

“ PERSPEKTIF AGAMA ISLAM DAN
PERAN SISTIM SARAF OTONOM
DALAM OLAHRAGA ”

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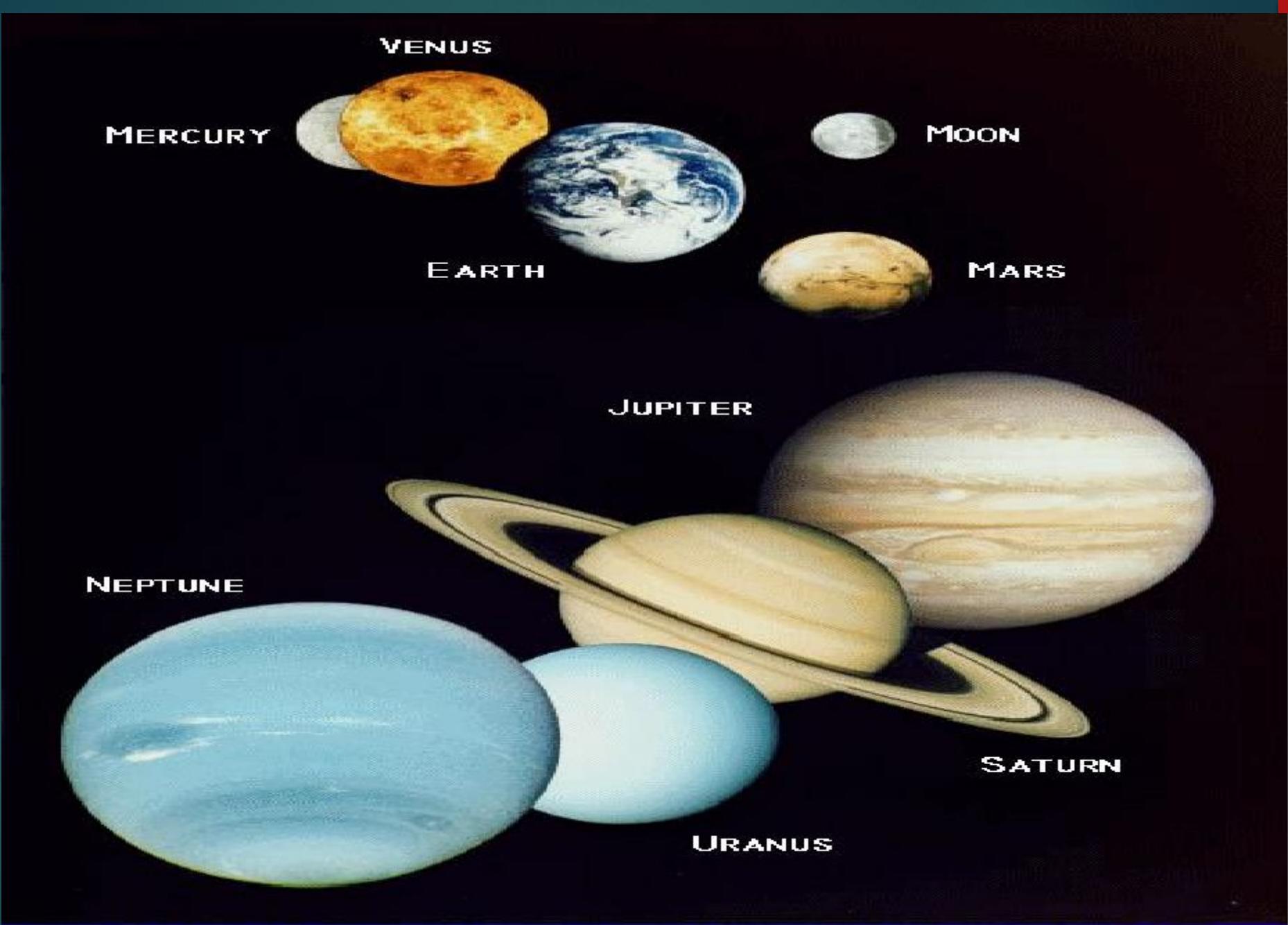
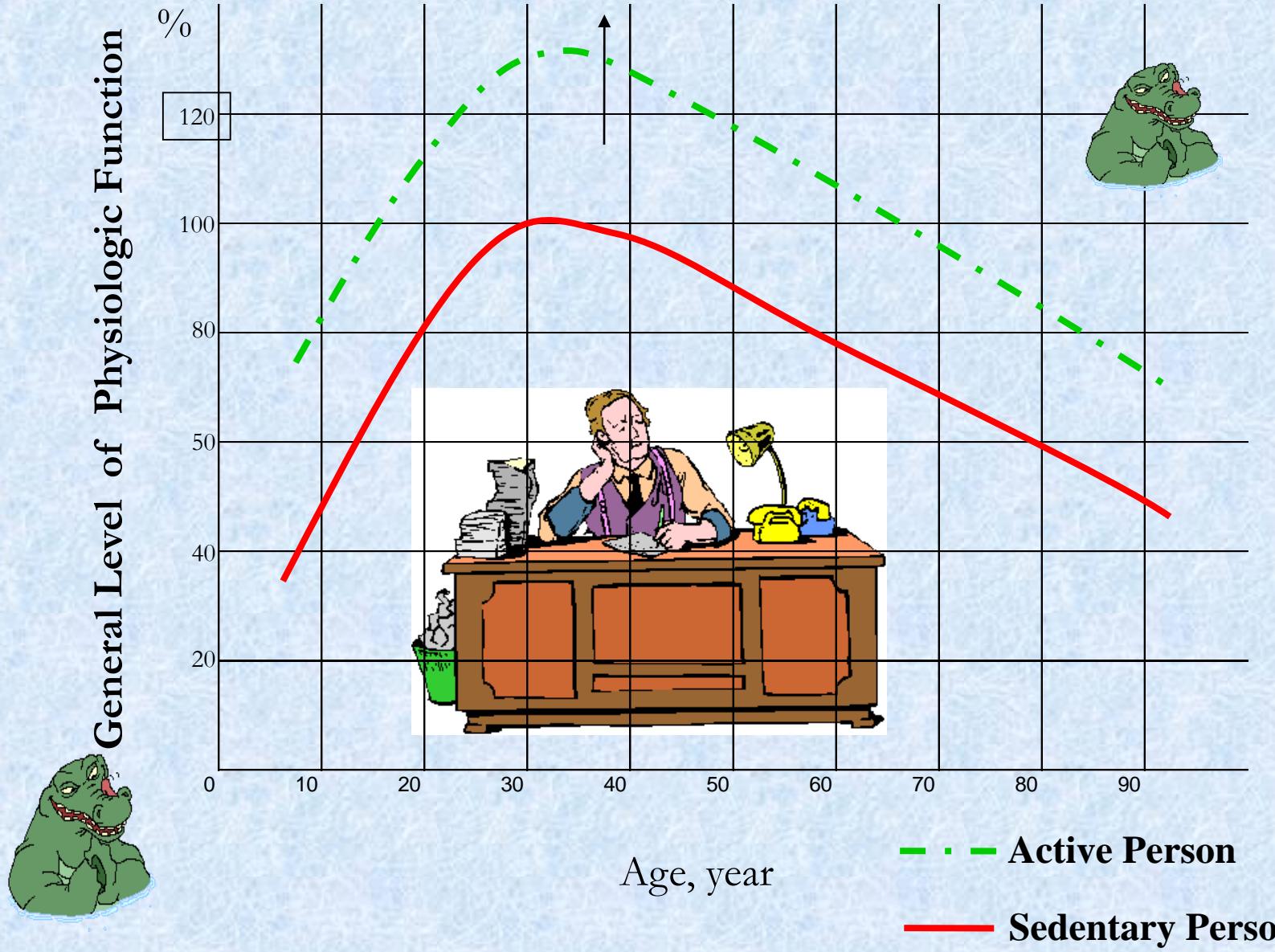
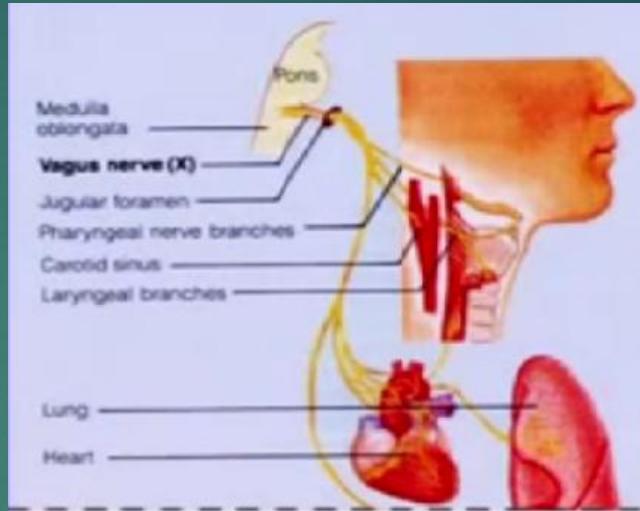


Fig. NASA'S Photo of The Planets and The Moon



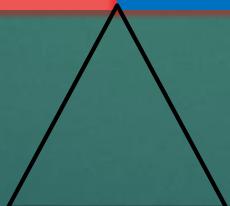
Supra-diaphragmatic
vagus

SNS, HPA (stress) Axis



Sympathetic

Parasympathetic



Sub-diaphragmatic
vagus

Polyvagal Theory: Phylogenetic Stages of Neural Control

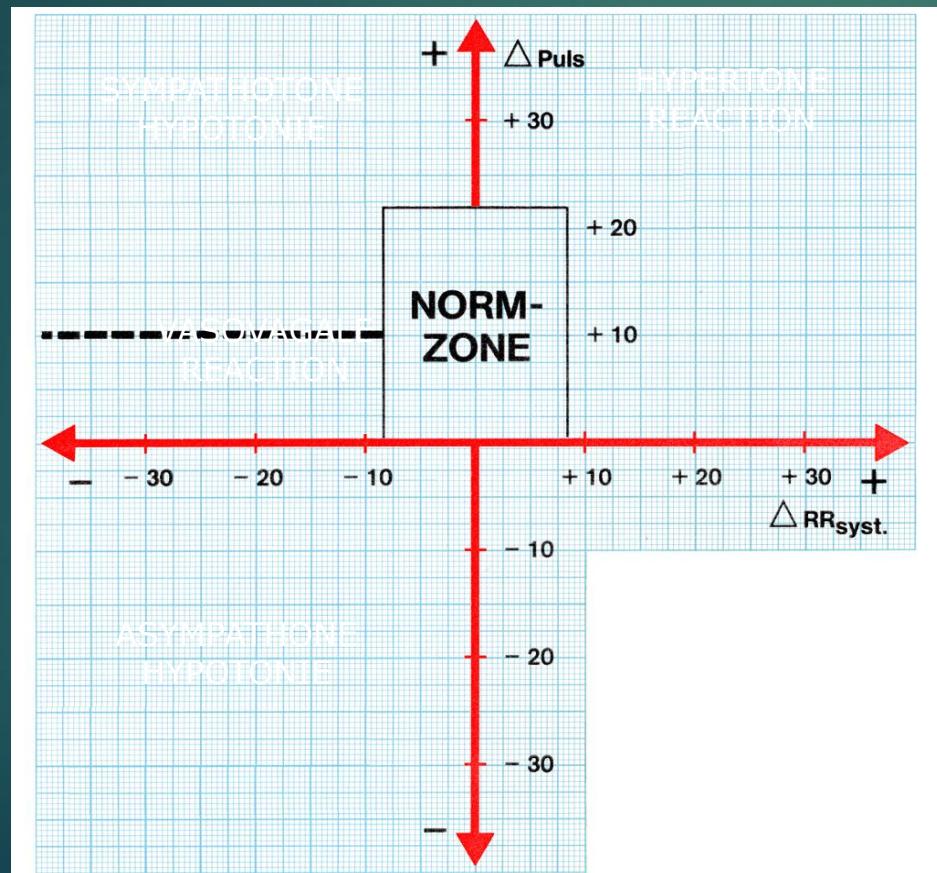
Stage	ANS Component	Behavioral Function	Lower motor neurons
III	Myelinated vagus <i>(VVC – ventral vagal complex)</i>	Social communication, self-soothing and calming, inhibit sympathetic-adrenal influences	Nucleus ambiguus
II	Sympathetic-adrenal system <i>(SNS – sympathetic nervous system)</i>	Mobilization (active avoidance)	Spinal cord
I	Unmyelinated vagus <i>(DVC – dorsal vagal complex)</i>	Immobilization (death feigning, passive avoidance)	Dorsal motor nucleus of the vagus



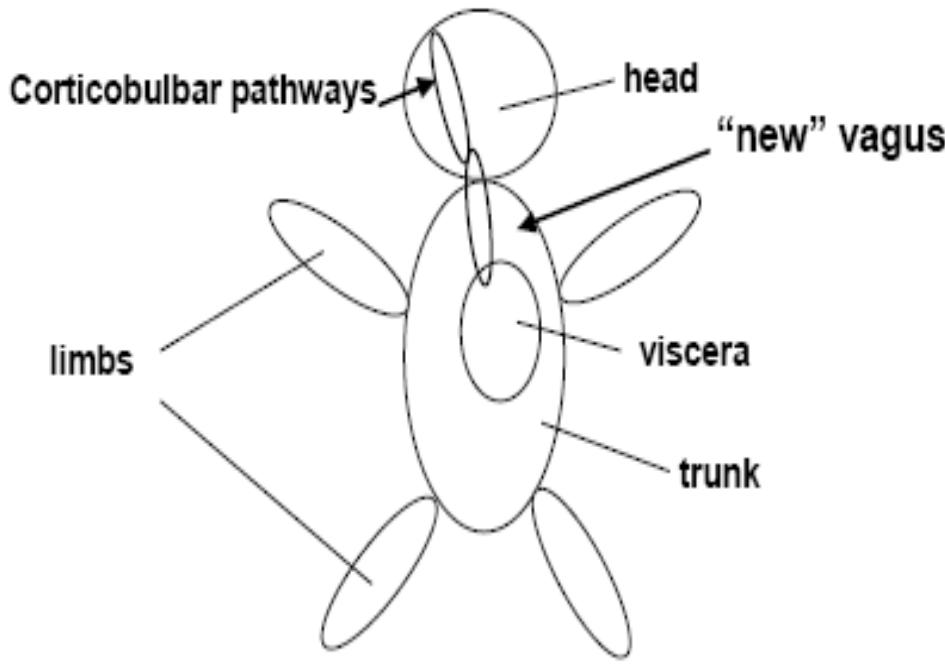
SCHELLONG TEST



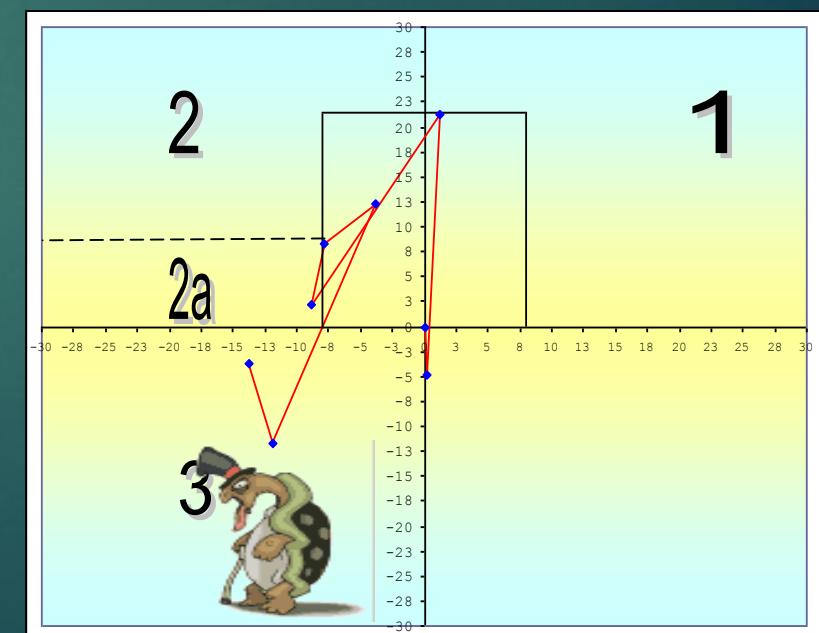
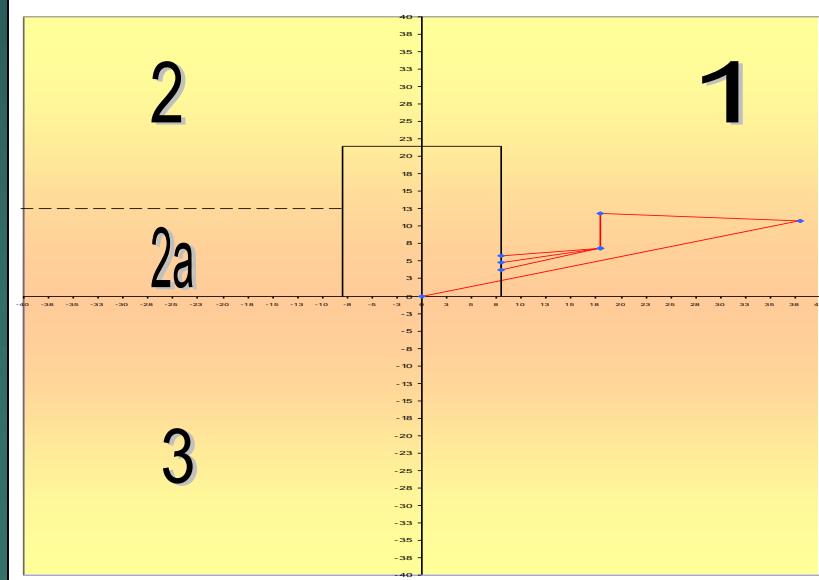
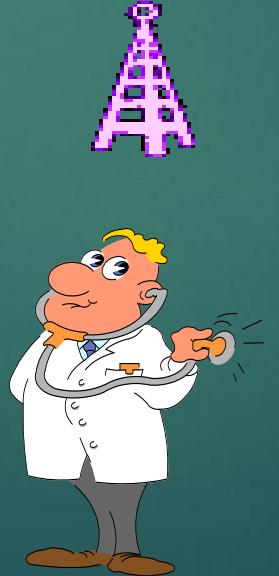
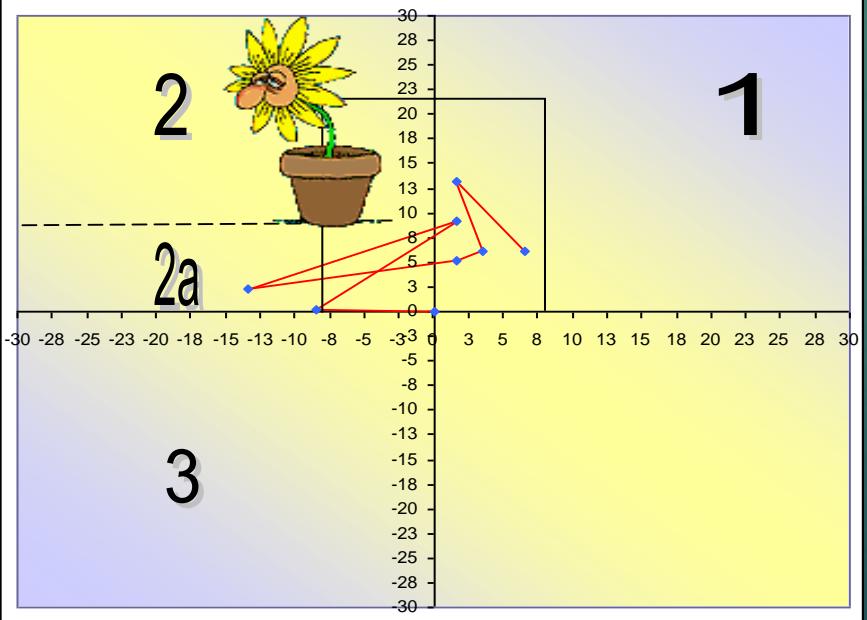
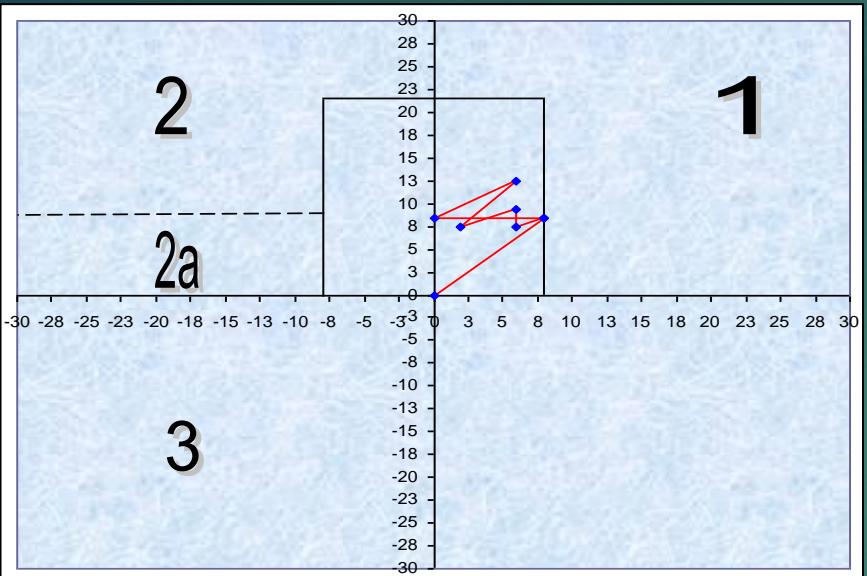
DIAGNOSE SCHEMA NACH THULESIUS

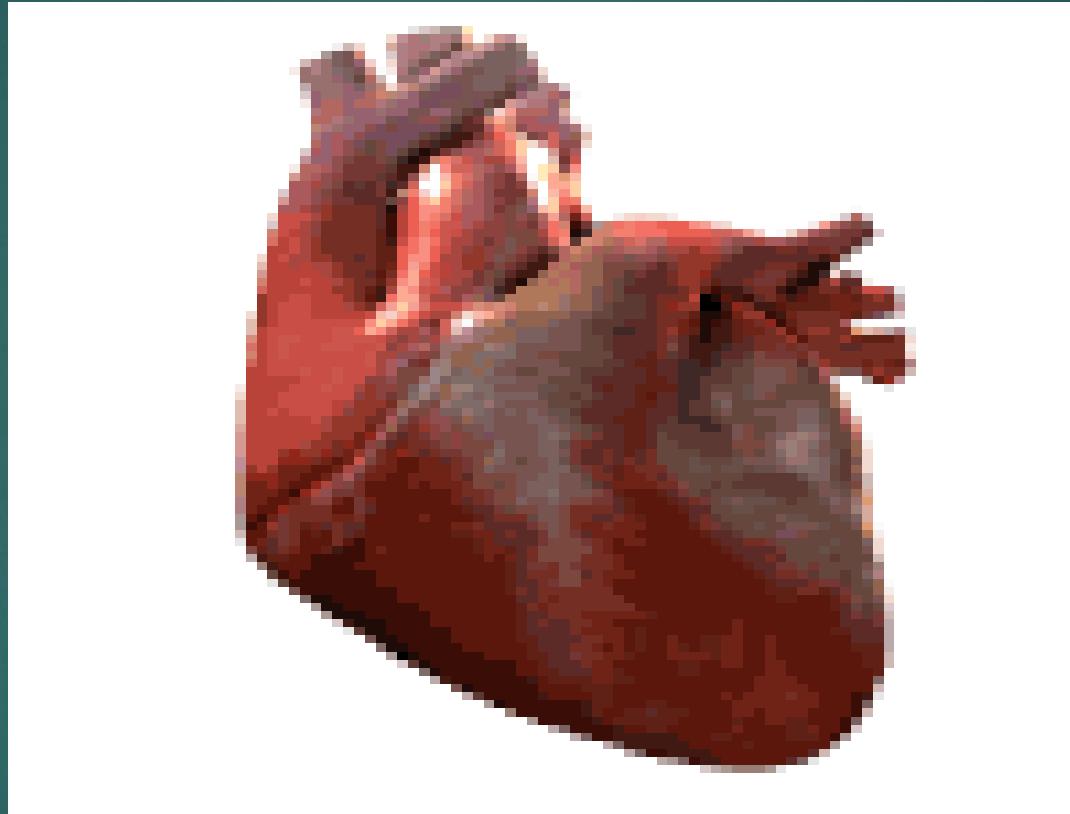


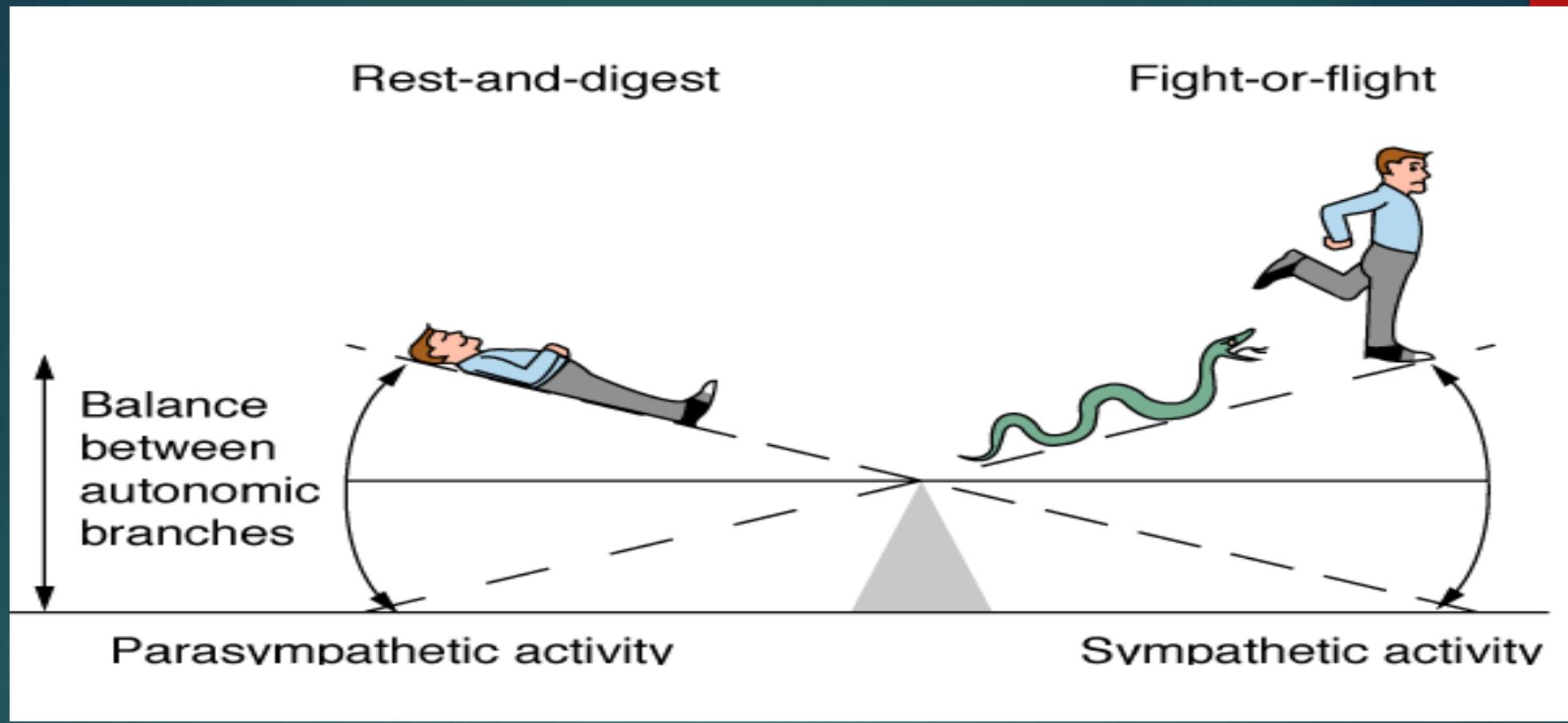
Phylogenetic Organization of the ANS: The Polyvagal Theory



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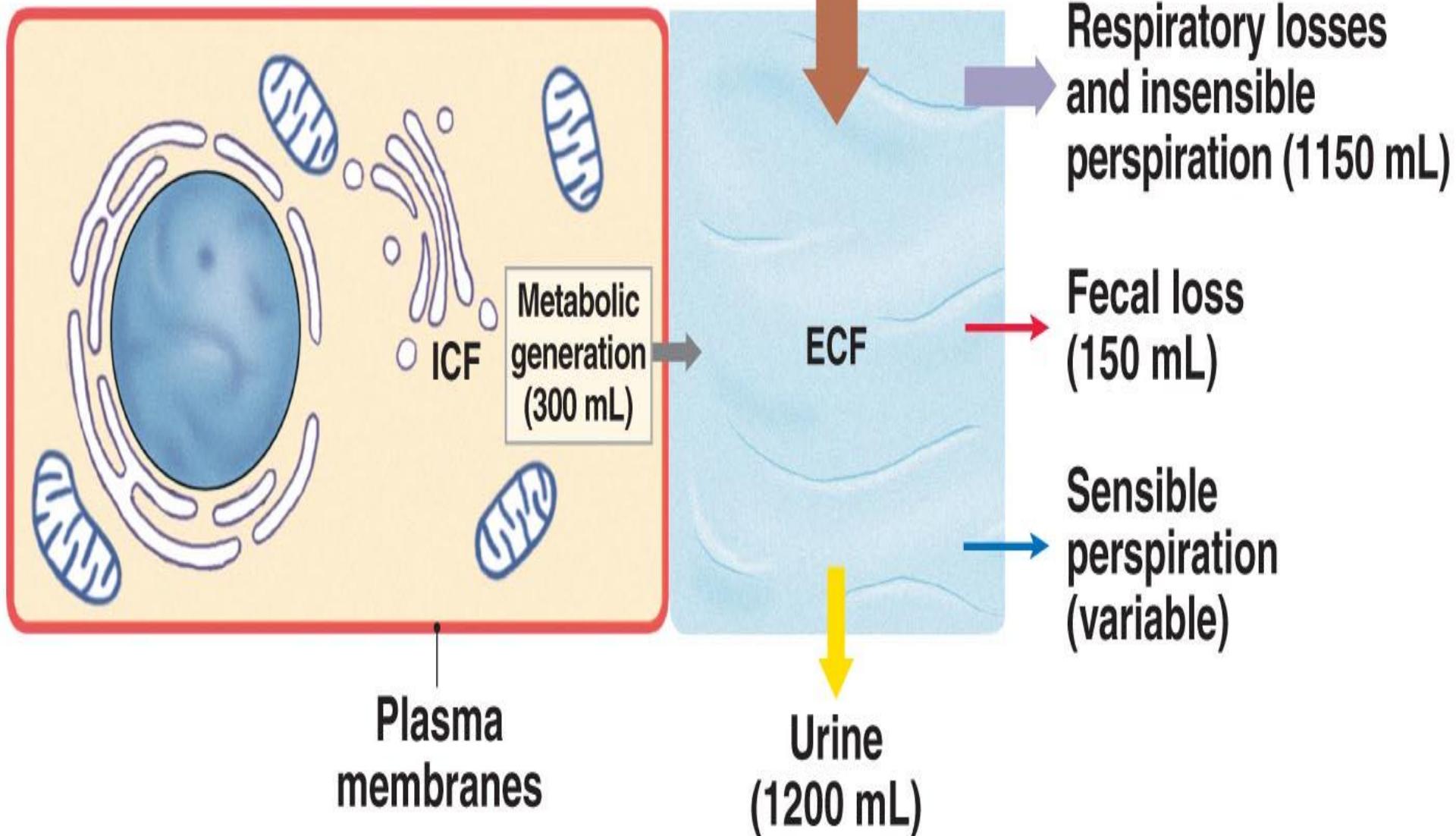




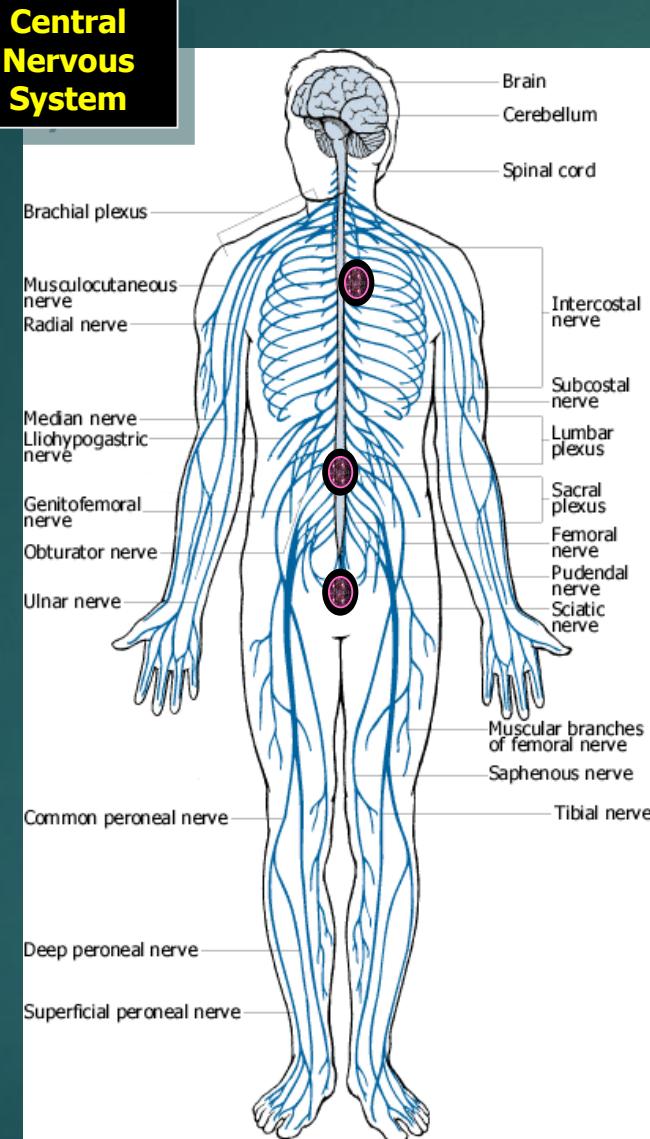
- In fight-or-flight situations, digestion is of low priority.
Heart and skeletal muscle prepare for high level of activity.
- The maintenance of homeostasis in the body involves balancing sympathetic and parasympathetic activity.

Fluid

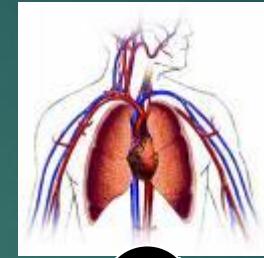
Absorption across digestive epithelium (2200 mL)



The Human Nervous System

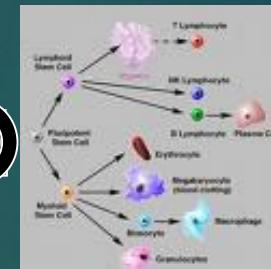


Cardiovascular system

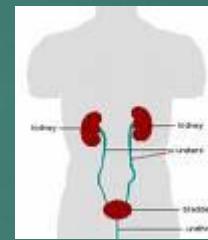


Nervous System Autonomic

Immune system



Urogenital tract



Homeostasis



Gastrointestinal tract

Ketahanan fisik & psikis diperlukan pada
saat sa'i



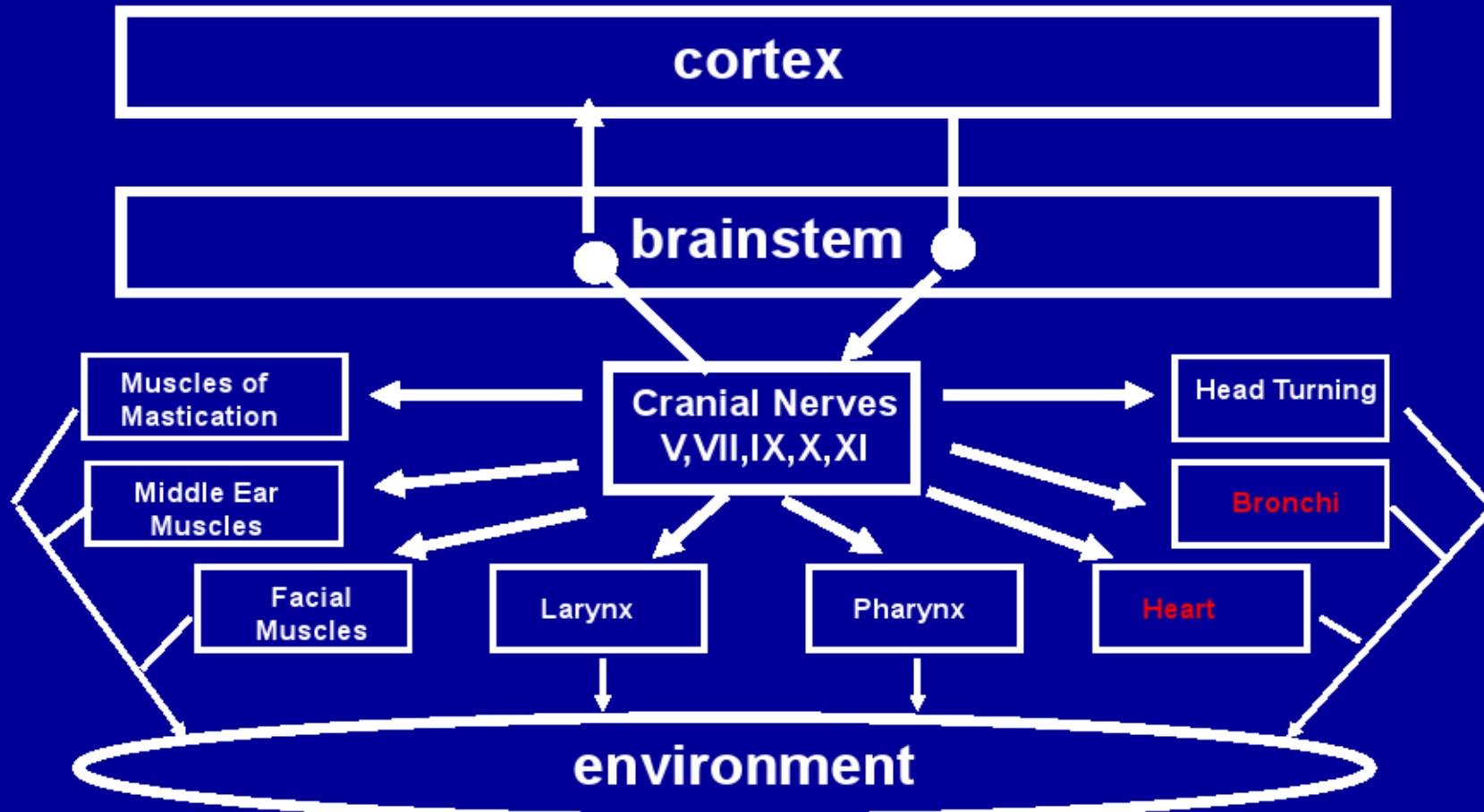


Chants and Prayer

Insights into a physiology of compassion



The “*Mammalian*” Vagus and Social Engagement System



Chants and Prayer

Insights into a physiology of compassion

Behavior	Vagal Mechanism
Vocalization	Laryngeal nerves, respiration (vagal “brake”, exhalation)
Breathing	Respiration (vagal “brake” during exhalation, abdominal stretch afferents during inhalation)
Posture	Carotid baroceptors (blood pressure regulation)

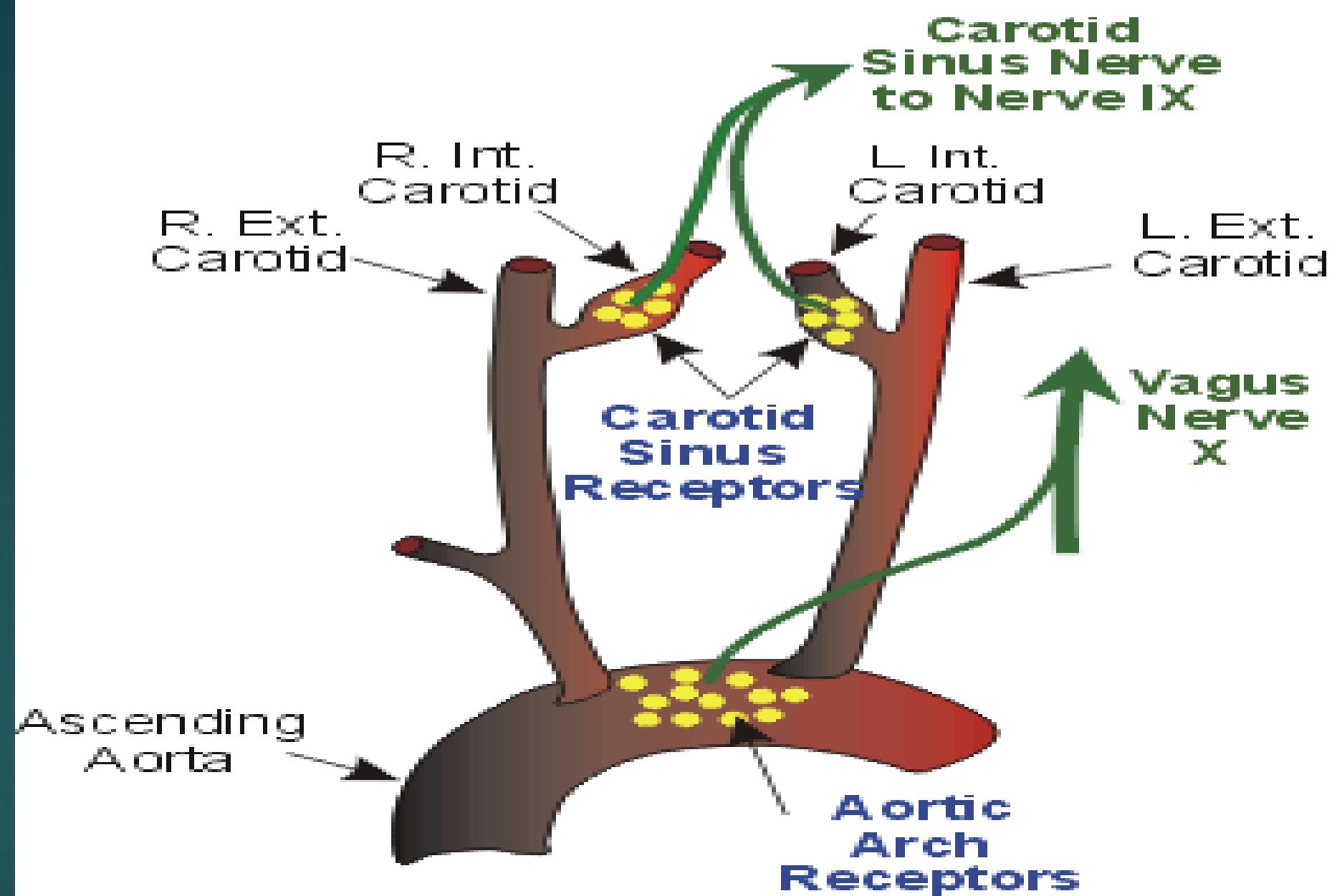
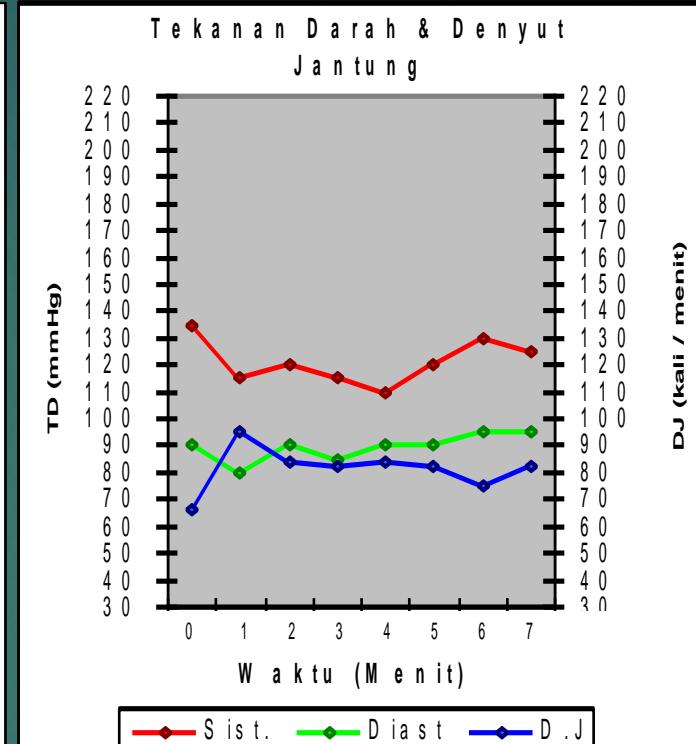
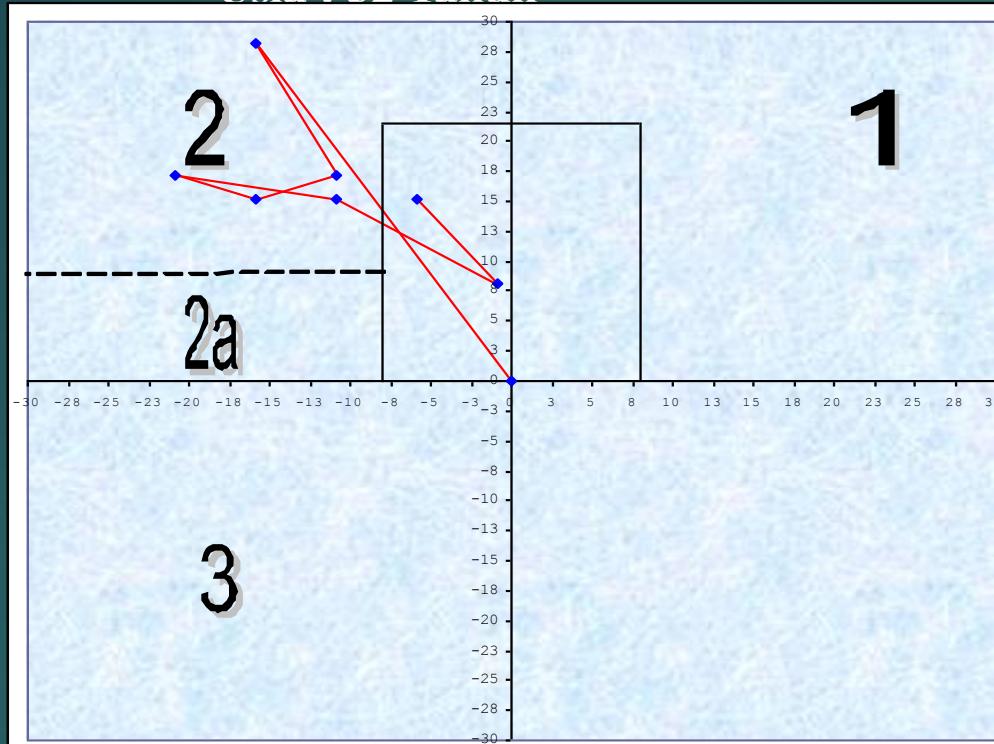


Figure 1. Location and innervation of arterial baroreceptors.

S C H E L L O N G T E S T

Tn. XXX
Usia : 52 Tahun

*



Keterangan : 1.  Reaksi Hypertonie

2a.  Hypotonie Asympatothone

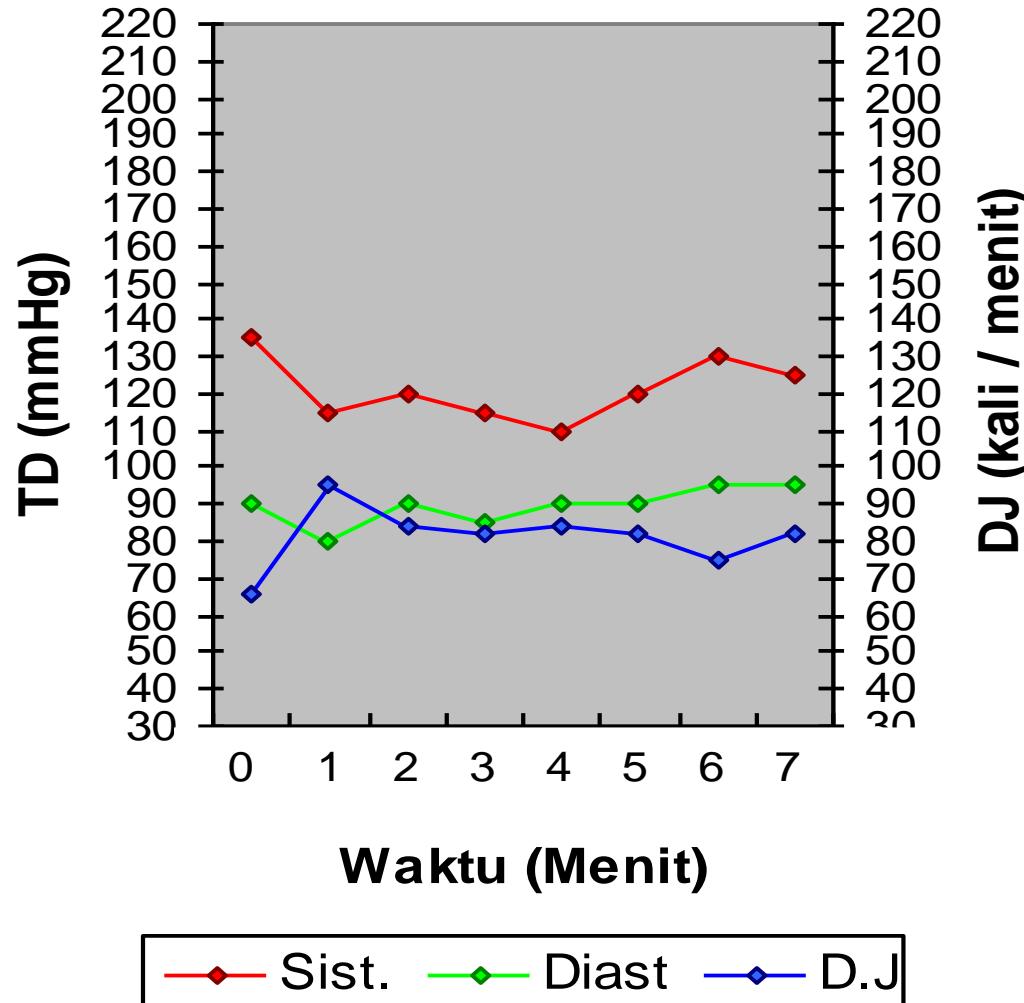
2.  Hypotonie Sympatothone

3.  Reaksi Vasovagale

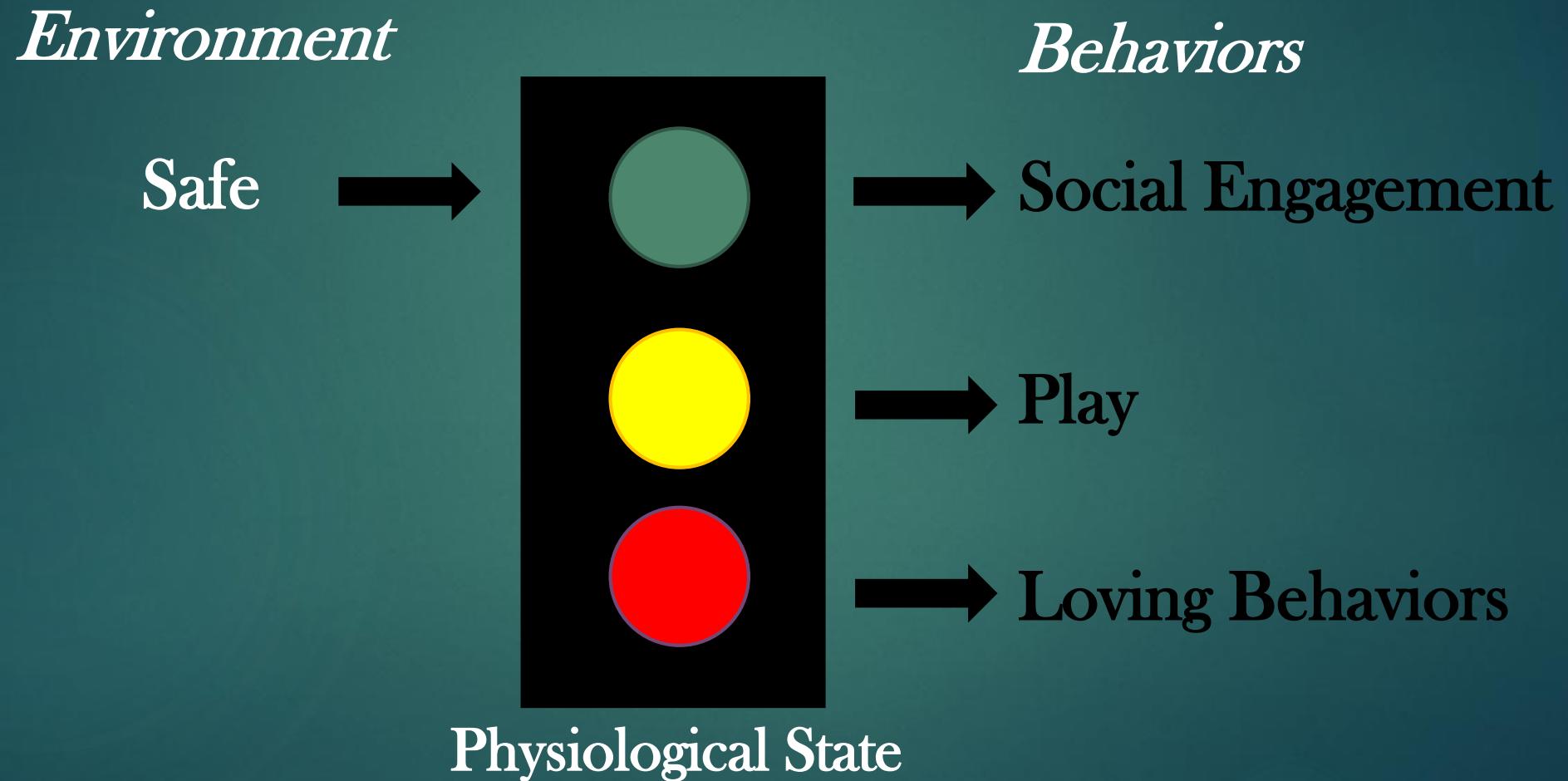
Parameter	Real	Standart
QT Interval	0,40	0,40
MAP	104,99	100
Pulse Pressure	45	40

IMT	36,59	
Keterangan	Obesitas	Lebih 24,7 Kg
E.C.G.	Sinus Normal	
ZONA	2	

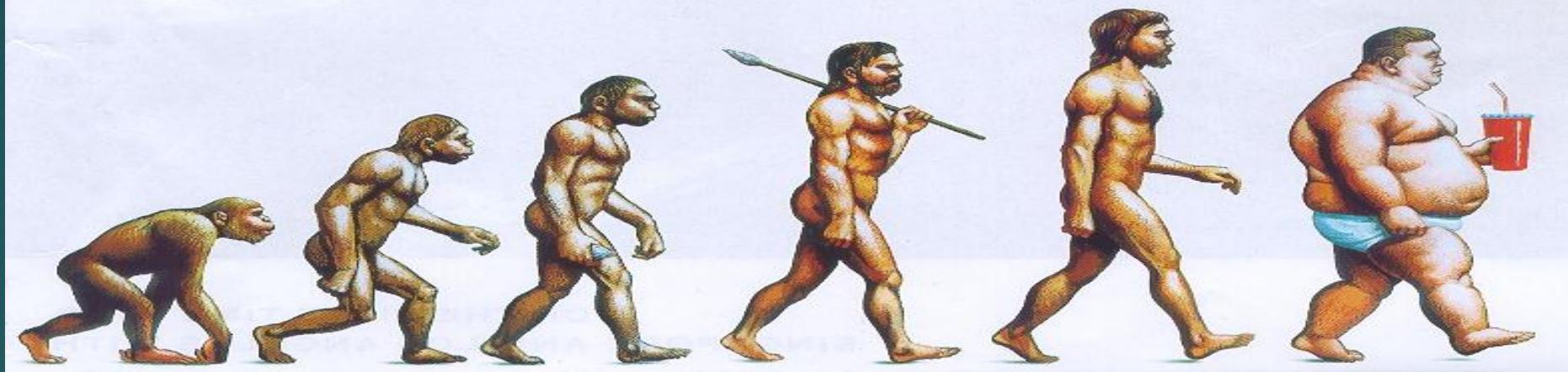
Tekanan Darah & Denyut Jantung



Neuroception



The shape of things to come



Thank you for the attention