

Biology



Nervous system

The nervous system is responsible for communication between different regions of the body, it is divided into:

CNS (central nervous system) = brain + spinal cord

PNS (peripheral nervous system) = nerves running between the CNS & other tissues.

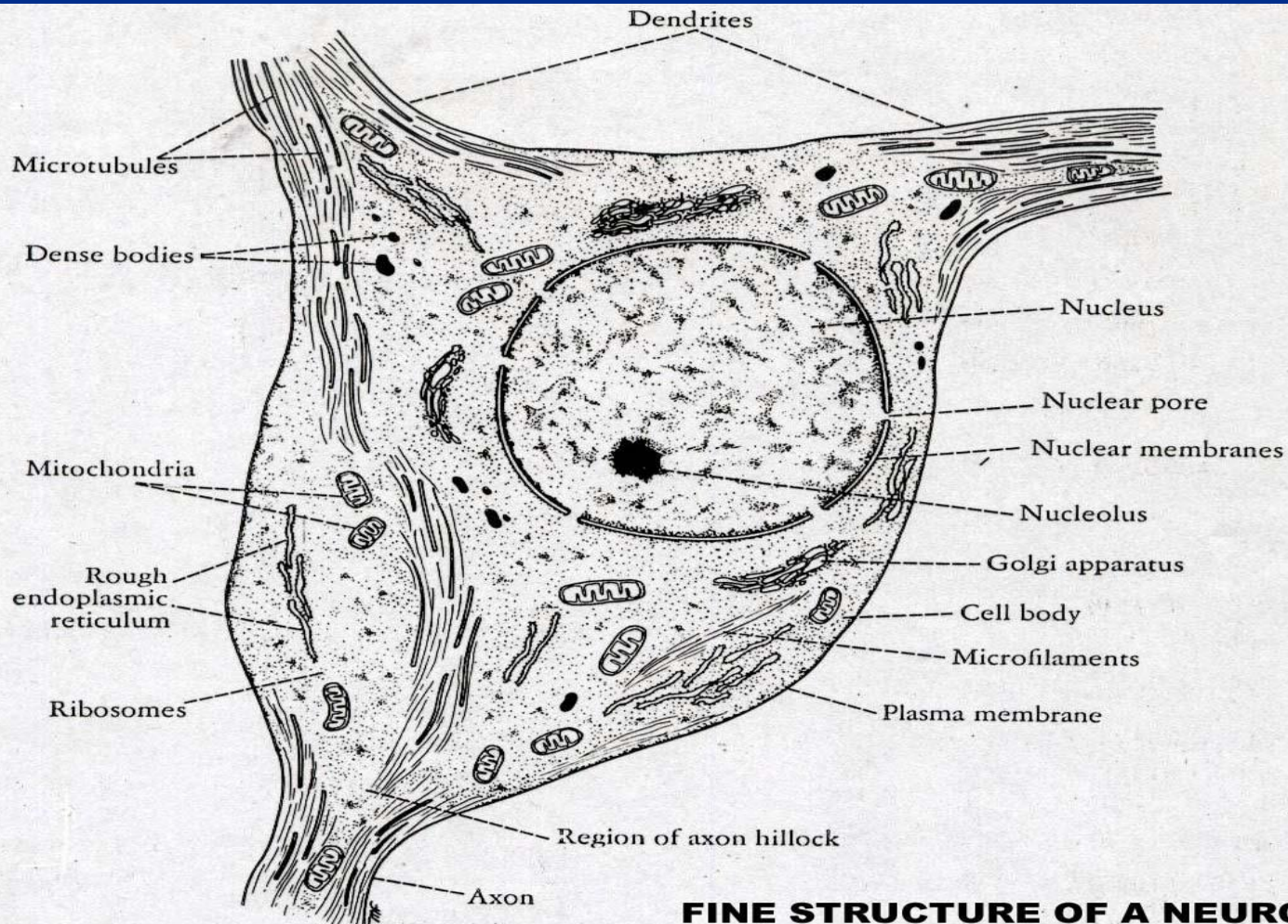
Nervous tissue consists of two major cell types: neurons and neuroglia.



The Neuron:

Is the main functional unit of the nervous system, it consists of:

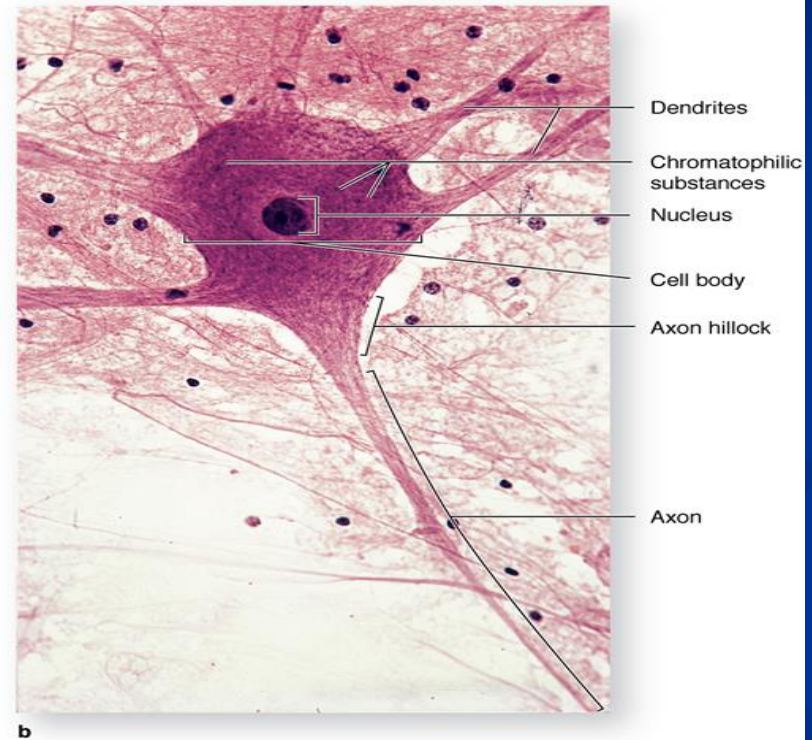
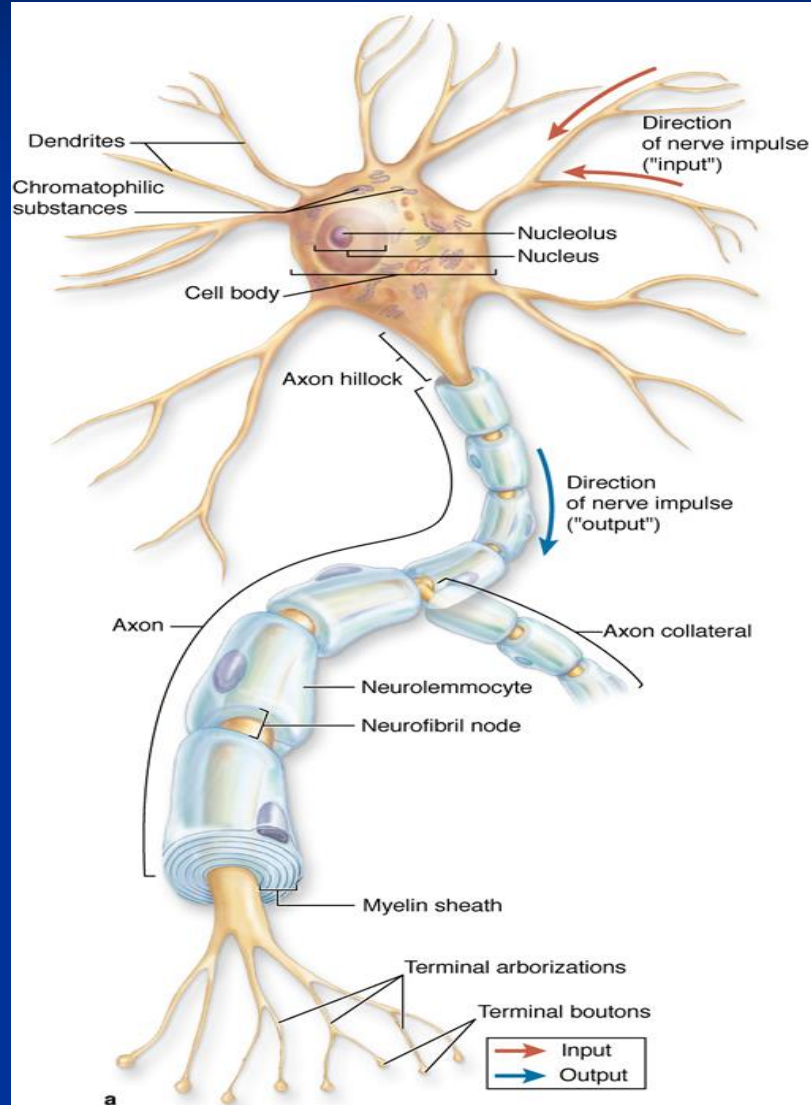
1. Cell body (perikaryon)



2. Axon

3. Dendrites

4. Terminal button



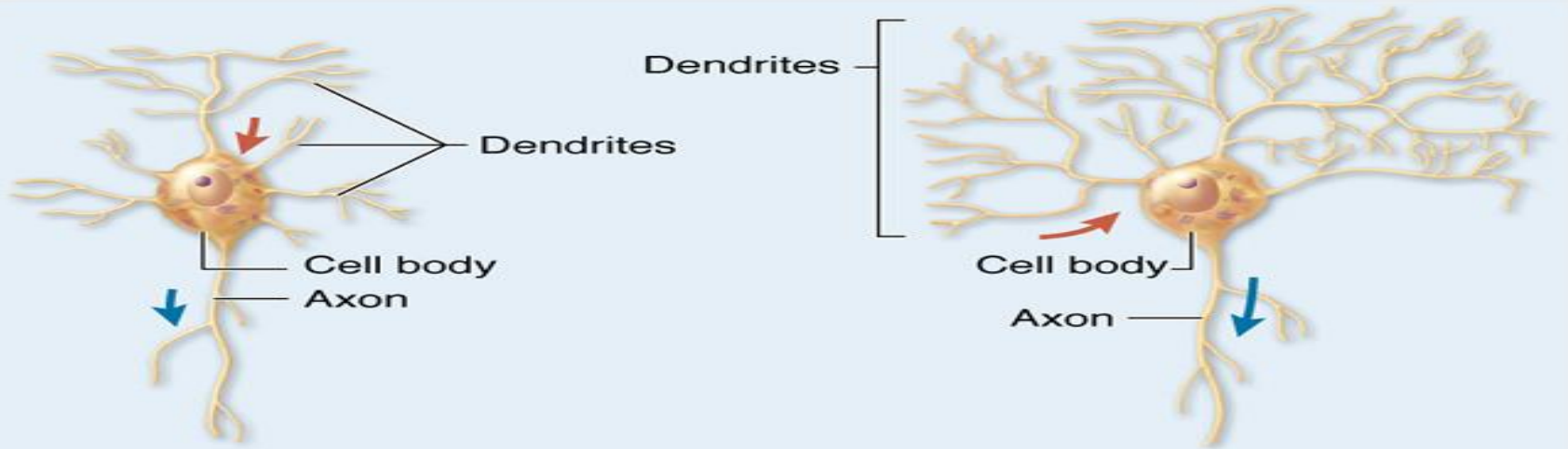
Types of the Neurons:

Multipolar (motor) neurons : have large cell body + large axon + many dendritic processes.

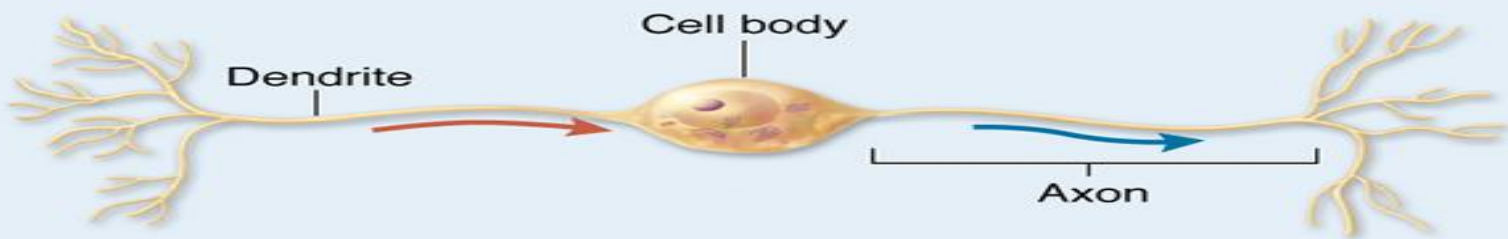
Unipolar (pseudounipolar) (sensory) : cell body + one large process divided into 2 branches, one is axon & other is dendrite.

Bipolar : simple cells provide local communications within the CNS having 2 main processes of equal size one axon & other dendrite.

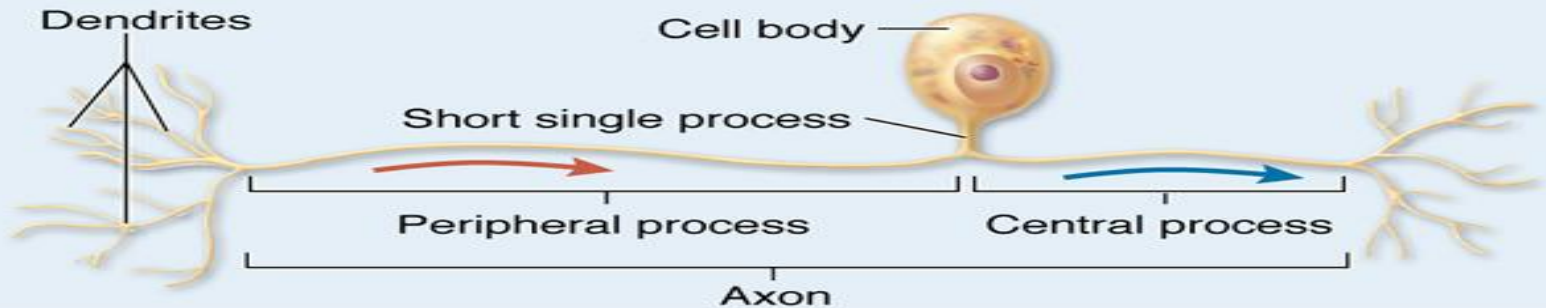




a Multipolar neurons



b Bipolar neuron



c Unipolar neuron

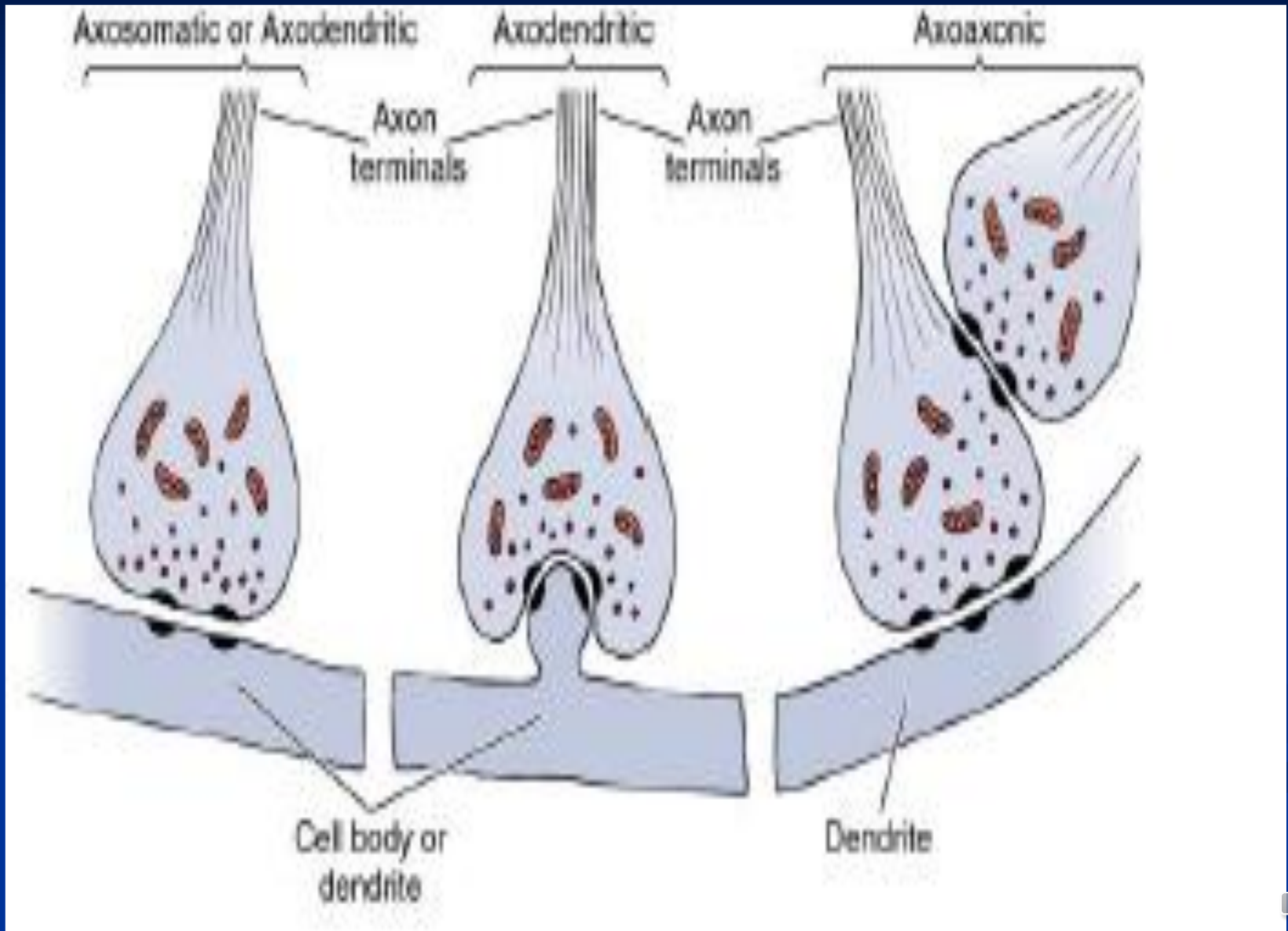


Neurons are of 3 types:

- Sensory (afferent) somatic (ppts) visceral (p)
- Motor (efferent) somatic & visceral
- Interneuron



Synapses:



Thank you

