

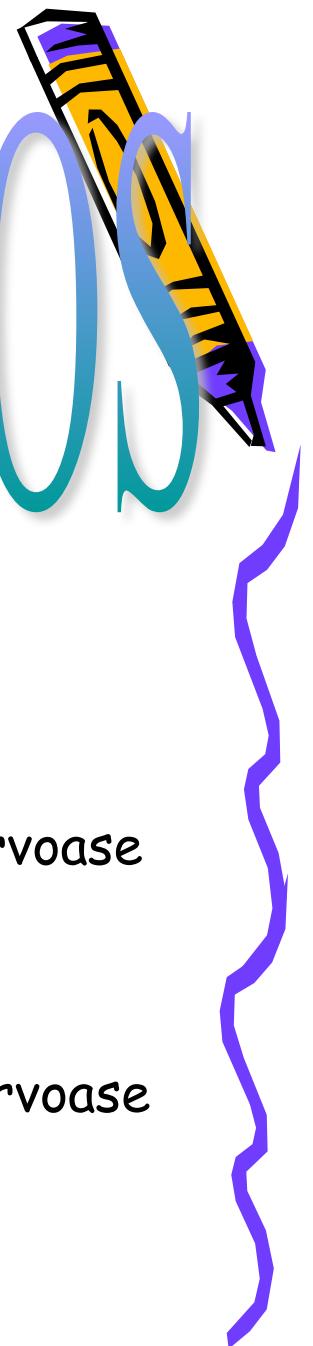
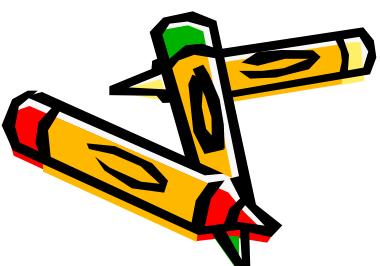
SISTEMUL NERVOUS

PROIECT REALIZAT DE GRUPA I
CLASA a XI a D, CNTV.

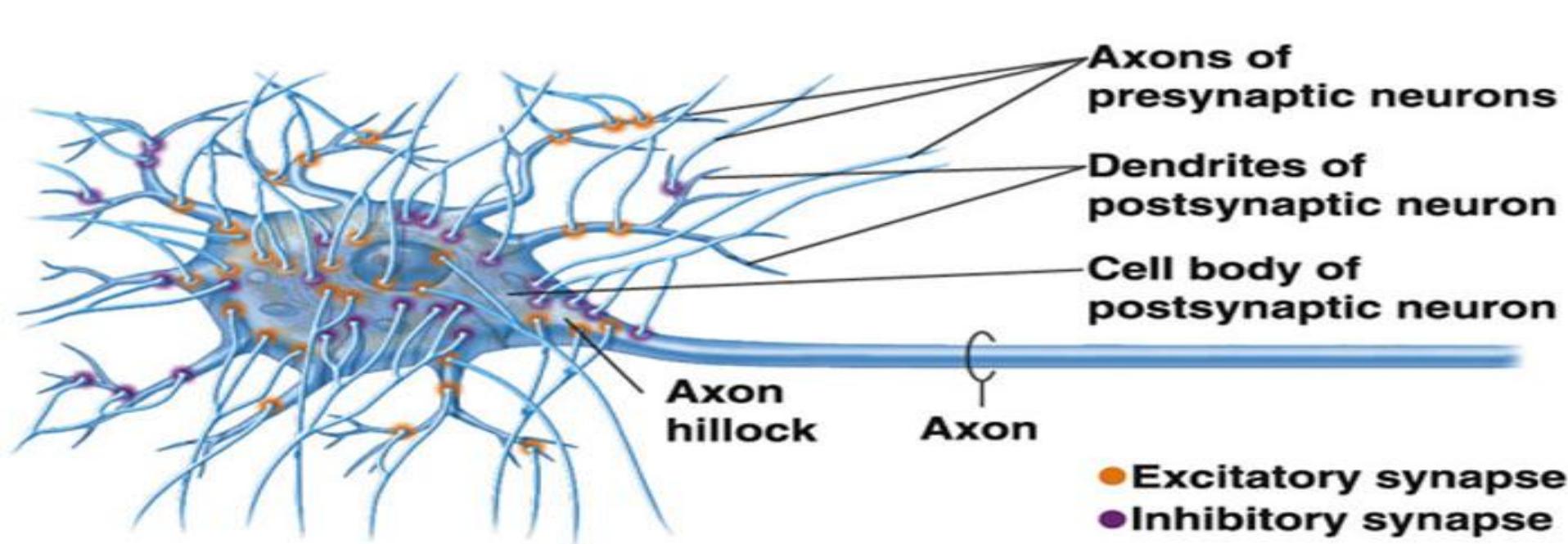
Claudiu : Localizarea, morfologia si anatomia organelor nervoase

Lucia : Circuite neuronale

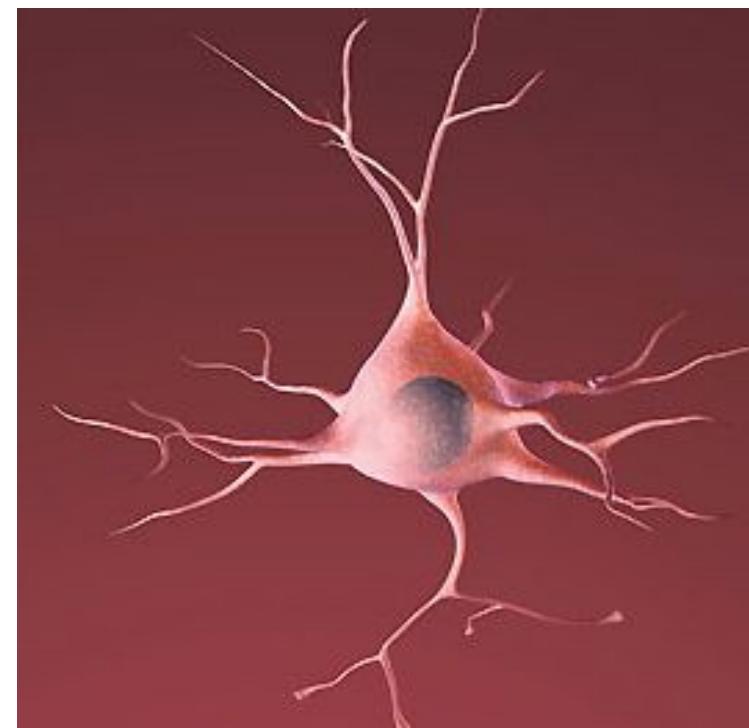
Adriana: Consecinte ale afectarii integritatii organelor nervoase

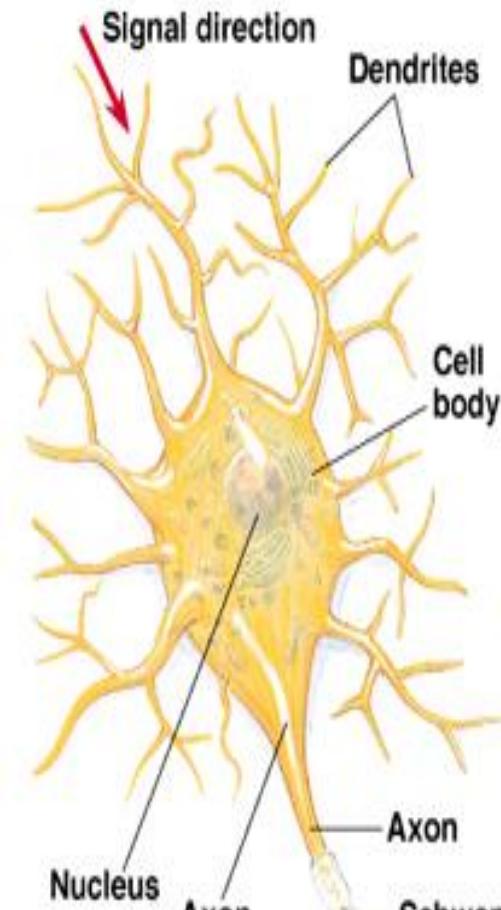


Localizarea, morfologia
si anatomia
organelor nervoase

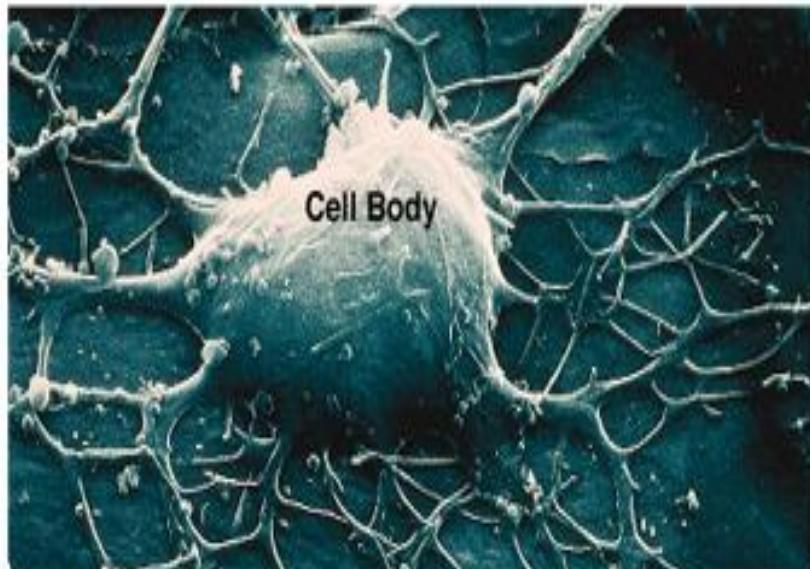


Neuronul este
unitatea
morfo-functională a
sistemului nervos.

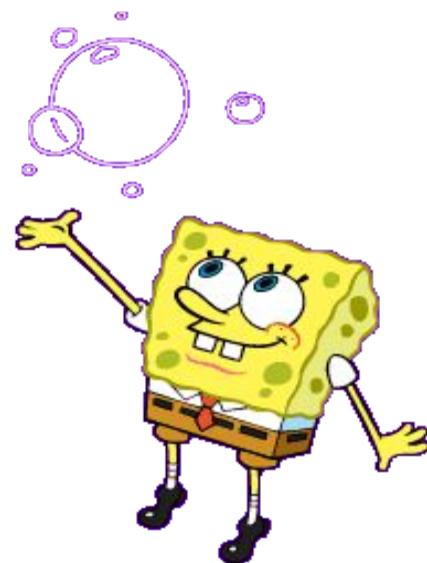
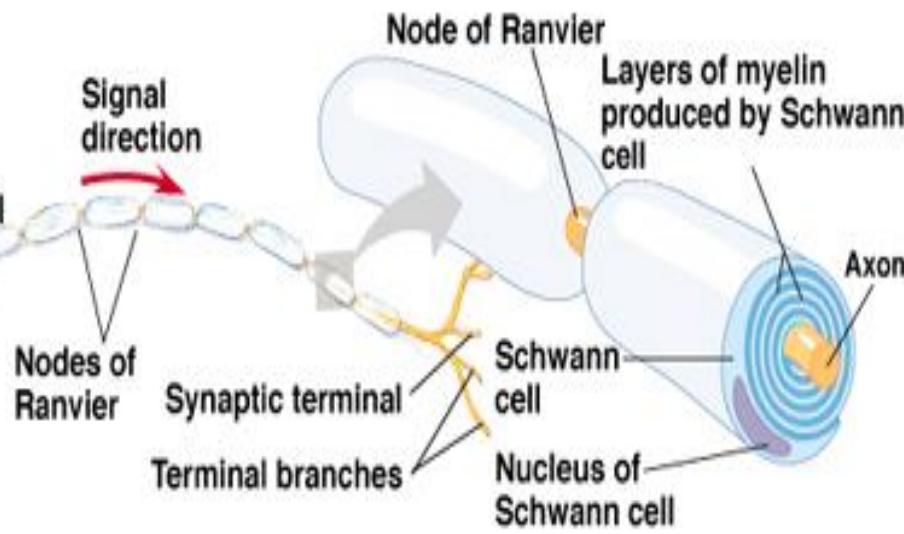




(a)



(b)





Sistemul nervos intregreaza organismul in mediul sau de viata si coordoneaza activitatea organelor interne.



- In organele nervoase, neuronii formeaza retele immense, fiind conectati intre ei prin multiple legaturi sinaptice

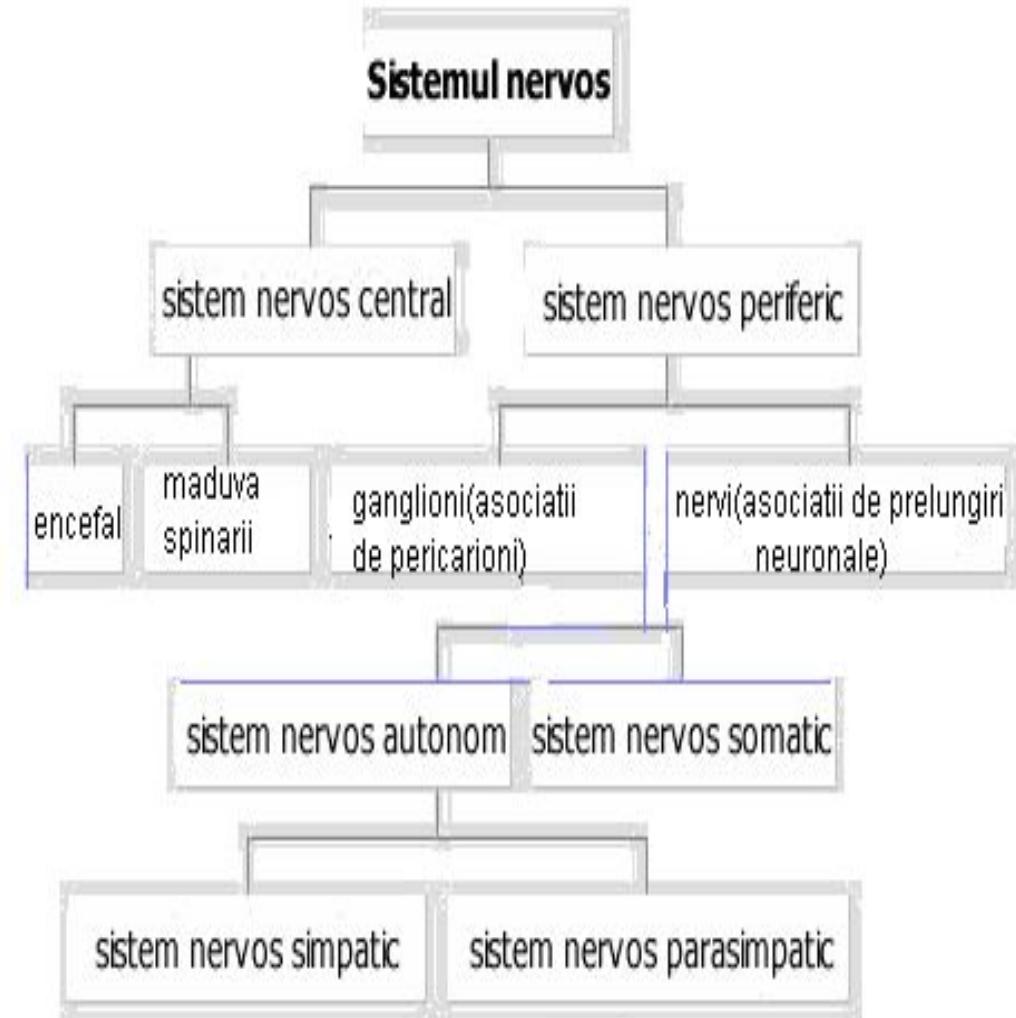


Ce poti face
cu
cu 100 de miliarde de
neonani?



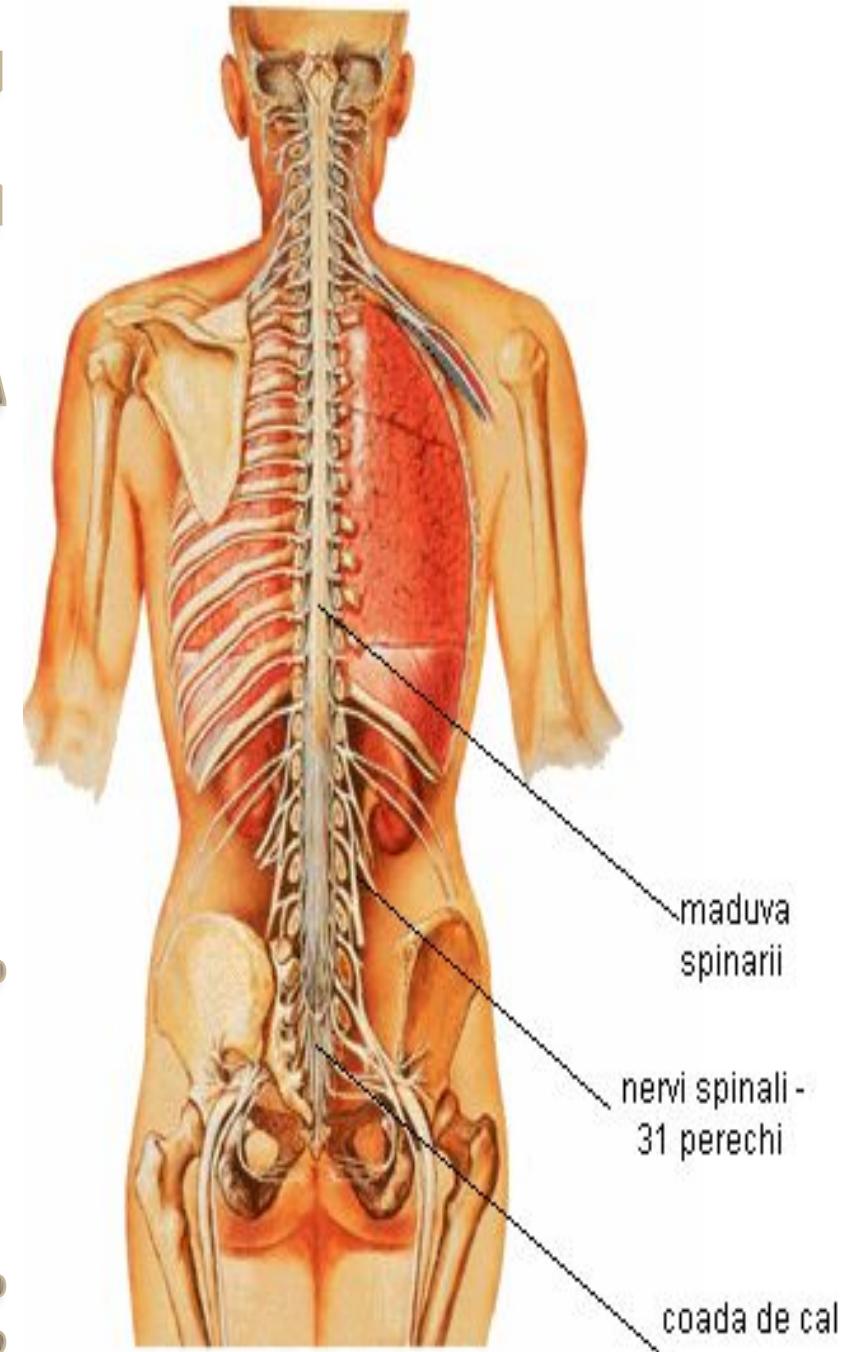
Asociatiile de neuroni formeaza structuri nervoase, organele sistemului nervos central si periferic.

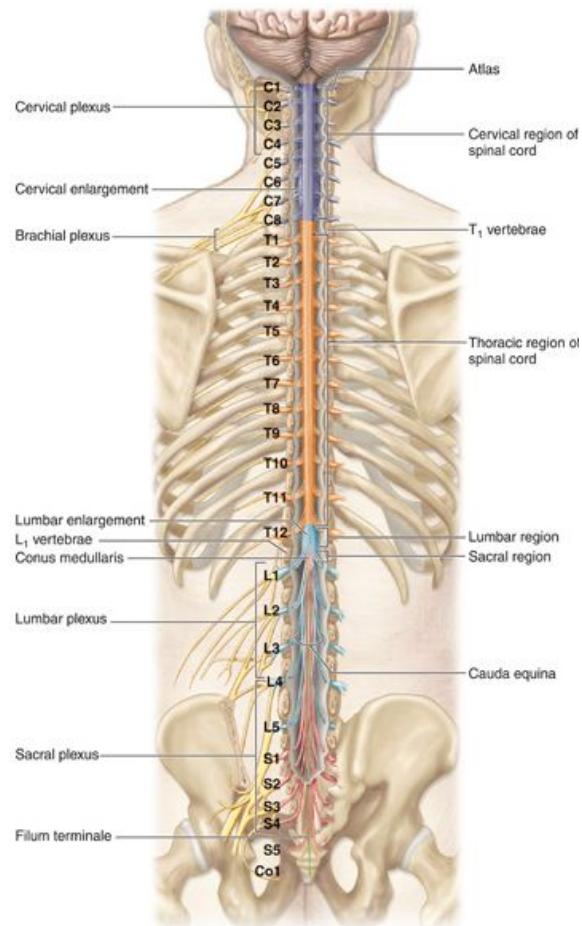
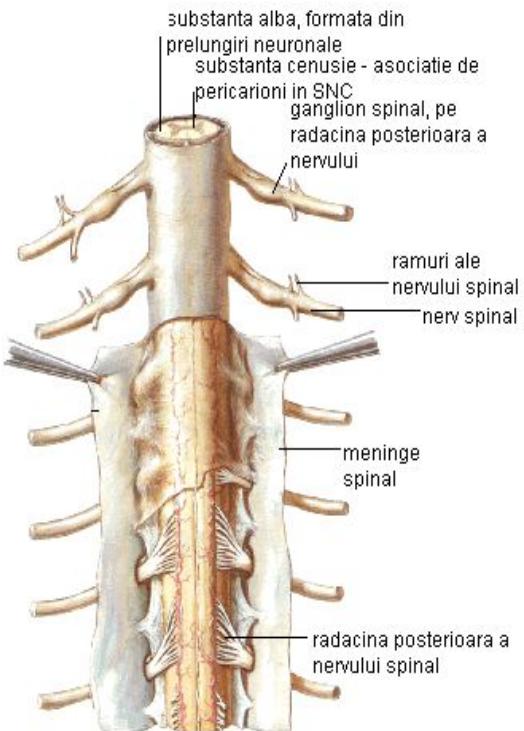
Acestea au functii somatice si vegetative.



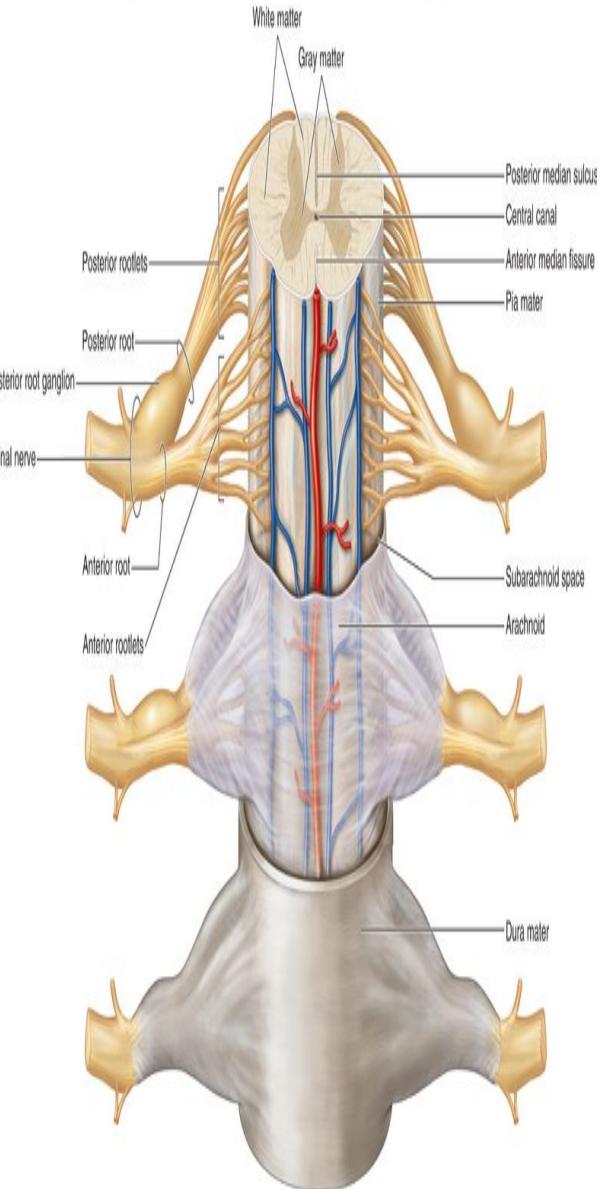
- se afla in canalul vertebral
- este invelita de meninge,format din
 - duramater
 - arahnoida
 - piamater
- comunica cu receptorii si efectorii prin 31 de perechi de nervi spinali mixti.

Maduva spinarii

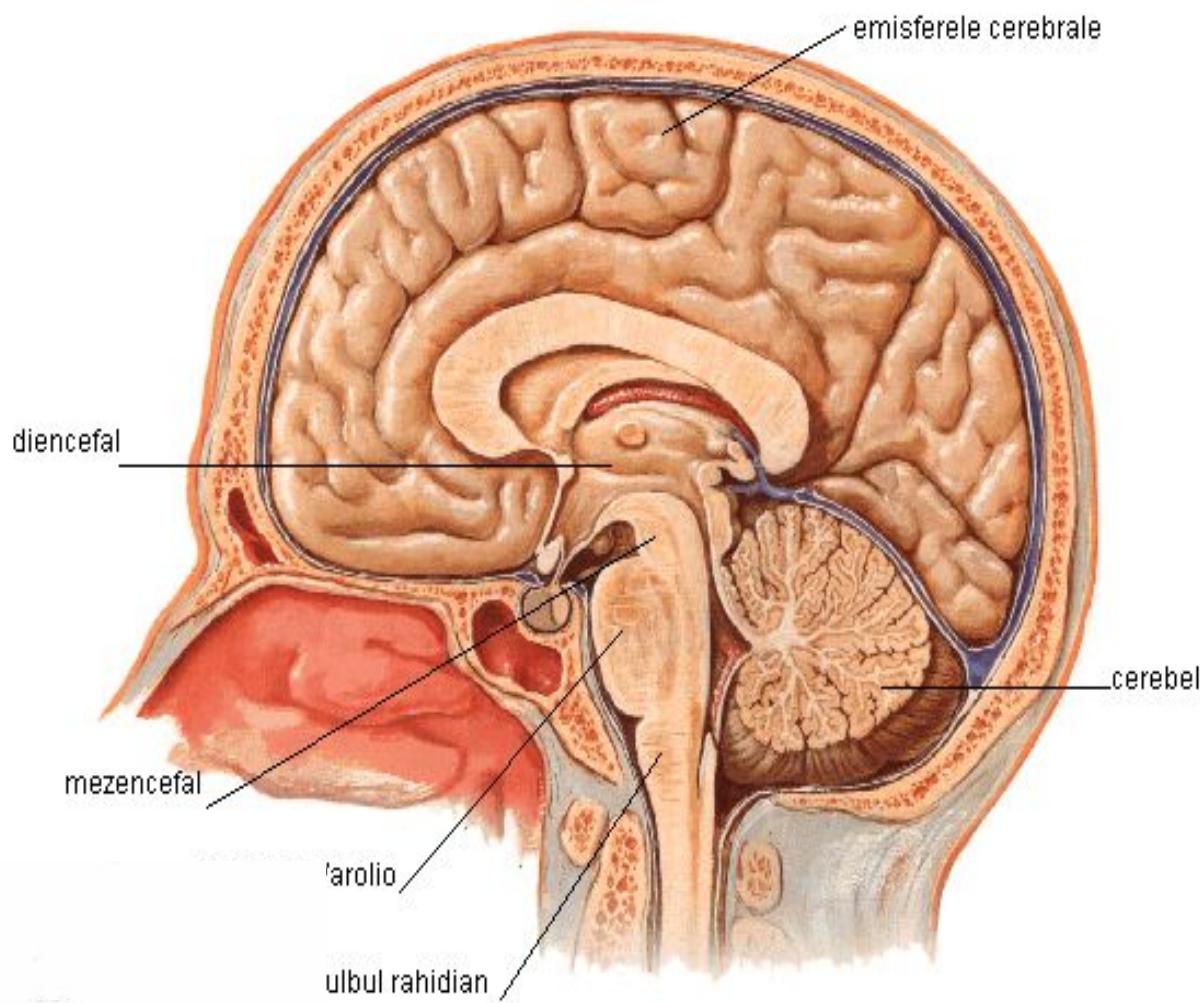




d

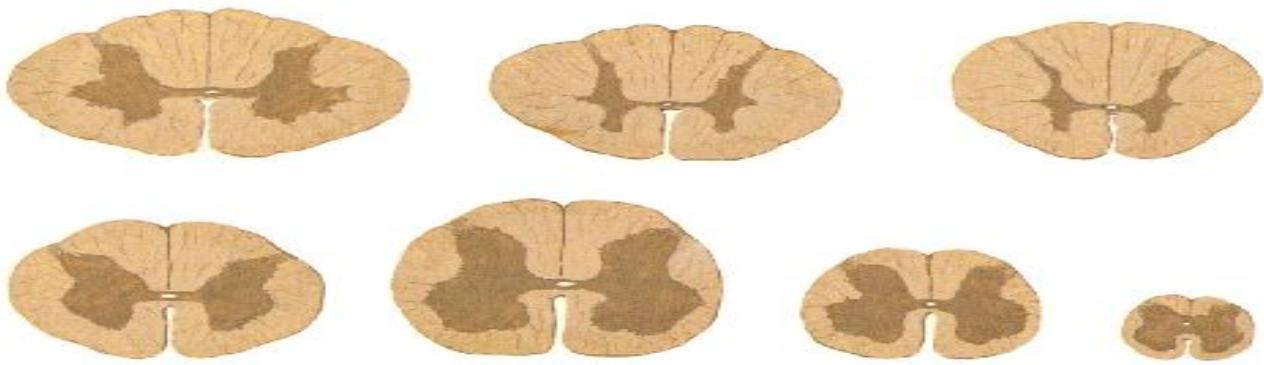


Encet inieție

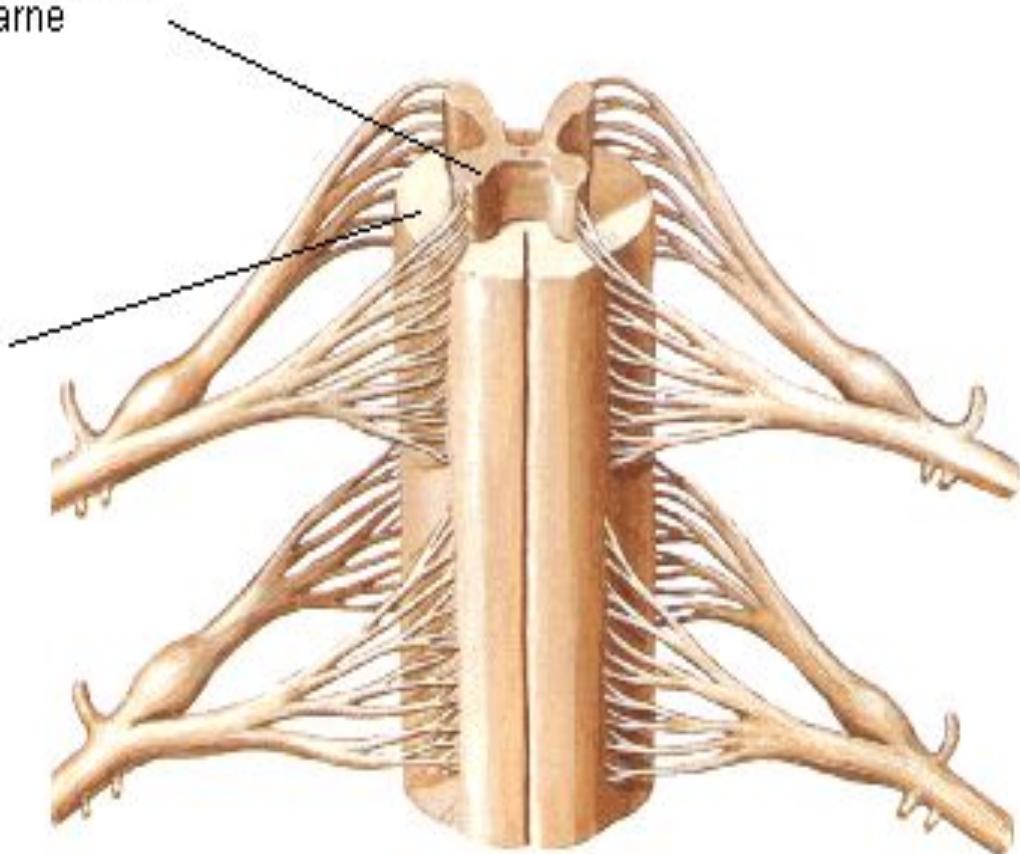


- Toate organele nevraxului sunt formate din :

- substanta alba -implicata in conducerea nervoasa
situata - periferic maduva spinarii
 - periferic si la interior in trunchiul cerebral si diencefal
 - la interior in cerebel si emisferele cerebrale
- substanta cenusie, ce asigura functia reflexa
situata – la interior in maduva, trunchi, diencefal
 - periferic si la interior in cerebel
 - si emisferele cerebrale



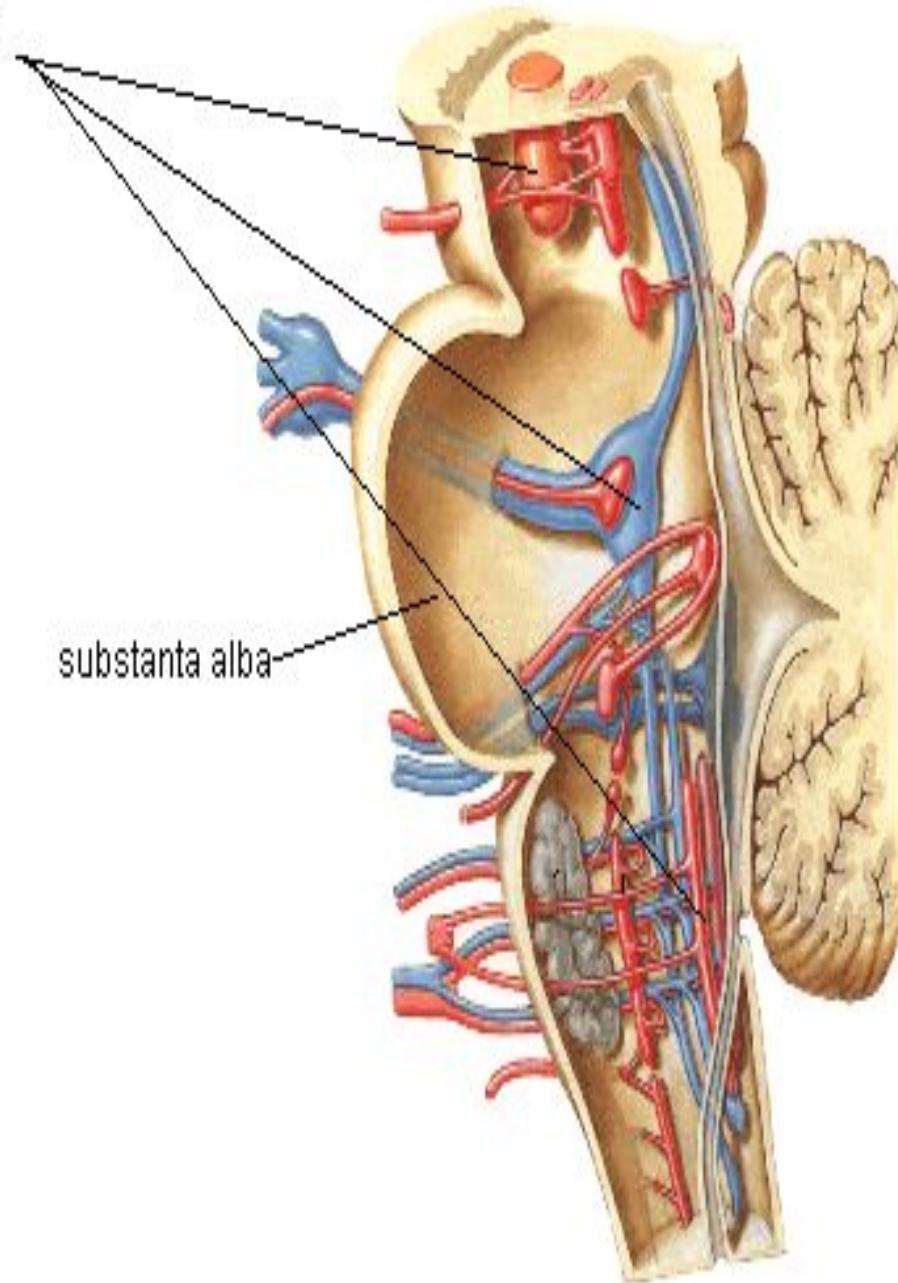
substanta cenușie, cu 3
perechi de coarne



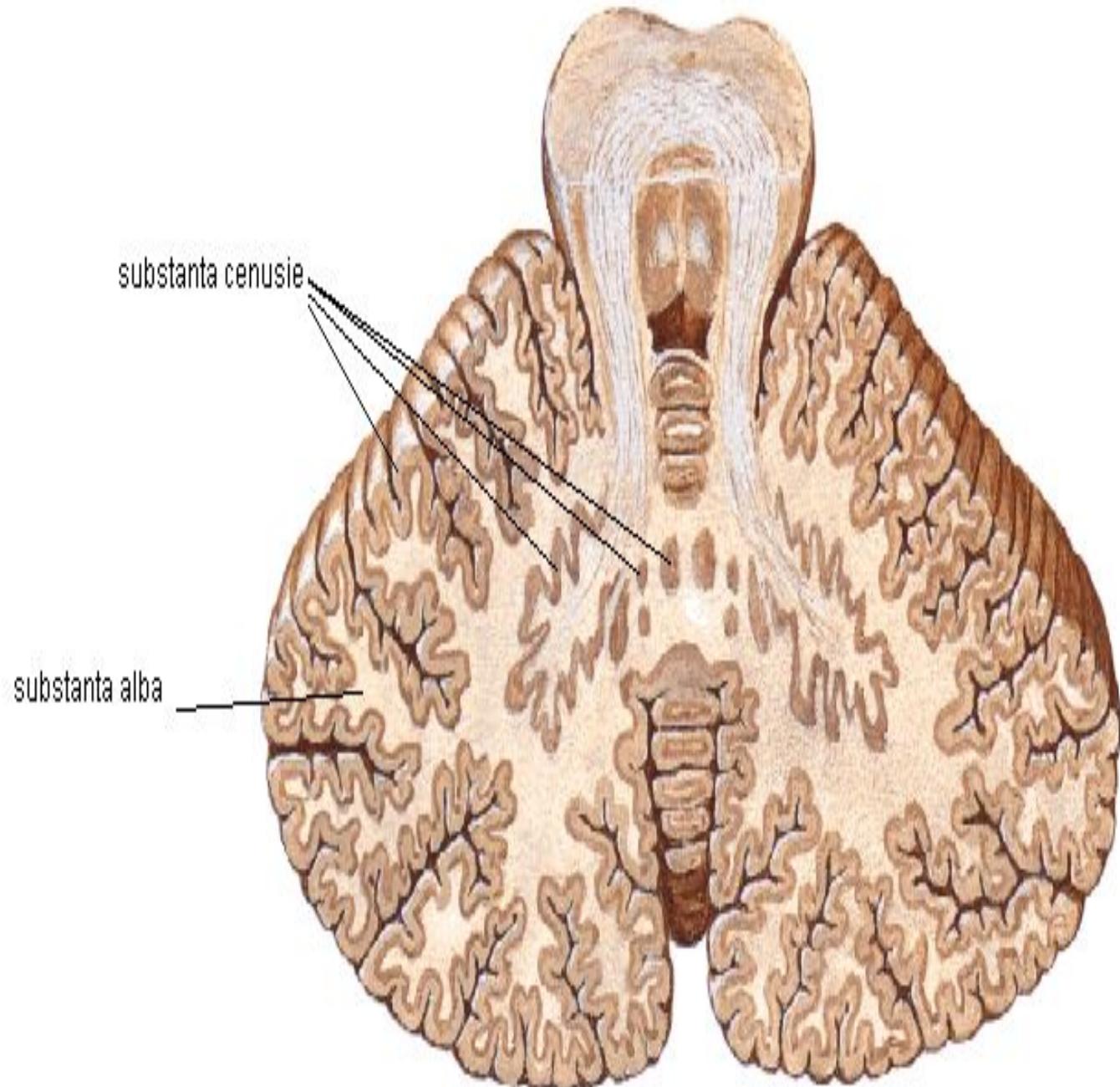
substanta alba,
cu 3 perechi de
cordoane

Trunchiul cerebral

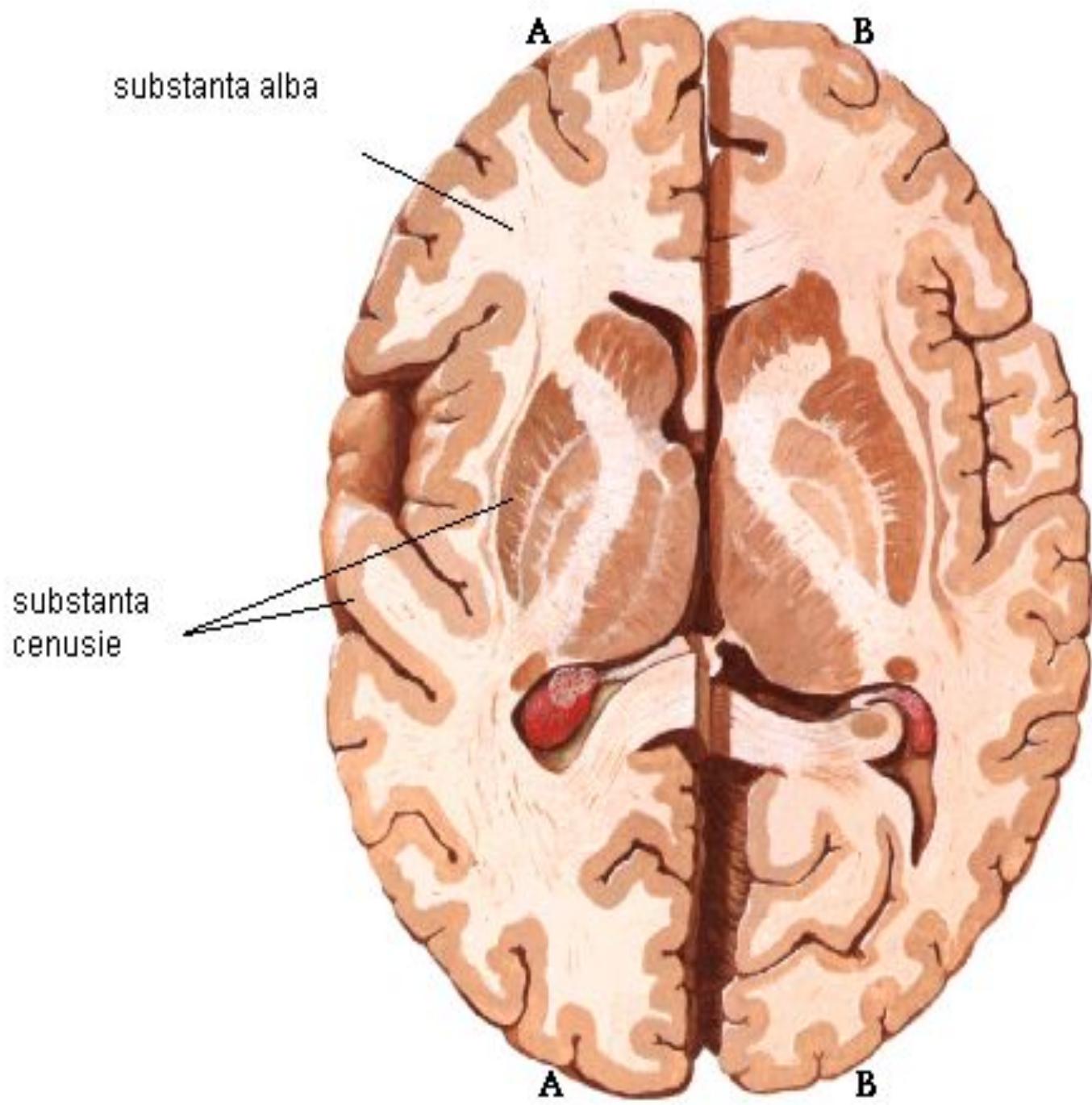
nuclei de substanta
cenușie



Centro
neurodegenerativo



Emisfero cerebrale



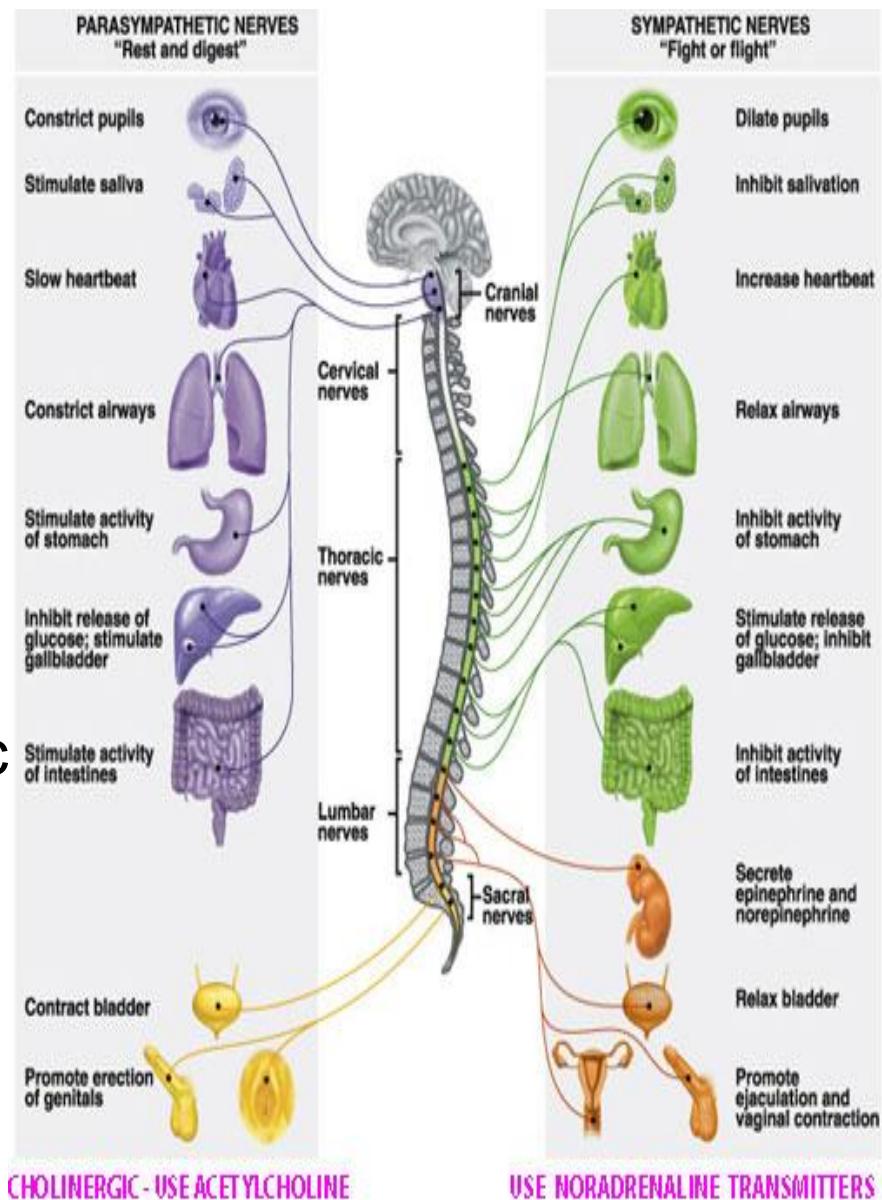
Sistemul nervos vegetativ

Are 2 componente: simpatica si parasimpatica.

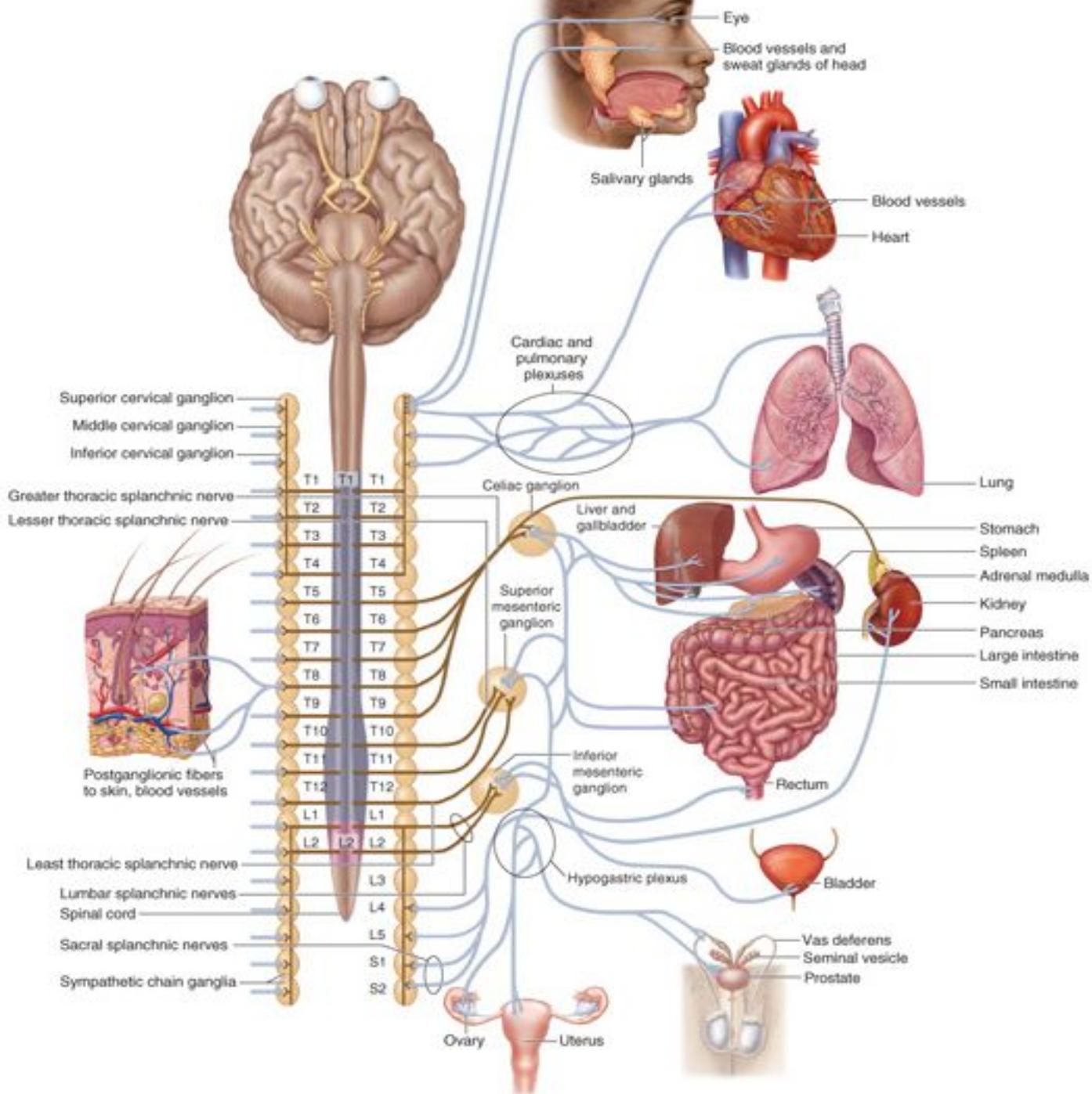
Componenta periferica este reprezentata prin nervi vegetativi si ganglioni vegetativi.

Componenta centrala apartine :

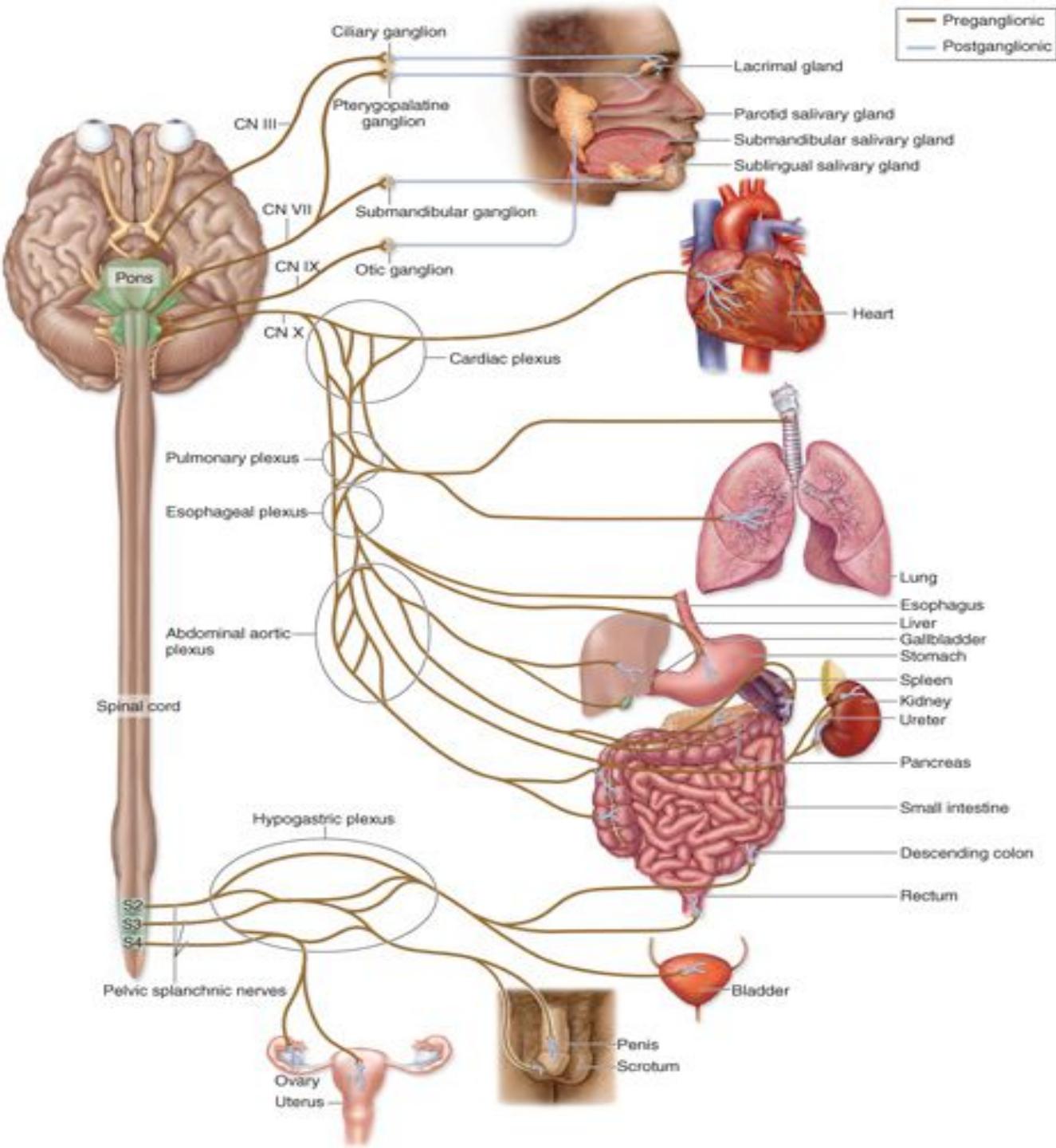
- maduvei $C_8 - L_2$ pentru simpatic
- trunchiului cerebral si maduvei $S_2 - S_4$ pentru parasimpatic



SNTS Sympathetic

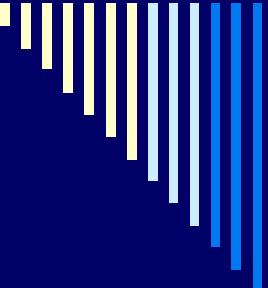


SNTV Parasympathetic



- Centrul de coordonare a activitatii SNV se afla in hipotalamus (diencefal), organ nervos ce functioneaza in stransa corelatie cu sistemul limbic al scoartei cerebrale.





Circuite neuronale

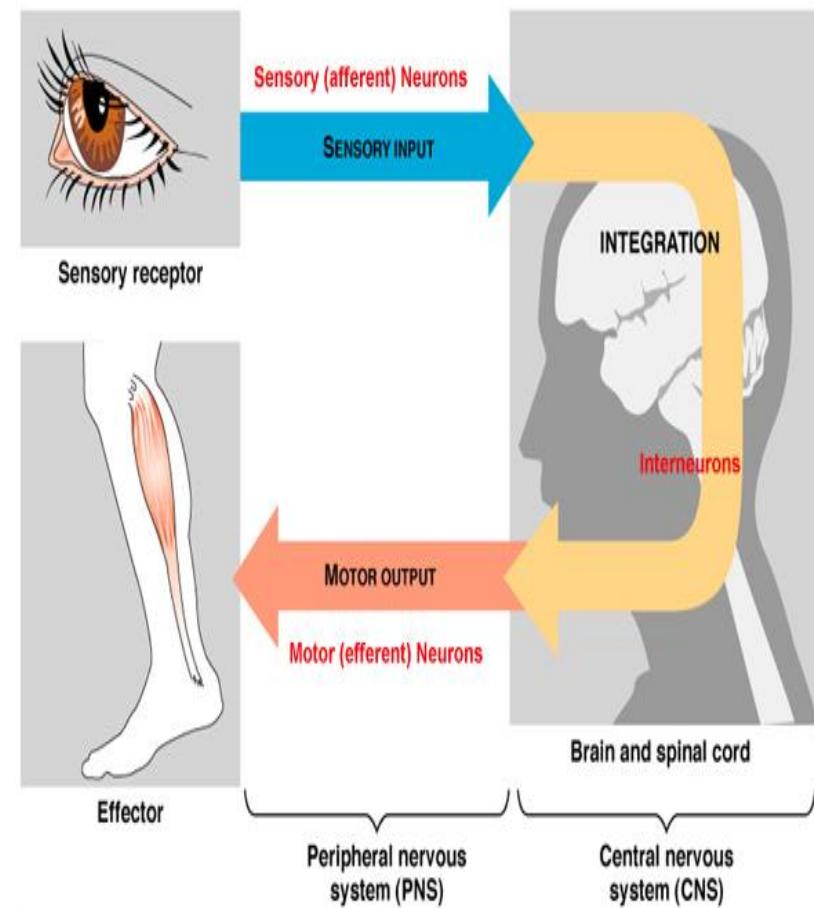
Circuitele functionale neuronale sunt reprezentate de caile de substanta alba extra si intranevraxiale.

Caile extranevraxiale includ
31 de perechi de nervi spinali mixti
si
12 perechi de nervi cranieni:
3 senzitivi, 5 motori si 4 mixti.

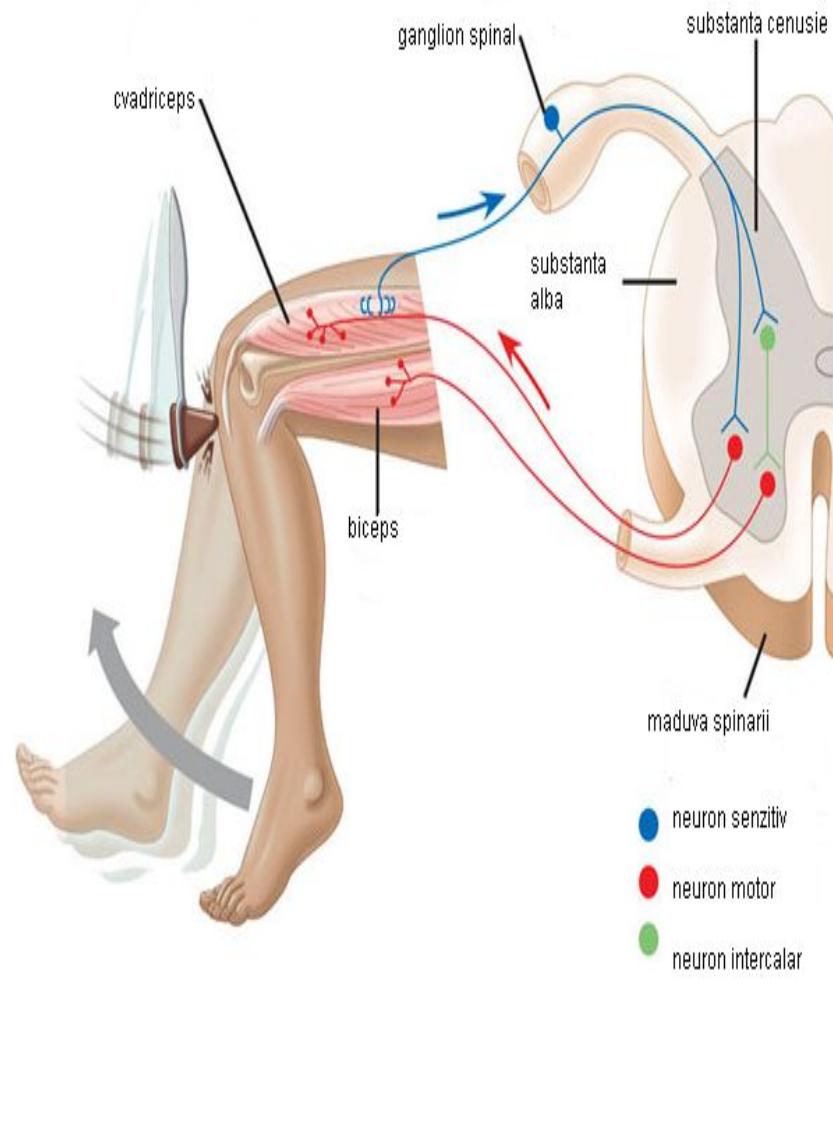
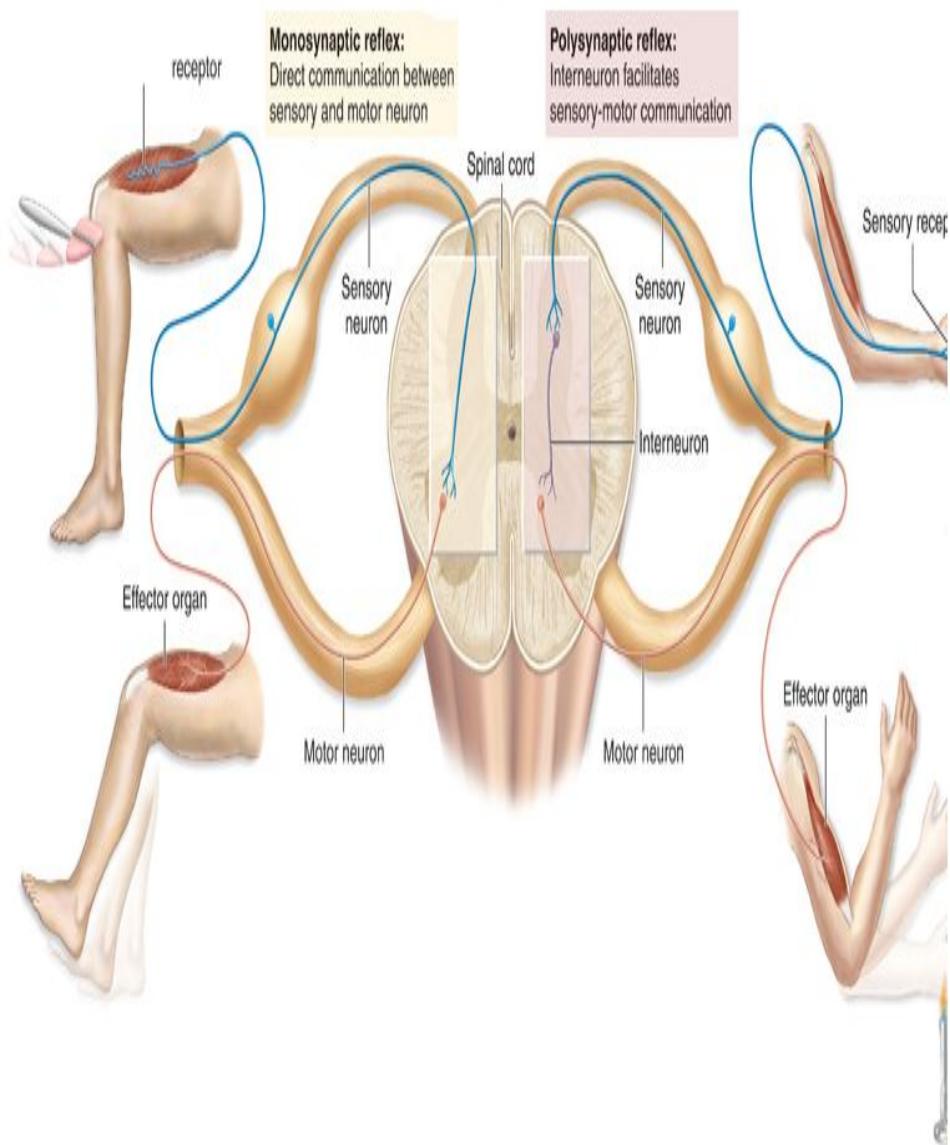
Nervii contin dendrite si axoni, protejati de
tesut conjunctiv
si
conecteaza nevraxul cu receptorii si
efectorii.

Arcul reflex este baza anatomica a actului reflex si include:

- Receptorul
- Calea aferenta(senzitiva)
- Centrul nervos intranevraxial
- Calea eferenta (motorie)
- Efectorul (muschi sau glanda)



Arcul reflex somatic



- Intranervraxial , circuitele neuronale sunt reprezentate de tracturile nervoase, ce formeaza cai:
 - scurte(de asociatie)
 - lungi(comisurale si de proiectie)

Caile ascendente sunt:

- Exteroceptive : tactile, termice, dureroase
- Proprioceptive : constiente si inconstiente
- Visceroceptive : spino-talamice sau in SR

Posterior

Posterior funiculus -
medial lemniscal pathway

Fasciculus gracilis

Fasciculus cuneatus

Spinocerebellar
pathway

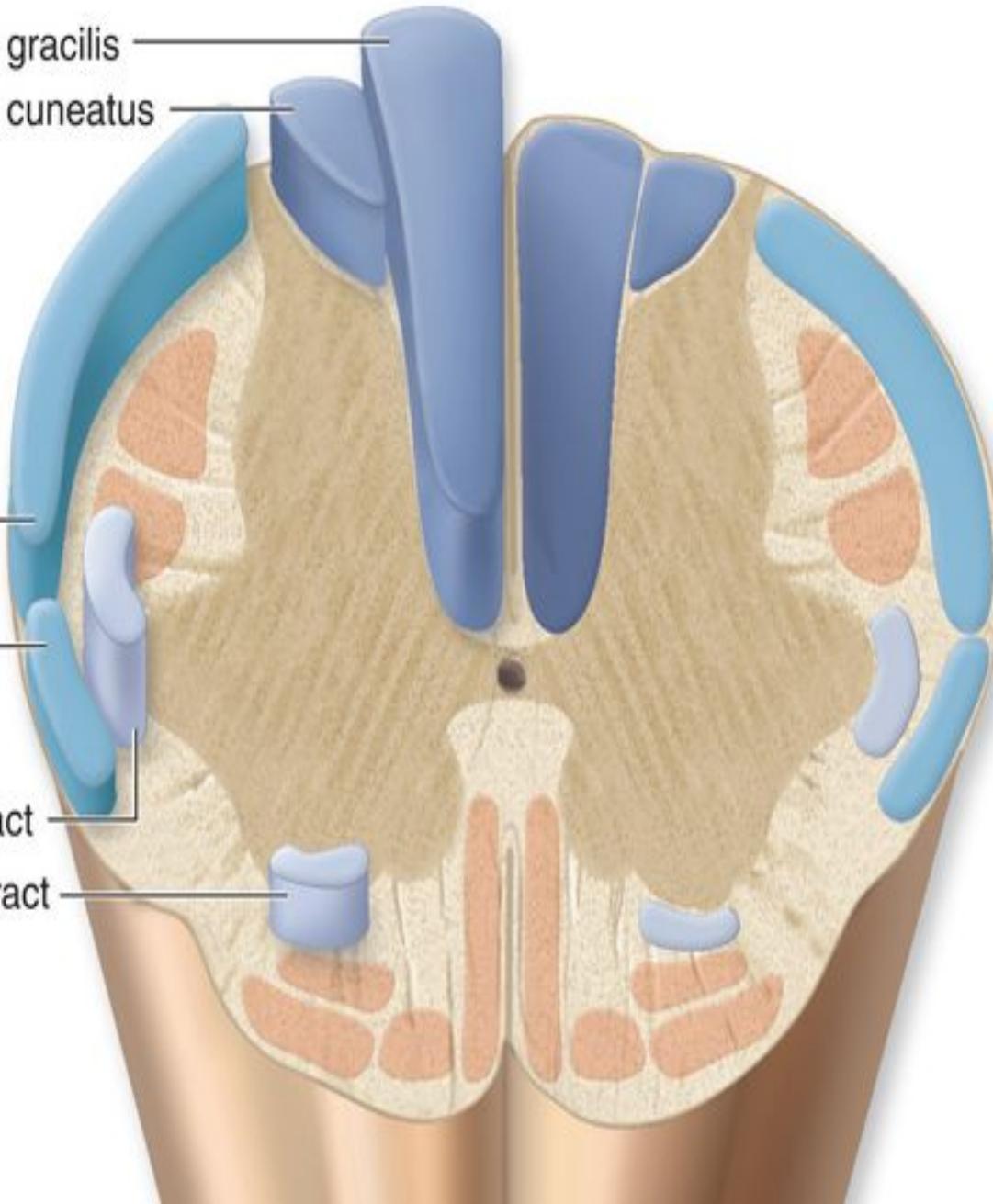
Posterior
spinocerebellar tract

Anterior
spinocerebellar tract

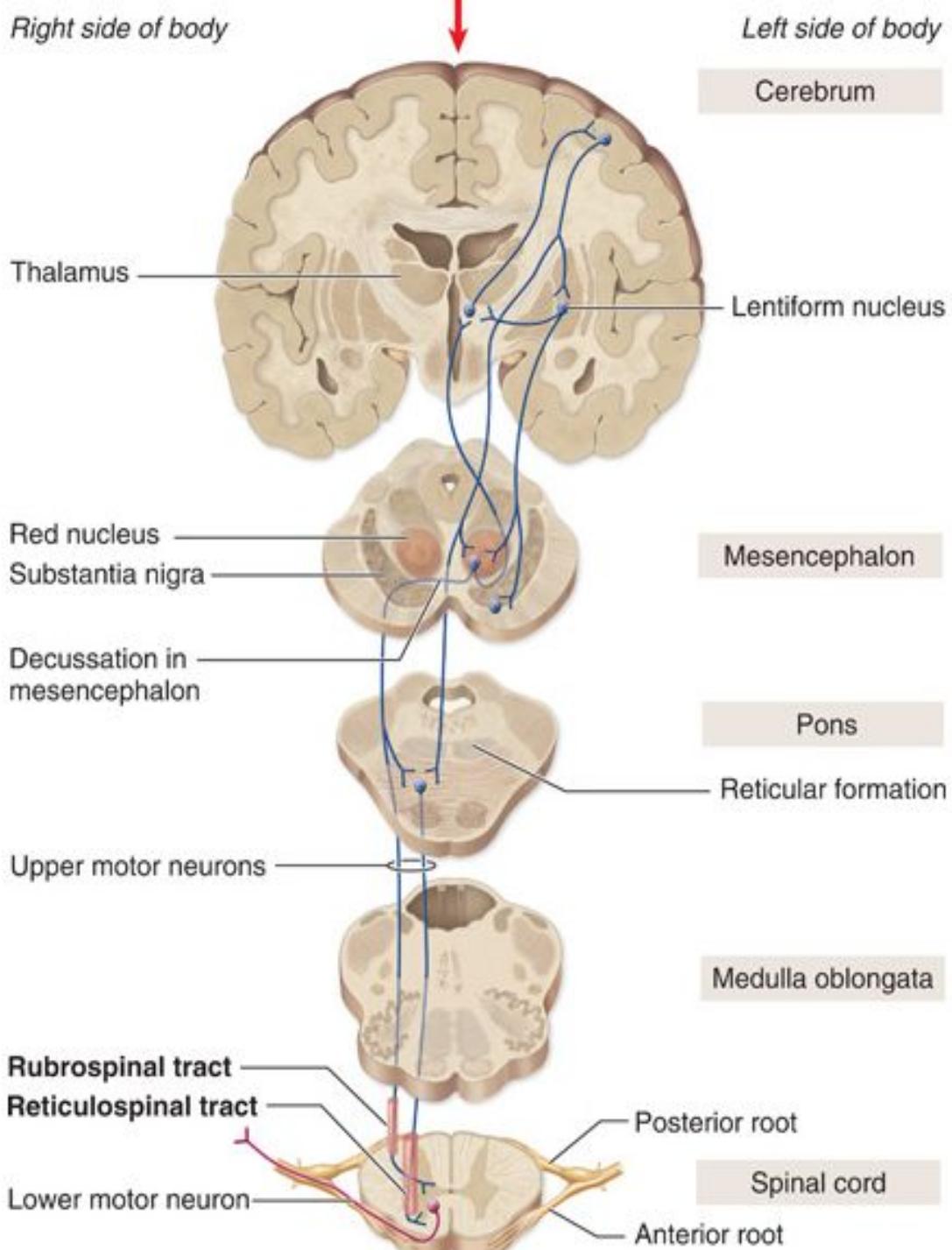
Anterolateral
pathway

Lateral spinothalamic tract

Anterior spinothalamic tract



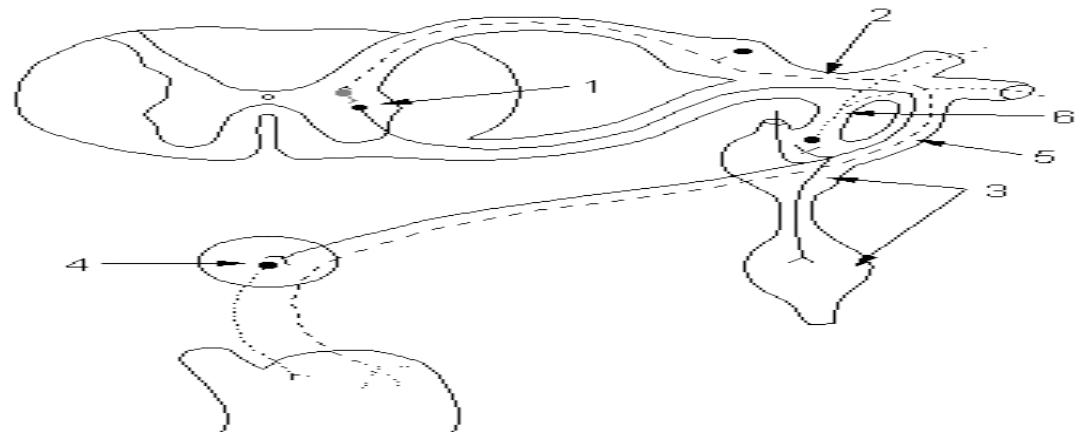
Caudate descendente



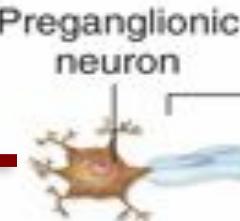
Distriplamidale

Arcul reflex vegetativ

1. corn lateral,
2. nerv spinal,
3. ganglion paravertebral,
4. ganglion prevertebral,
5. ram comunicant alb,
6. ram comunicant cenusiu



parasimpatic



Long preganglionic axon

Ganglionic neuron

postganglionic axon



Short, branching
preganglionic axon

Long postganglionic axon

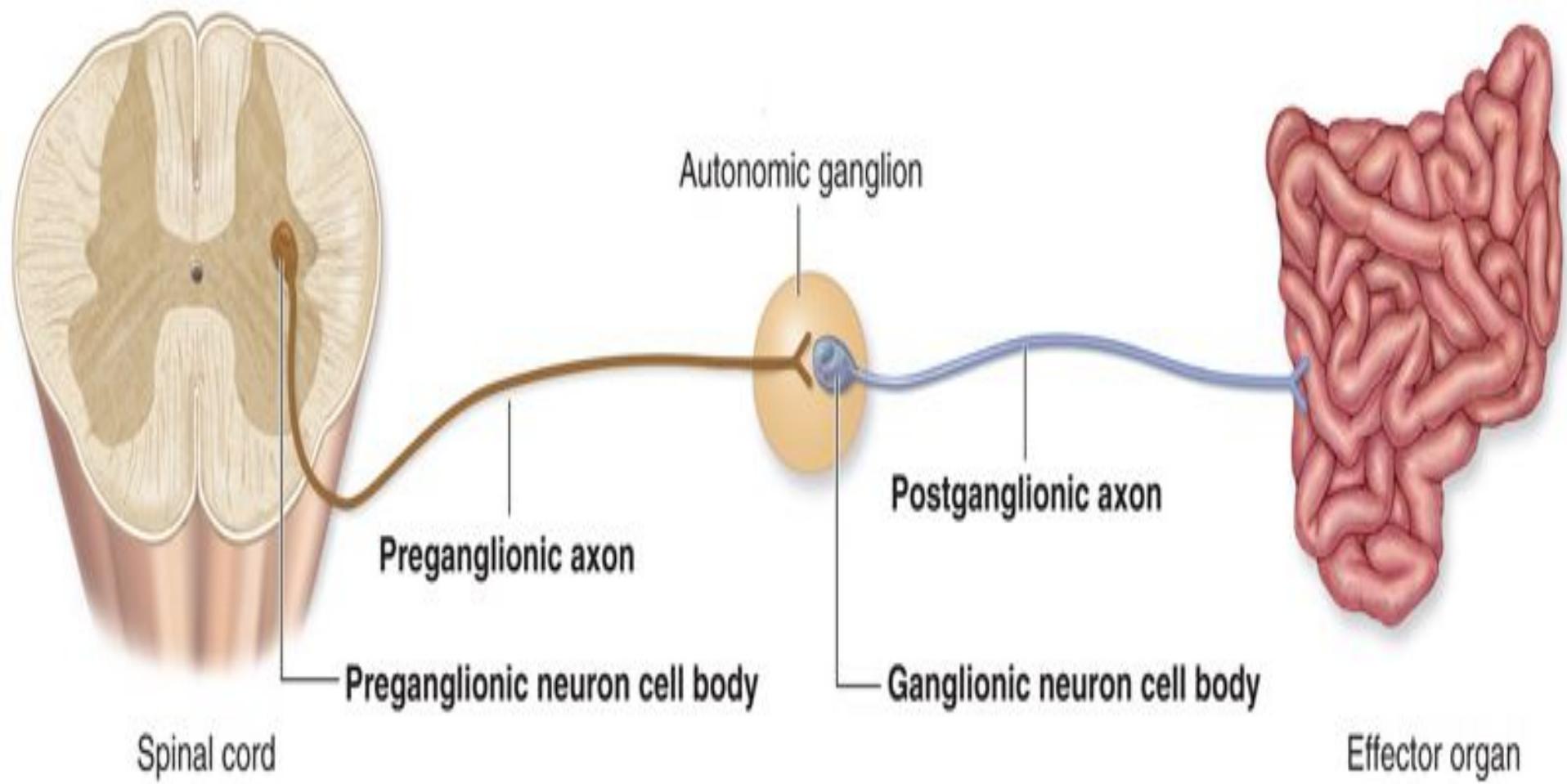


Preganglionic neuron

Ganglionic neuron

simpatic

Eferenta vegetativa simpatica



Consequently, we must conclude that the
whole of the present system of law is
unconstitutional, and that it is
imperative that it should be
replaced by a new system which
will be based upon the principles
of justice and equality before the law,
and will be designed to protect
the rights of all citizens without
exception.

100 de miliarde?



Alcoolul...

afecteaza creierul intervenind in activitatea centrilor care coordoneaza **echilibrul, perceptia, vorbirea si gandirea**;

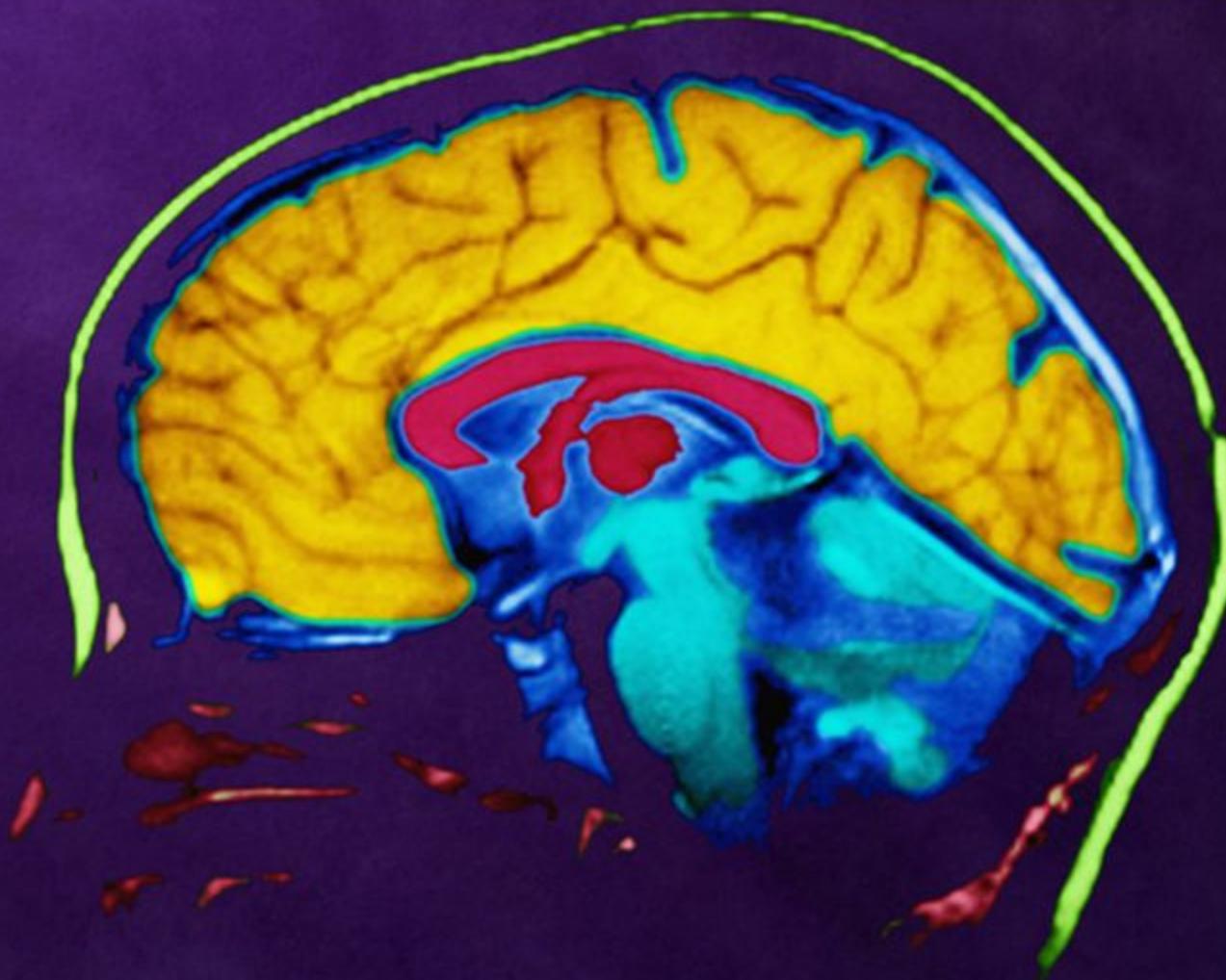
produce **dificultati in vorbire si erori in procesul de gandire**;

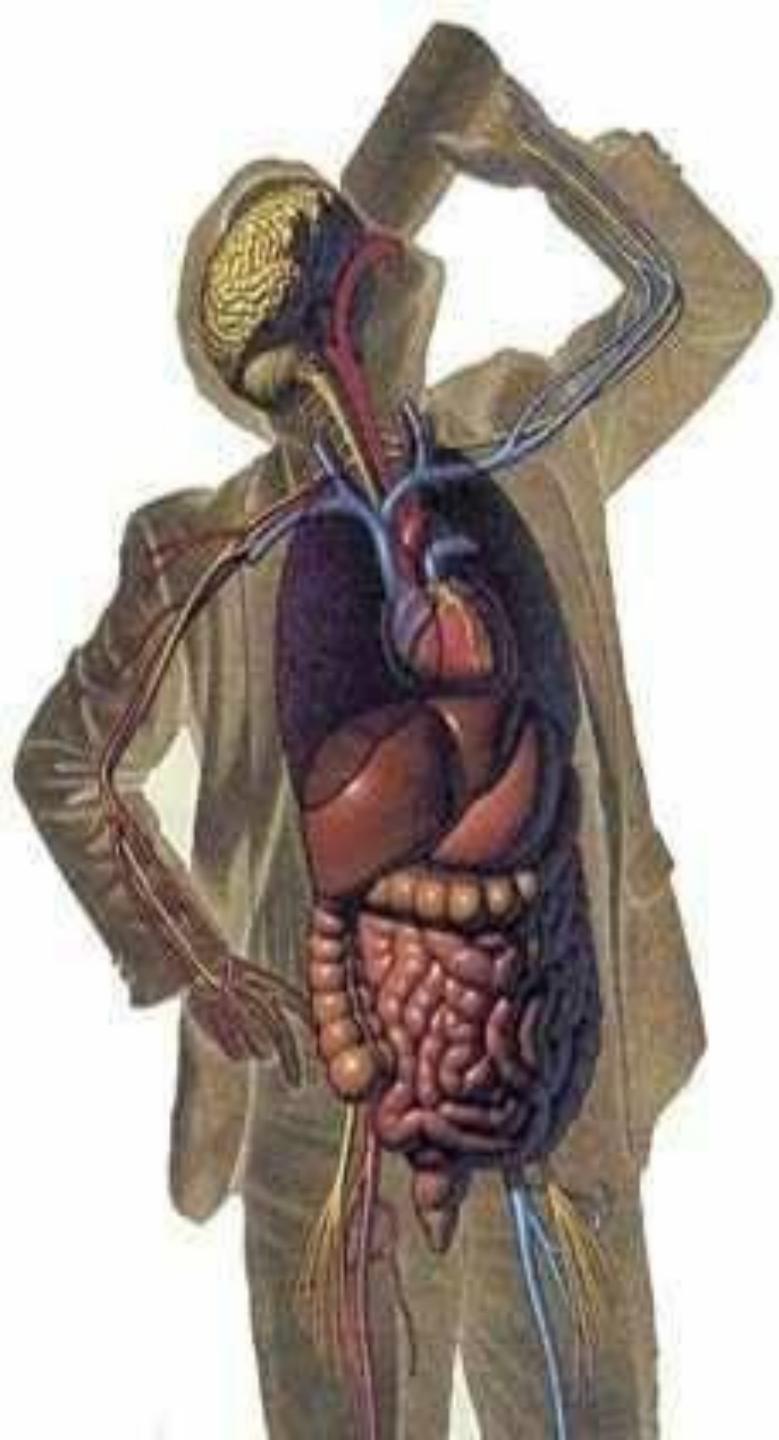
sunt afectati centrii coordonarii, aparand astfel "simptomele" clasice: **mersul impleticit, cazaturile**, ajungandu-se pana la imposibilitatea de a mai tine un chibrit aprins in mana;

duce la **disparitia inhibitiilor**. Emotiile sunt exprimate mult mai usor, deoarece acea parte a creierului care ne ajuta sa ne controlam comportamentul este scoasa din functie sau se relaxeaza excesiv astfel incat emotiile devin exagerate.

daca se consuma indeajuns de mult alcool persoana **va adormi** sau, in cazuri extreme, **va intra in coma**.

Alcoolul este cunoscut ca având un efect depresiv, care scade acuitatea reflexelor sistemului nervos central





Crește riscul
de accident
vascular cerebral





Producă
retardare
mentală

Sedativele

• Riscurile abuzului:

- >> apatie, lipsa traiilor emotionale;
- >> slabirea creativitatii;
- >> incapacitatea rezolvării conflictelor;
- >> pierderea simtului raspunderii;
- >> manii, accese de furie, halucinatii, psihozze;
- >> posibil, amplificarea starilor depresive.

SEDATIVE ale sistemului nervos



Benzodiazepine

SEDATIVE si TRANCHILIZANTE ale sistemului nervos



Methaqualona



Seconal



Rohypnol

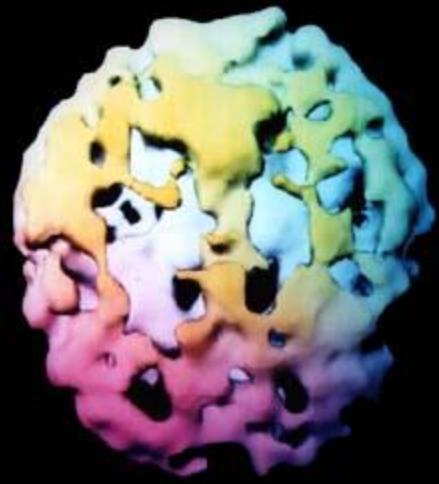


Valium



**DRUGS
ARE
BAD ...
MMM KAY?**

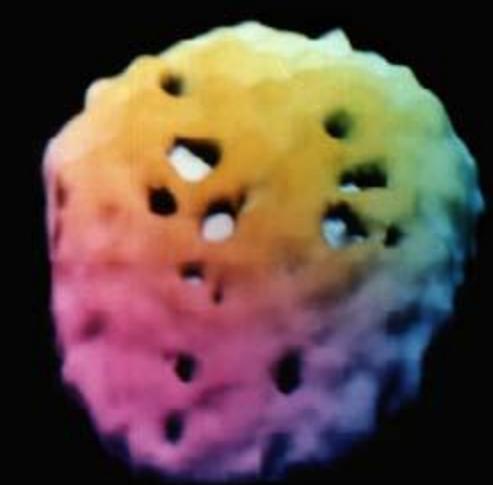




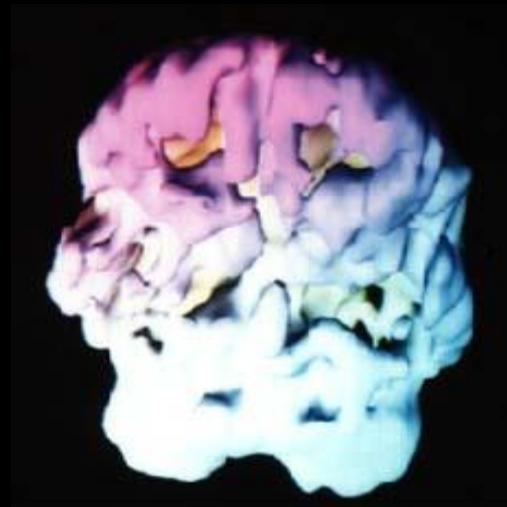
20 de ani de heroină



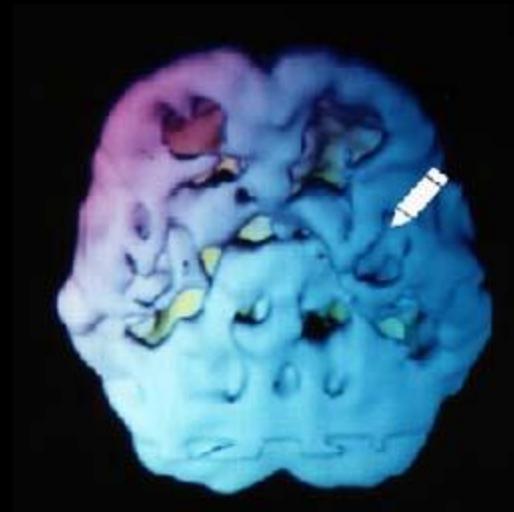
creier normal



2 ani de cocaïna



25 de ani de abuz
de acool



12 ani de marijuana

TEST

Afla despre cunoștințele
tale în materie de alcool,
tutun și droguri
-chestionar -

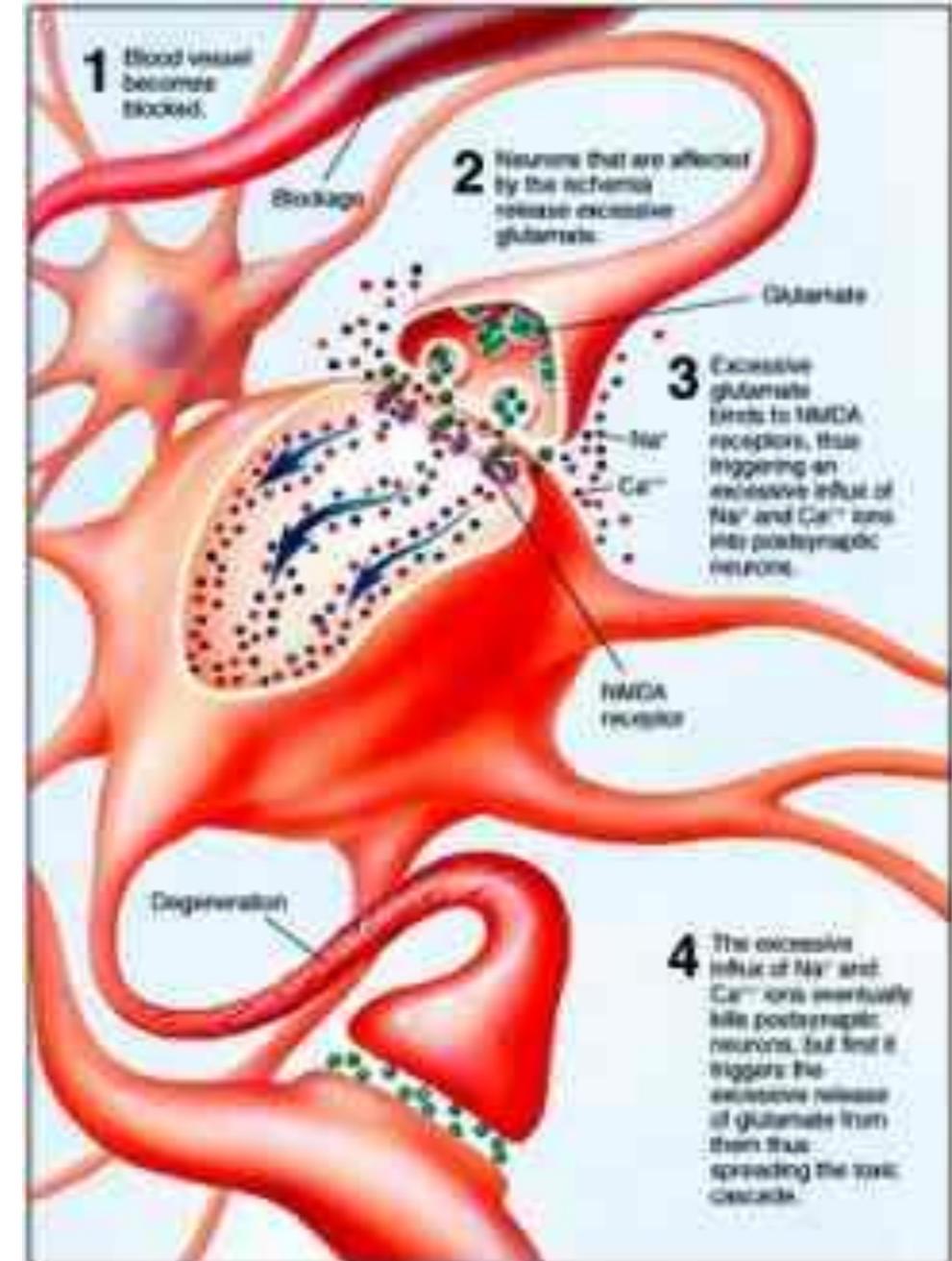


Glutamatul monosodic , E 621, se folosește cel mai mult în alimentele fabricate artificial .

Rolul lui este de a da impresia creierului ca acel aliment este foarte gustos (o păcăleală).

Suprastimularea receptorilor (în creier sau în alte organe) duce la numeroase dezechilibre interne și la probleme de sănătate .

Consumul de glutamat asociat cu aspartam amplifică de câteva ori problemele , la fel ca atunci când se consumă băuturi alcoolice amestecat.



Şocul inducă de GLUTAMAT duce la "arderea" neuronilor din creier și organe

A fost foarte interesant!

