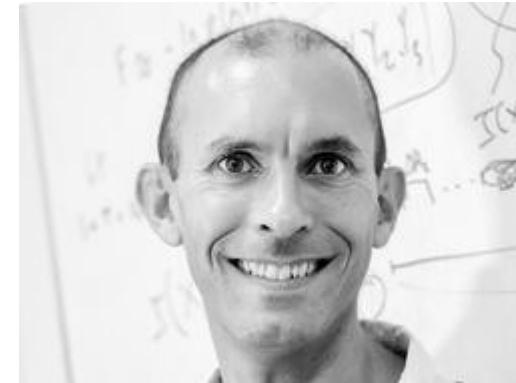
# Video inspiration



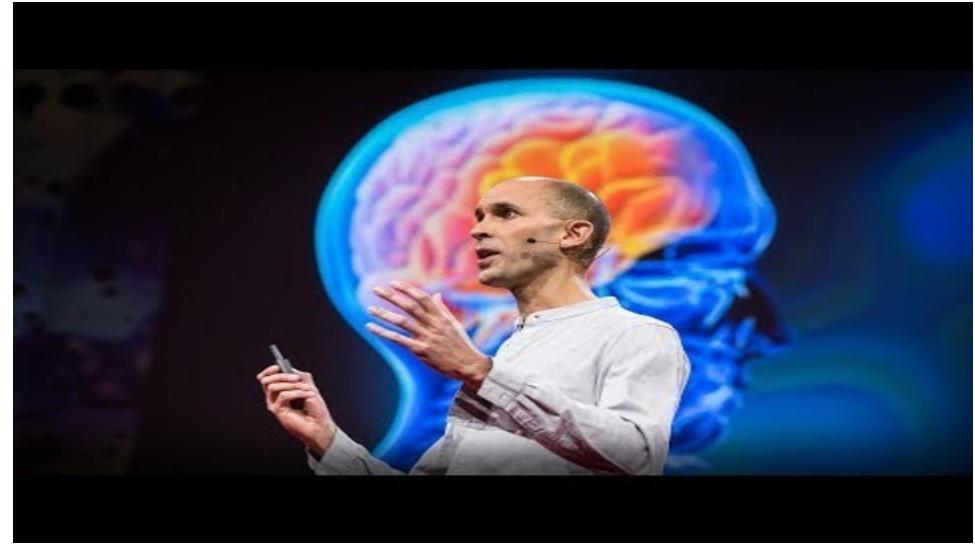
**Peter Doolittle:**  
**How your "working memory"**  
**makes sense of the world**



[https://www.ted.com/speakers/peter\\_doolittle](https://www.ted.com/speakers/peter_doolittle)



**Anil Seth: Your brain hallucinates  
your conscious reality**

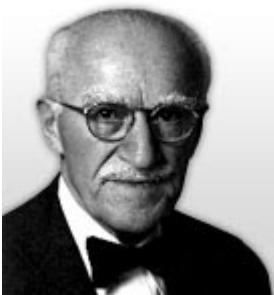


[https://www.ted.com/speakers/anil\\_seth](https://www.ted.com/speakers/anil_seth)

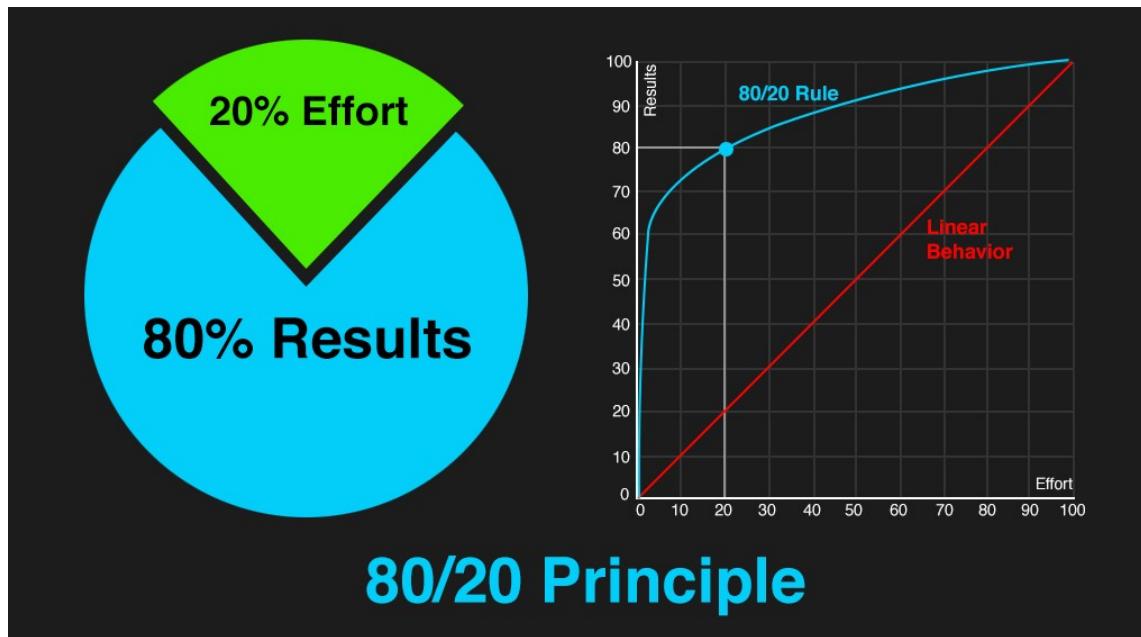
# The Pareto principle

also known as the 80/20 rule, the law of the vital few, or the principle of factor sparsity

Joseph M. Juran



(24/12/1904 – 28/2/2008)



Vilfredo Frederico Damaso Pareto  
(15/7/1848 – 19/8/1923)



# **The Four Agreements**

**(Don Miguel Ruiz)**

**Be impeccable with your word.**

**Don't take anything personally.**

**Don't make assumptions.**

**Always do your best.**



# The 7 Habits of Highly Effective People

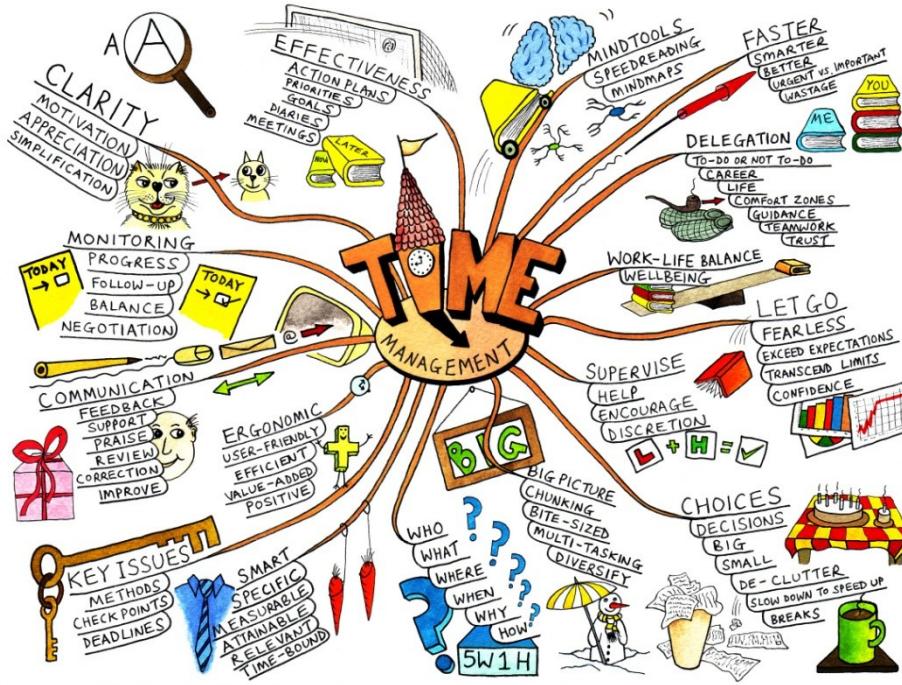
- 1 - Be Proactive
- 2 - Begin with the End in Mind
- 3 - Put First Things First
- 4 - Think Win-Win
- 5 - Seek First to Understand, Then to be Understood
- 6 - Synergize
- 7 - Sharpen the Saw



Stephen R. Covey

# Mind-maps

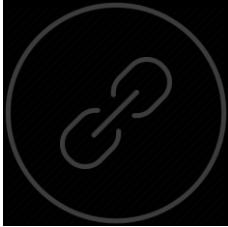
## „When the thinking is visible“



# **Belbin Team Roles**

**Plant**  
**Resource**  
**Investigator**  
**Co-ordinator**  
**Shaper**  
**Monitor**  
**Evaluator**  
**Teamworker**  
**Implementer**  
**Completer**  
**Finisher**  
**Specialist**





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**ENG**

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Supplement:

Burnout

The word "Burnout" is displayed in a large, bold, black sans-serif font. The letters are partially obscured by a graphic effect of fire and smoke. The fire is represented by bright orange and yellow flames at the base of each letter, with thick, billowing white smoke rising behind them. The overall effect is one of intense heat and destruction.



# PRINCIPLES

TO BURN OUT

CAN ONLY THE ONE

Burnout

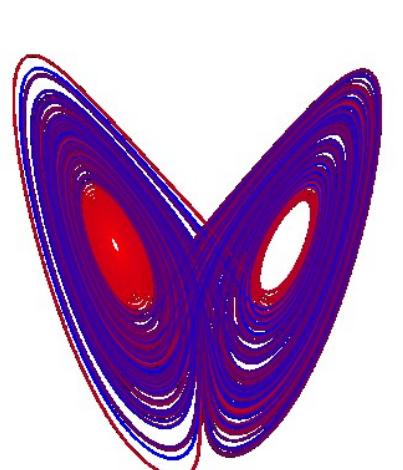


WHO BURNS!



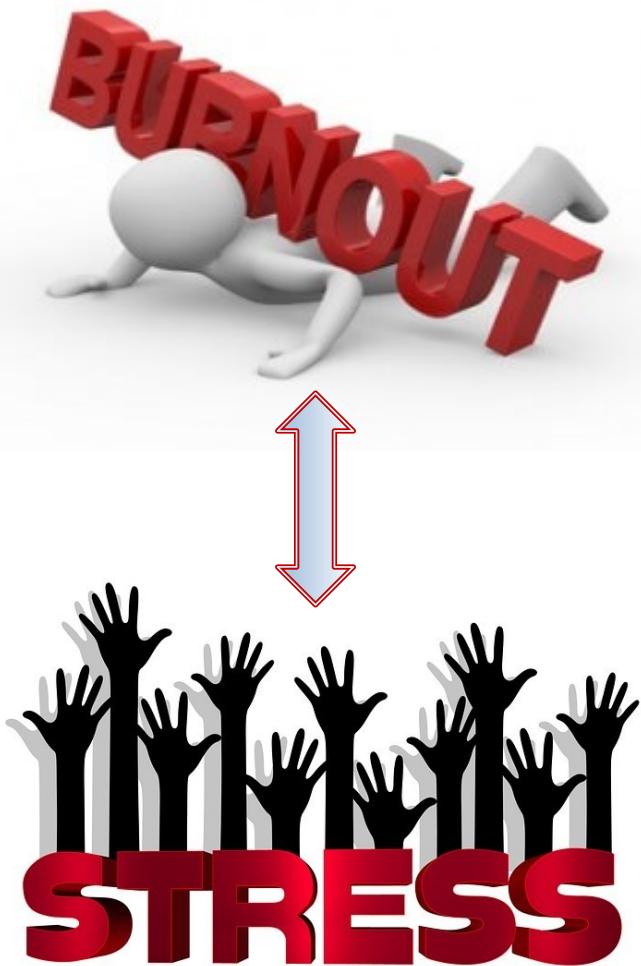


# Butterfly Effect





# FACTS



**Burnout** is a type of **psychological stress**. **Occupational burnout** or **job burnout** is characterized by *exhaustion, lack of enthusiasm and motivation, feelings of ineffectiveness*, and also may have the dimension of *frustration or cynicism*, and as a result *reduced efficacy* within the workplace.

The term burnout in psychology was coined by **Herbert Freudenberger** in his **1974 Staff burnout**, based on his observation of drug addicts he helped who, with blank looks, stared at cigarettes until they burned out.

More recently the term **brownout** has been used in the business world to describe a less serious version of burnout. It refers to staff who are *disengaged and demotivated in their job role*.

Occupational burnout is typically and particularly found within **human service professions**. Professions with high levels of burnout include *social workers, nurses, teachers, lawyers, engineers, medical practitioners, customer service representatives, and police officers*. One reason why burnout is so prevalent within the human services field is due in part to the high-stress work environment and emotional demands of the job.

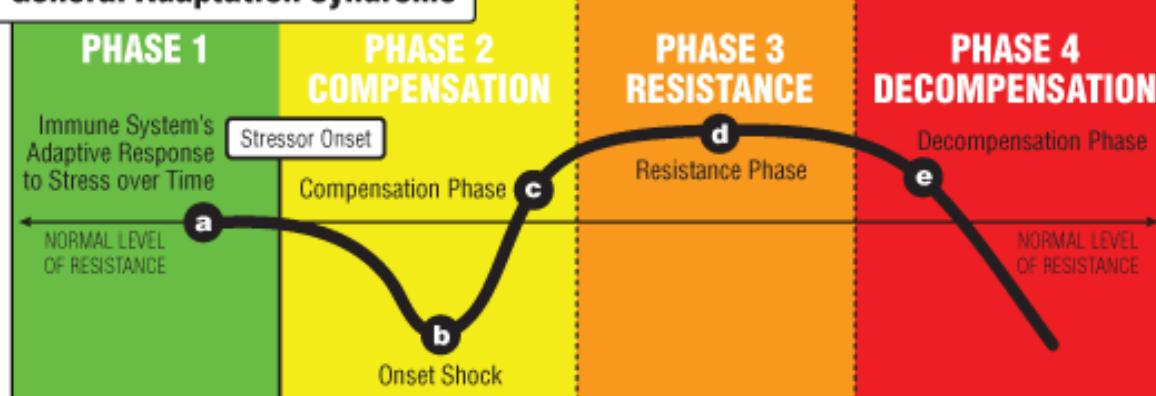


# FACTS

**12-stage model of burnout** developed by psychologists Herbert Freudenberger and Gail North:

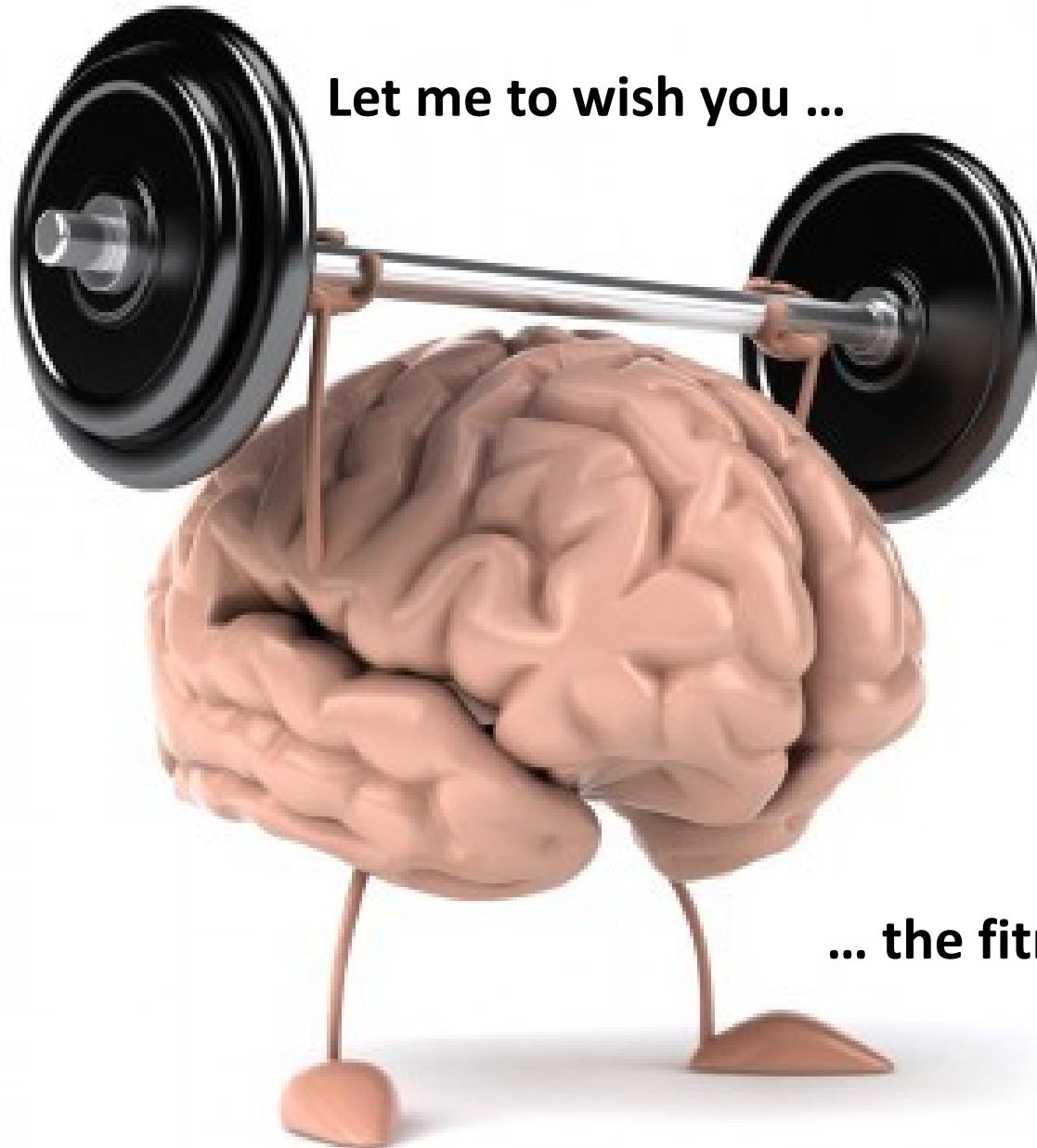
- 1. The Compulsion to Prove Oneself:** demonstrating worth obsessively; tends to hit the best employees, those with enthusiasm who accept responsibility readily.
- 2. Working Harder:** an inability to switch off.
- 3. Neglecting Needs:** erratic sleeping, eating disrupted, lack of social interaction.
- 4. Displacement of Conflicts:** problems are dismissed; we may feel threatened, panicky, and jittery.
- 5. Revision of Values:** Values are skewed, friends and family dismissed, hobbies seen as irrelevant. Work is the only focus.
- 6. Denial of Emerging Problems:** intolerance; perceiving collaborators as stupid, lazy, demanding, or undisciplined; social contacts harder; cynicism, aggression; problems are viewed as caused by time pressure and work, not because of life changes.
- 7. Withdrawal:** social life small or nonexistent, need to feel relief from stress, alcohol/drugs.
- 8. Odd Behavioral Changes:** changes in behavior obvious; friends and family concerned.
- 9. Depersonalization:** seeing neither self nor others as valuable, and no longer perceive own needs.
- 10. Inner Emptiness:** feeling empty inside and to overcome this, look for activity such as overeating, sex, alcohol, or drugs; activities are often exaggerated.
- 11. Depression:** feeling lost and unsure, exhausted, future feels bleak and dark.
- 12. Burnout Syndrome:** can include total mental and physical collapse; time for full medical attention.

## General Adaptation Syndrome



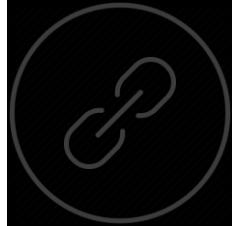
GAS: See above (slide 19)





**Let me to wish you ...**

**... the fitness of the brain ...**



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