



Nervous System

NERV-SYS 2023/2024

Part1

Key facts about the nervous system

- Vocabulary
- Translation
- Definition (glossary)

1. Vocabulary and Translation

1. The brain= le cerveau
2. The grey white matter = substance grise/ blanche
3. The cranial nerves = les nerfs crâniens
4. The spinal nerves = les nerfs rachidiens
5. The cerebellum =le cervelet
6. The brain stem = le tronc cérébral
7. The medulla oblongata = le bulbe rachidien
8. The mesencephalon/ the midbrain = le mésencéphale
9. The basal ganglia = les ganglions de la base
10. The dura mater = la dure-mère
11. The thalamus = le thalamus
12. The hypothalamus = l'hypothalamus
13. The pons = le pont de Varole
14. The pituitary gland/ the hypophysis = l'hypophyse
15. Cerebrospinal fluid (CSF) = liquide céphalorachidien (LCR)
16. The spine = le rachis
17. The spinal cord = la moelle épinière
18. The peripheral nervous system (PNS) = le system nerveux périphérique
19. Nerve impulse = influx nerveux
20. Motor function = motricité
21. Vasovagal syncope = malaise vasovagal

2- “The Nerv-sys” Glossary

Autonomic nervous system (ANS): functional division of the nervous system that is responsible for homeostatic reflexes that coordinate control of cardiac and smooth muscle, as well as glandular tissue

axon : single process of the neuron that carries an electrical signal (action potential) away from the cell body toward a target cell

brain : the large organ of the central nervous system composed of white and gray matter, contained within the cranium and continuous with the spinal cord

central nervous system (CNS) : anatomical division of the nervous system located within the cranial and vertebral cavities, namely the brain and spinal cord

dendrite : one of many branch like processes that extends from the neuron cell body and functions as a contact for incoming signals (synapses) from other neurons or sensory cells

enteric nervous system (ENS) : neural tissue associated with the digestive system that is responsible for nervous control through autonomic connections

ganglion : localized collection of neuron cell bodies in the peripheral nervous system

glialcell : one of the various types of neural tissue cells responsible for maintenance of the tissue, and largely responsible for supporting neurons

gray matter : regions of the nervous system containing cell bodies of neurons with few or no myelinated axons; actually may be more pink or tan in color, but called gray in contrast to white matter

integration : nervous system function that combines sensory perceptions and higher cognitive functions (memories, learning, emotion, etc.) to produce a response

myelin : lipid-rich insulating substance surrounding the axons of many neurons, allowing for faster transmission of electrical signals

nerve : cord-like bundle of axons located in the peripheral nervous system that transmits sensory input and response output to and from the central nervous system

neuron : neural tissue cell that is primarily responsible for generating and propagating electrical signals into, within, and out of the nervous system

nucleus : in the nervous system, a localized collection of neuron cell bodies that are functionally related; a “center” of neural function

peripheral nervous system (PNS) : anatomical division of the nervous system that is largely outside the cranial and vertebral cavities, namely all parts except the brain and spinal cord

process: in cells, an extension of a cell body; in the case of neurons, this includes the axon and dendrites

response: nervous system function that causes a target tissue (muscle or gland) to produce an event as a consequence to stimuli

sensation: nervous system function that receives information from the environment and translates it into the electrical signals of nervous tissue

soma: in neurons, that portion of the cell that contains the nucleus; the cell body, as opposed to the cell processes (axons and dendrites)

somatic nervous system (SNS) : functional division of the nervous system that is concerned with conscious perception, voluntary movement, and skeletal muscle reflexes

spinal cord : organ of the central nervous system found within the vertebral cavity and connected with the periphery through spinal nerves; mediates reflex behaviours

stimulus : an event in the external or internal environment that registers as activity in a sensory neuron

tract : bundle of axons in the central nervous system having the same function and point of origin

white matter : regions of the nervous system containing mostly myelinated axons, making the tissue appear white because of the high lipid content of myelin