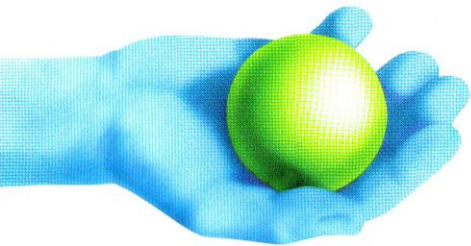


Corso Istruttori

Settore giovanile FIDAL Piemonte

Cambiano 23 ottobre 2016

Grandi Apparati



PROGRAMMA MULTIMEDIALE PER OPERATORI SPORTIVI

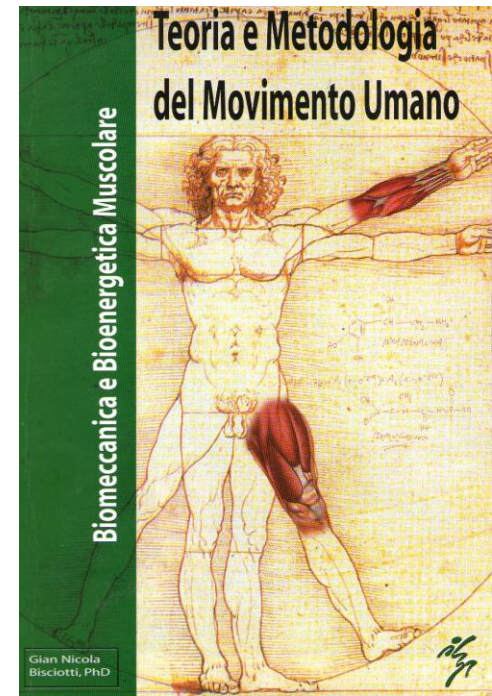
**CORPO MOVIMENTO
PRESTAZIONE**
PARTE GENERALE

ISTITUTO
DELLA ENCICLOPEDIA ITALIANA
FONDATA DA G. TRECCANI

COMITATO
OLIMPICO NAZIONALE
ITALIANO



FIDAL Piemonte
Prof. Luciano Mazzon



Sistema Nervoso

Apparato Endocrino

Apparato Respiratorio

Apparato Digerente

Apparato Escretorio

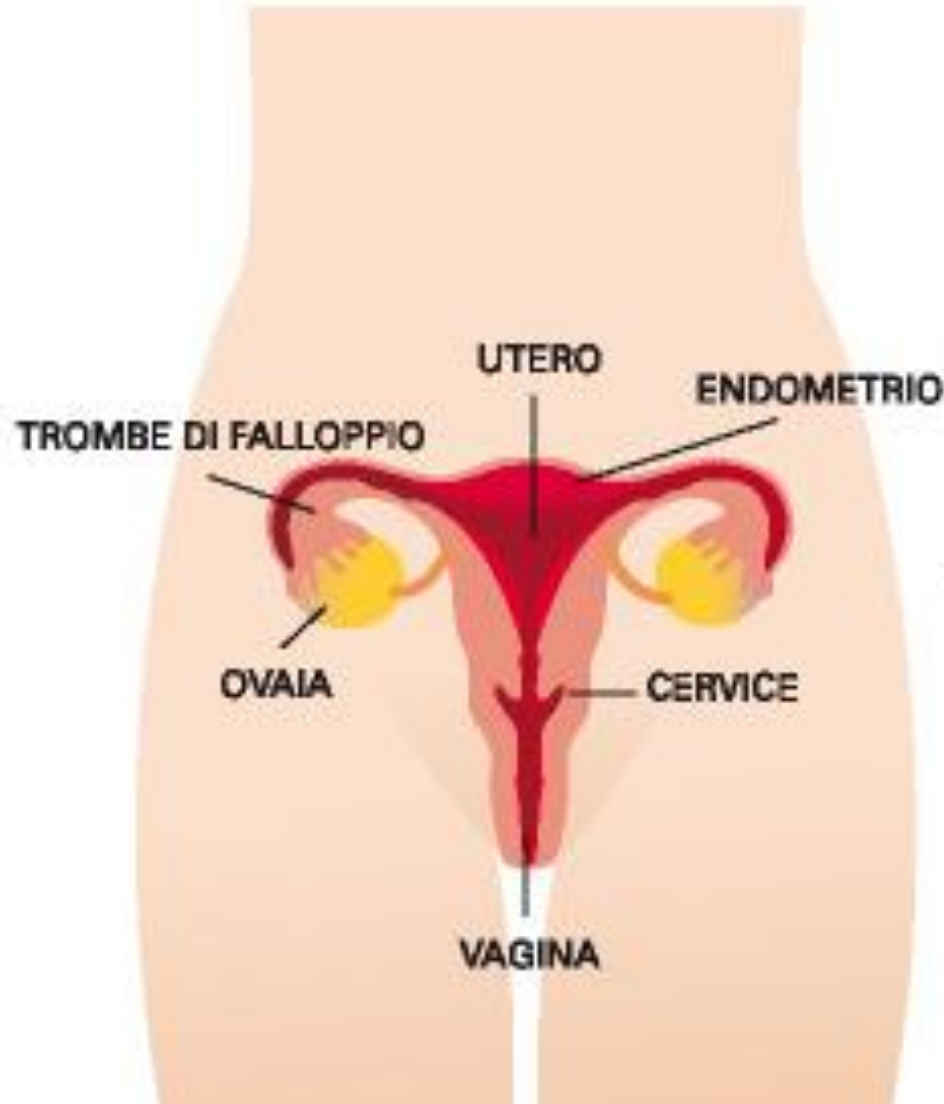
Apparato Cardiovascolare (circolatorio)

Apparato Riproduttore

Apparato Locomotore

Apparato Riproduttore

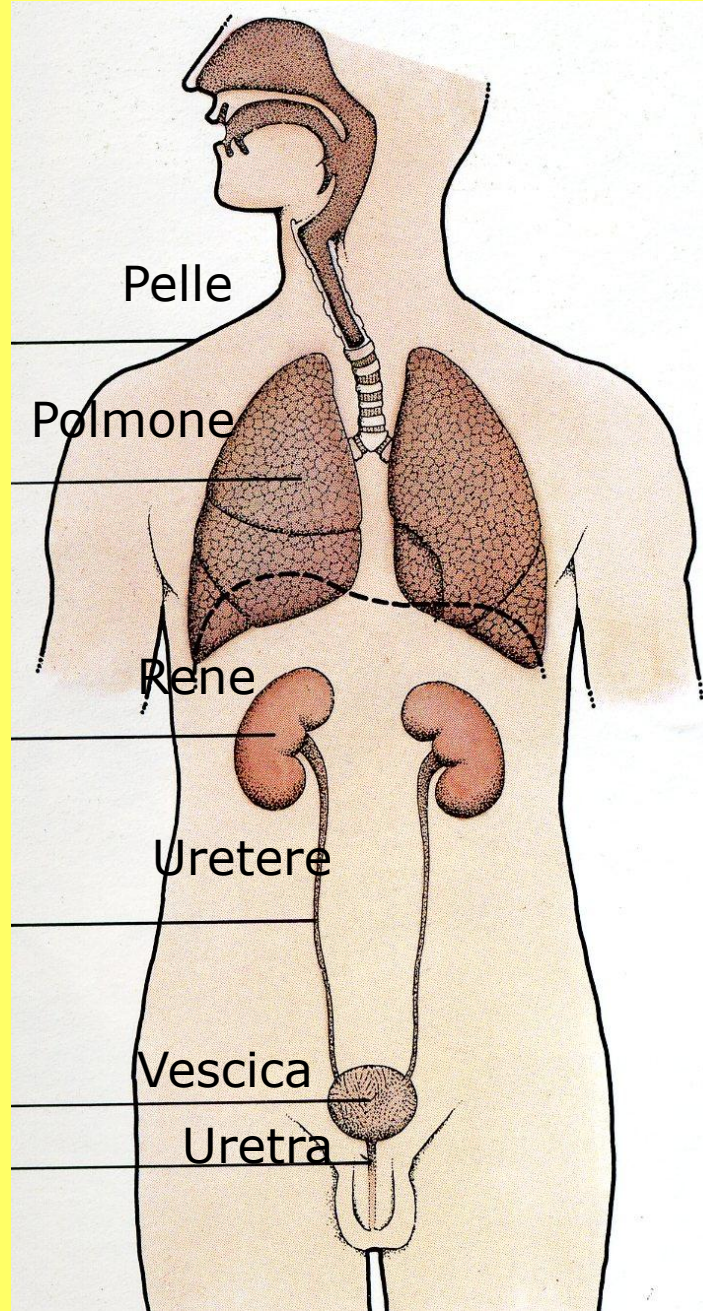
APPARATO RIPRODUTTORE FEMMINILE



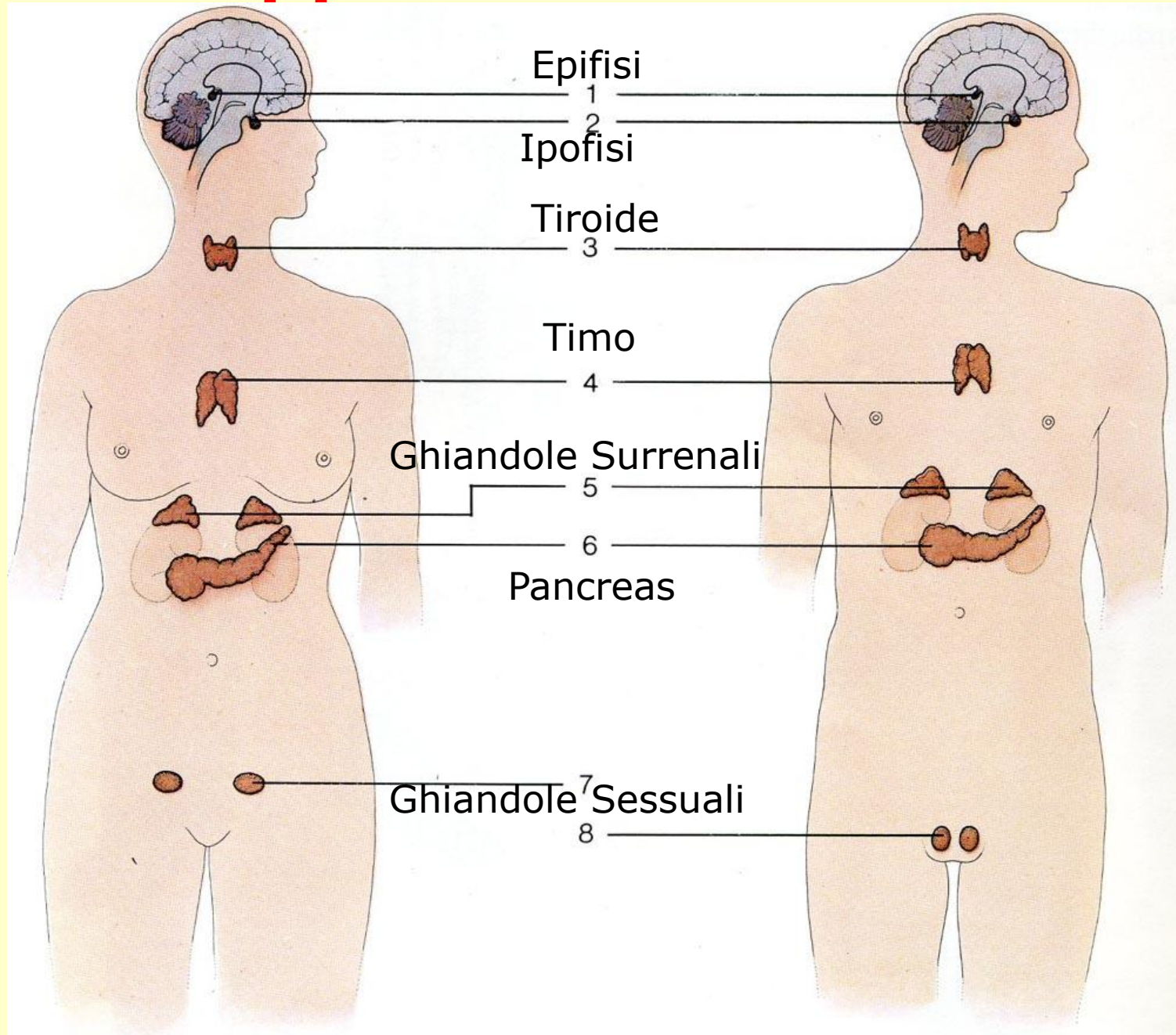
APPARATO RIPRODUTTORE MASCHILE



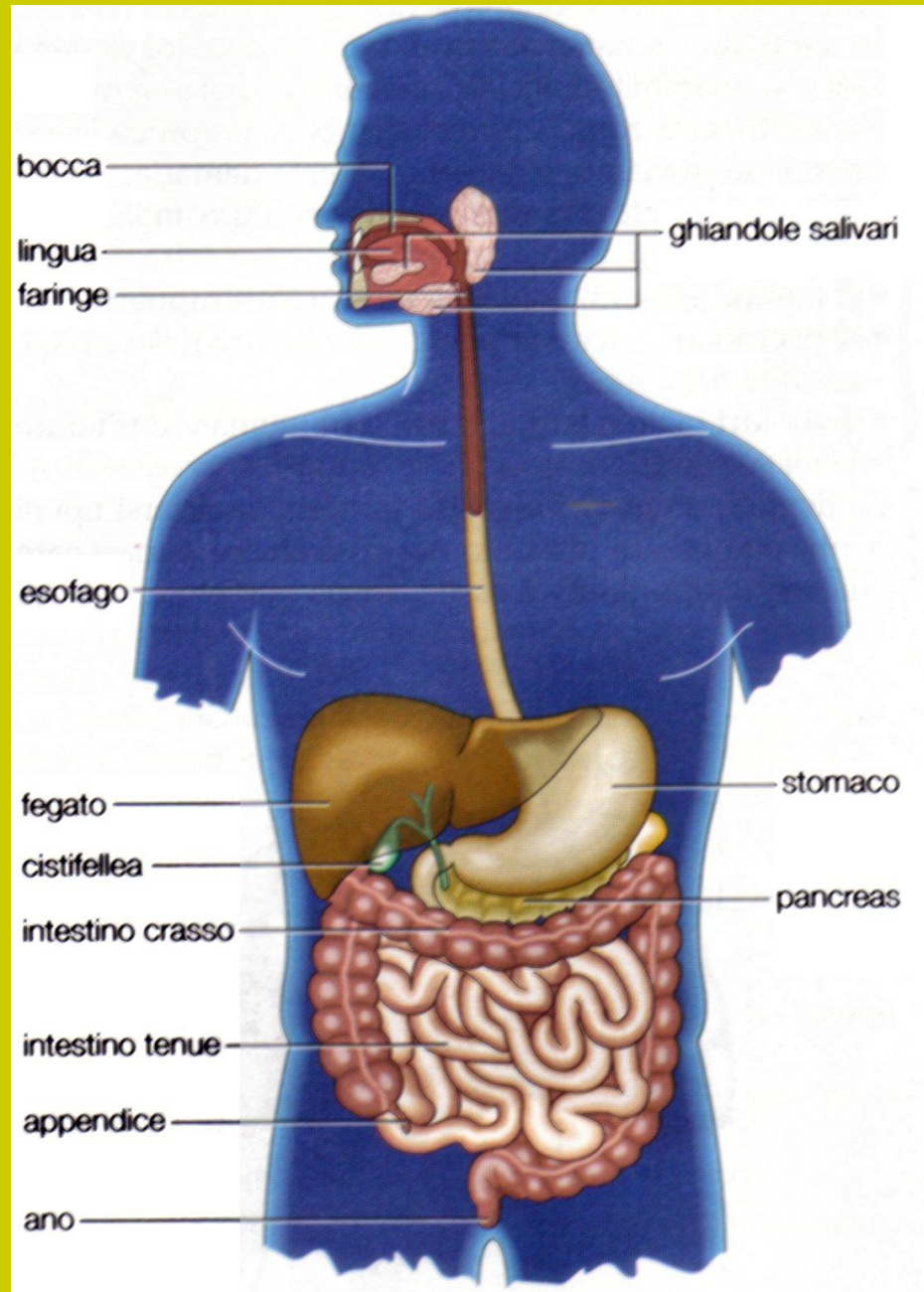
Apparato Escretorio



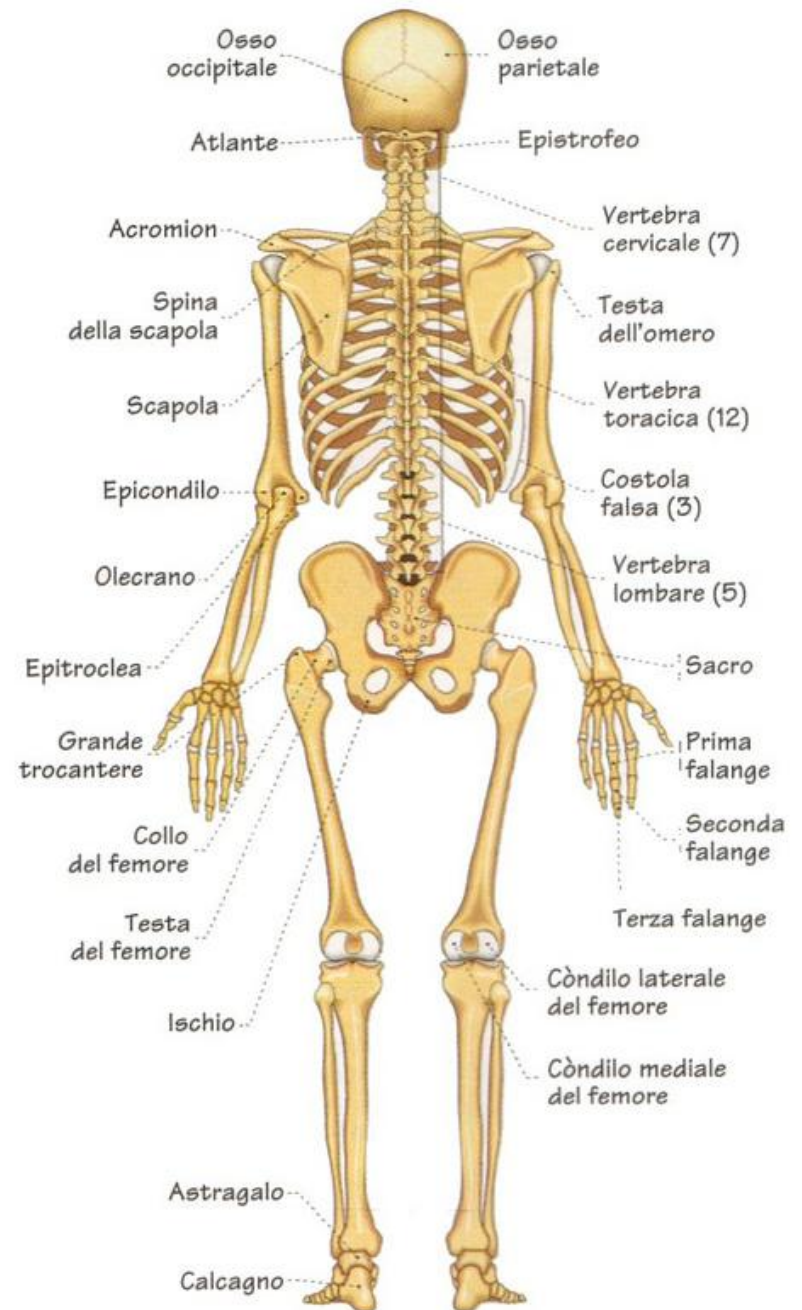
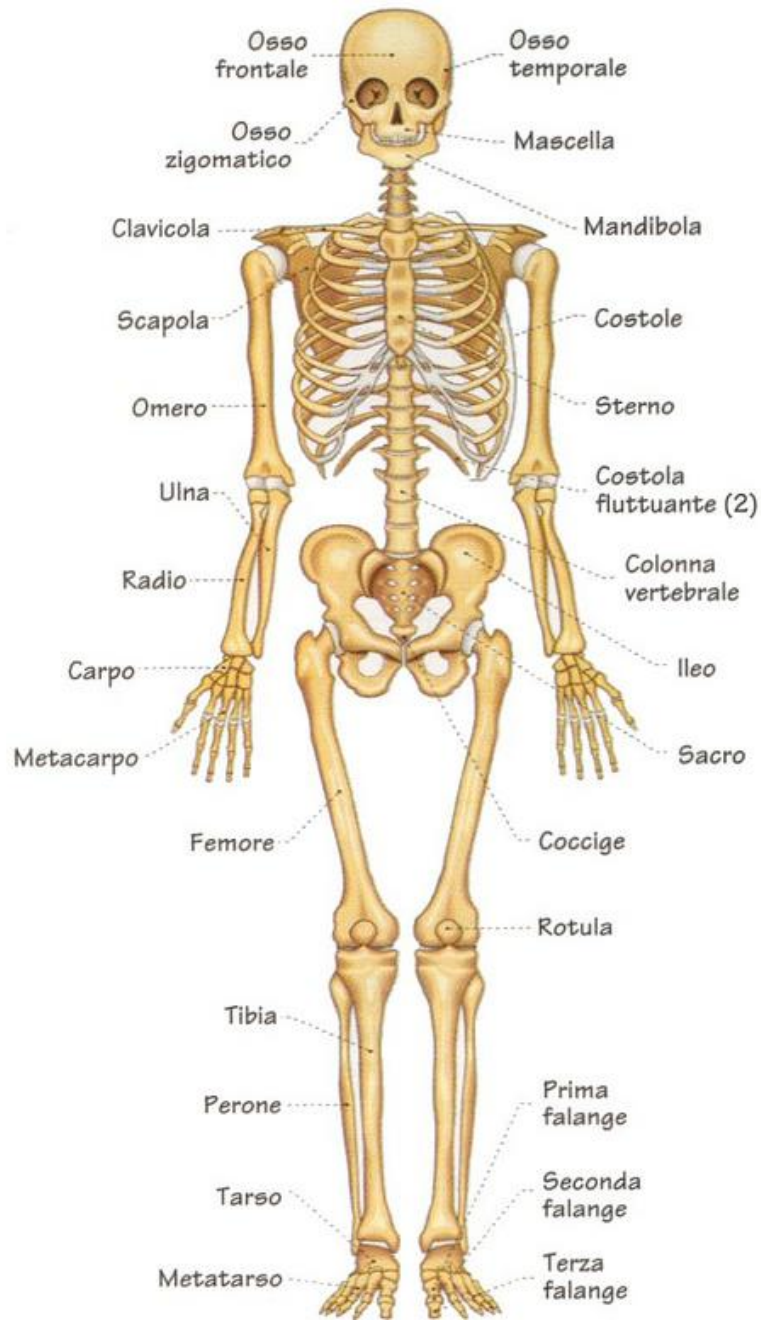
Apparato Endocrino

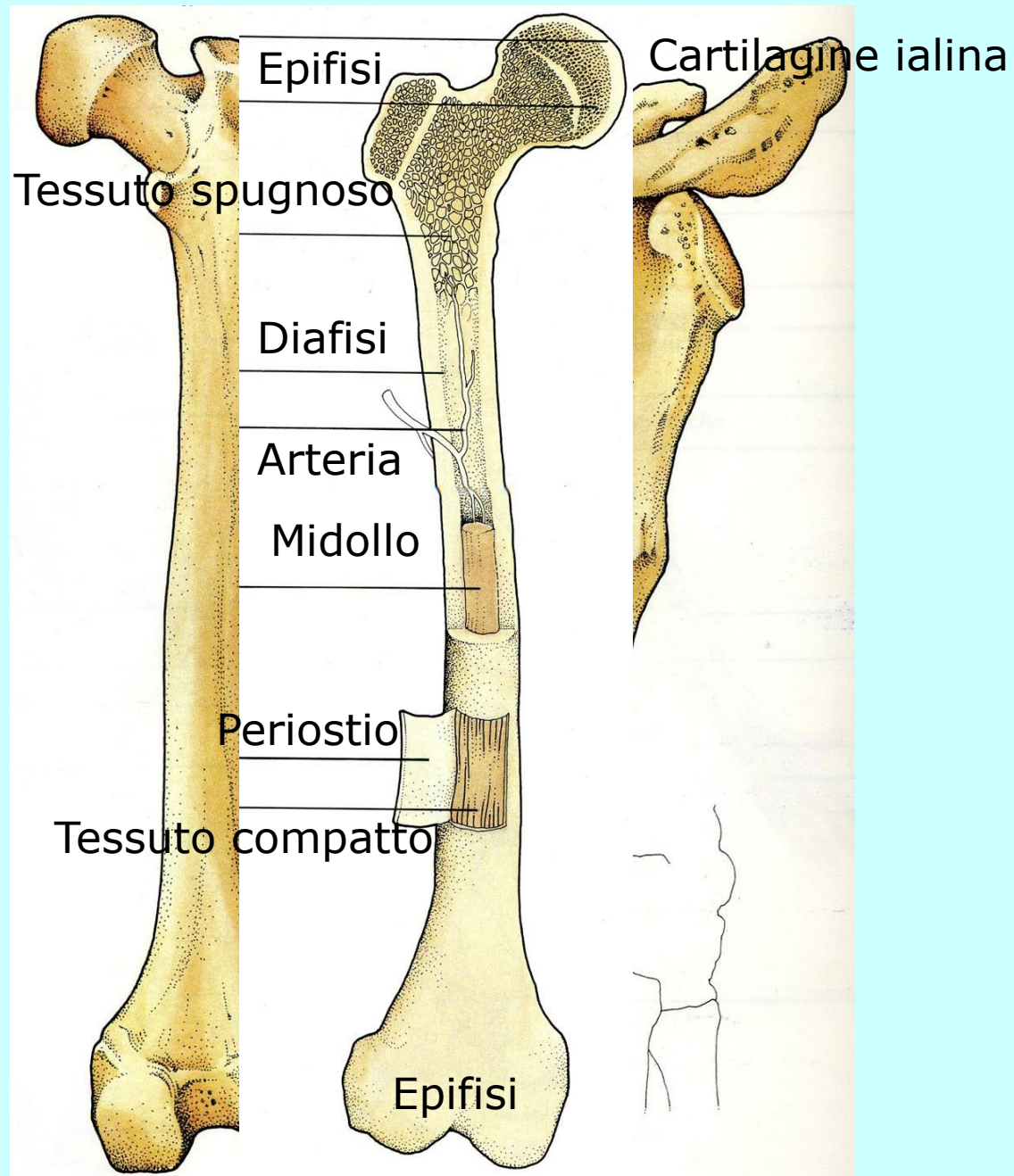


Apparato Digerente

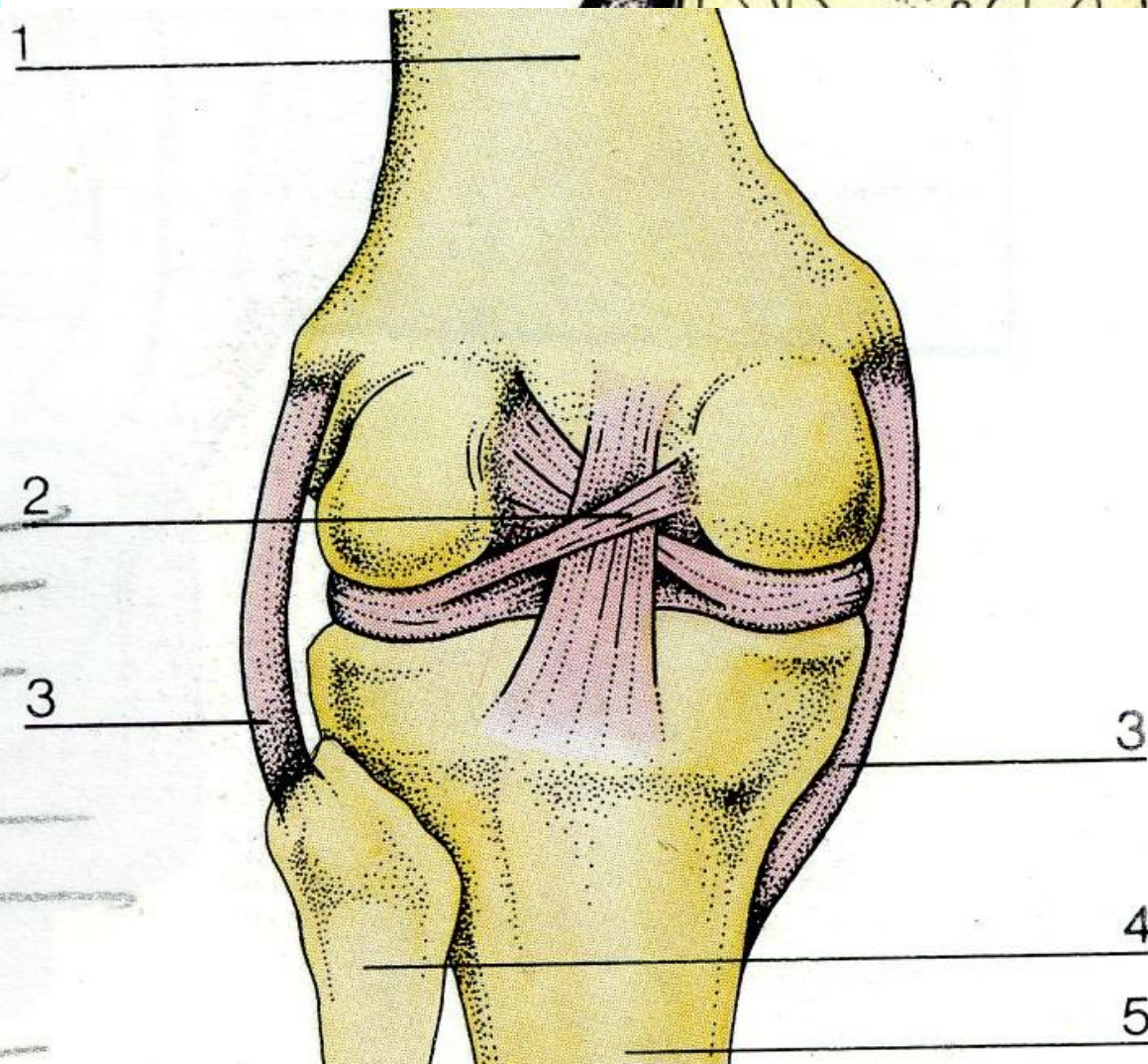


Apparato Locomotore

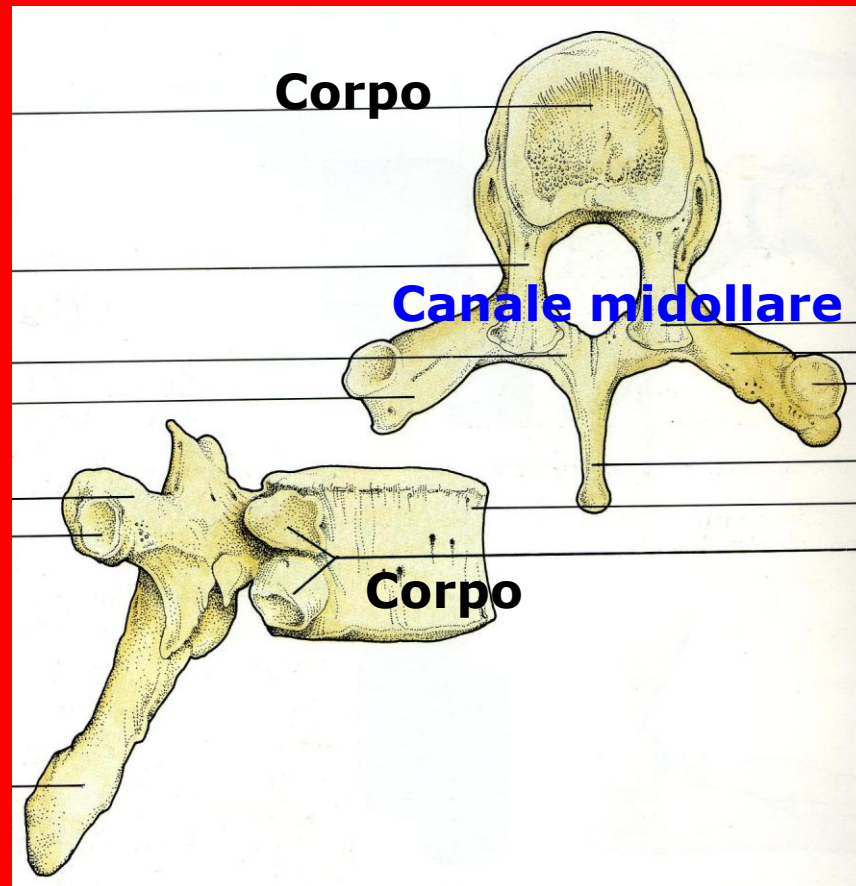
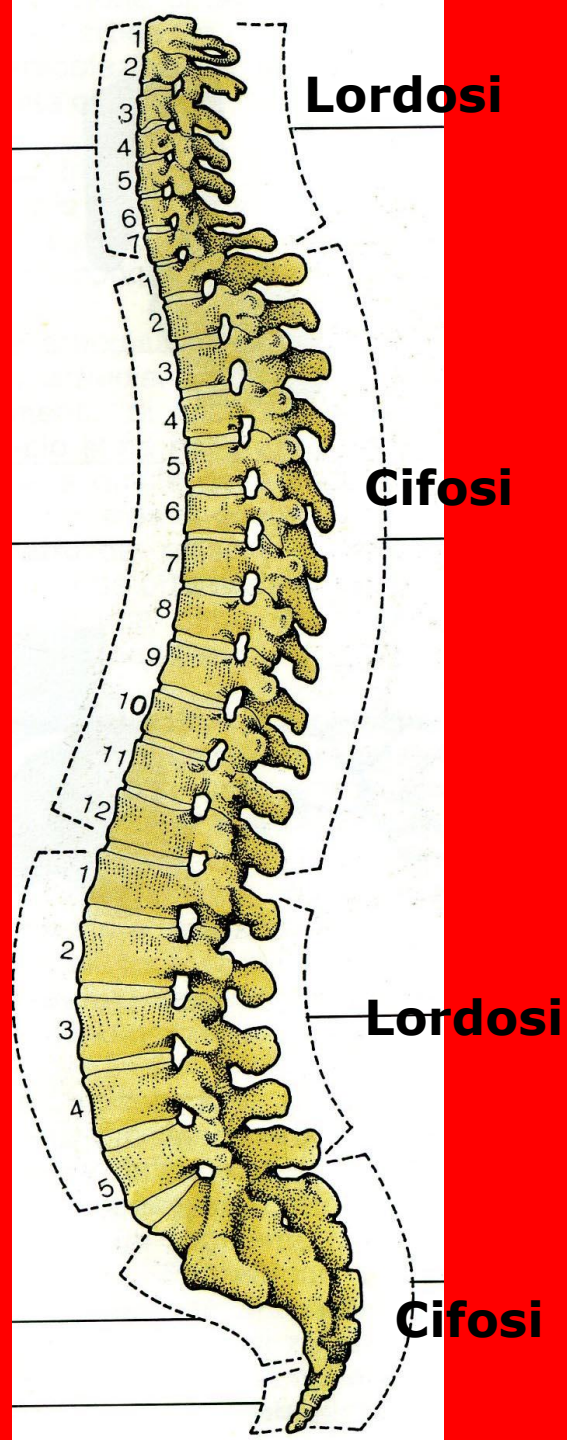


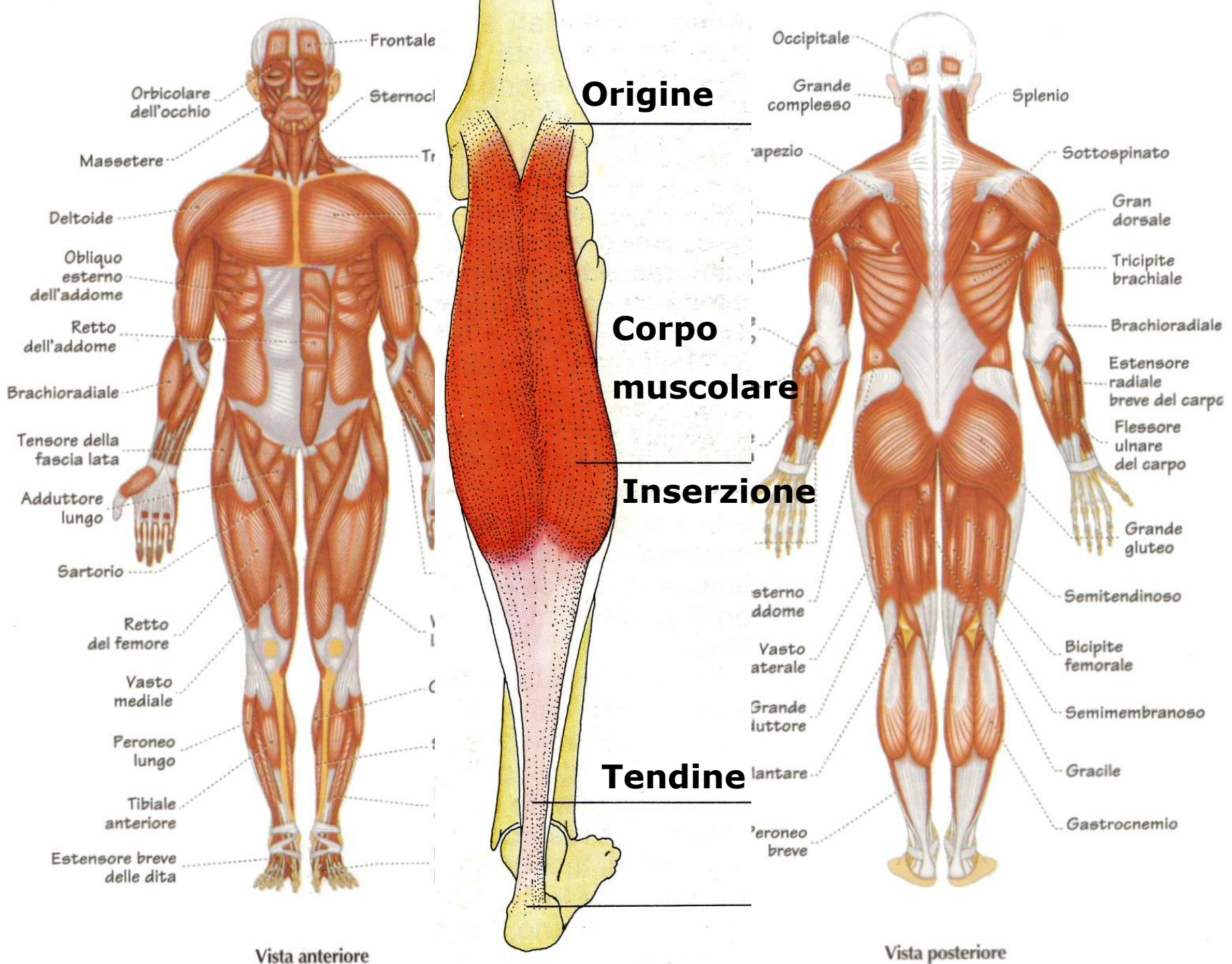


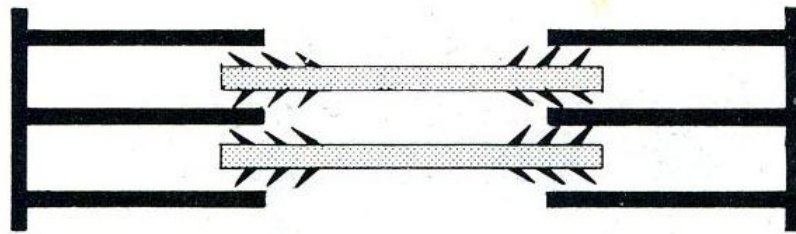
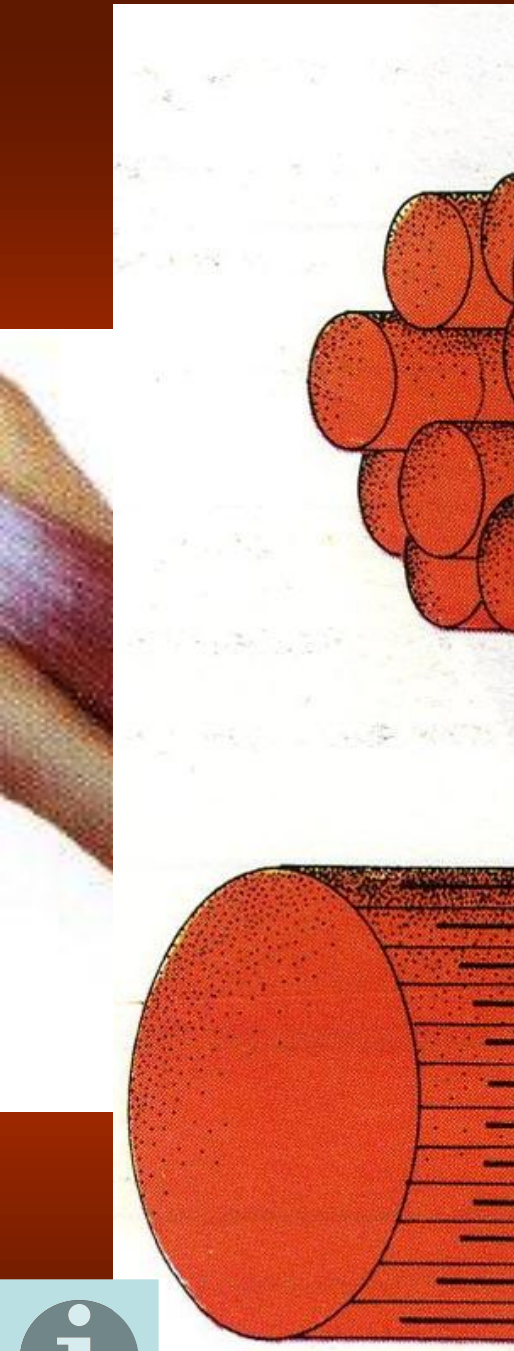
1 Legamenti



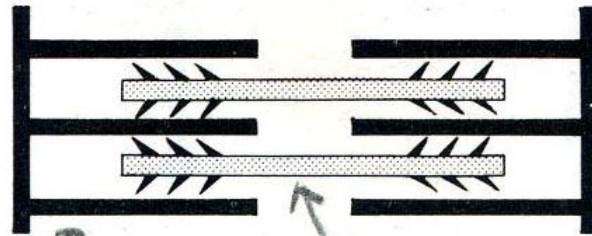
- (1) femore
- (2) legamenti crociati
- (3) legamenti collaterali
- (4) perone
- (5) tibia





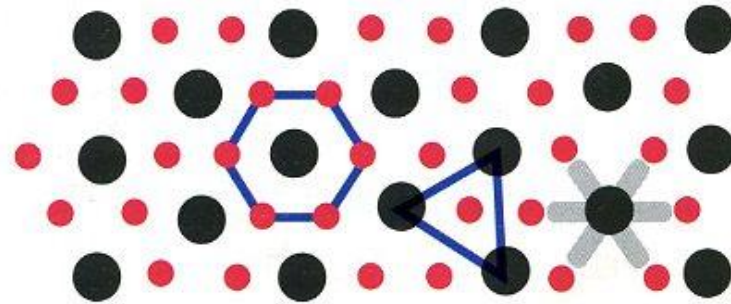
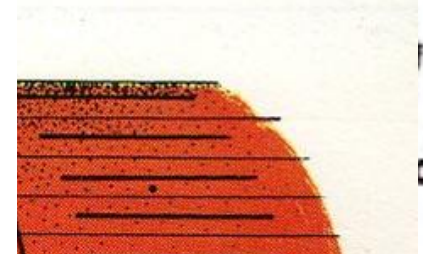
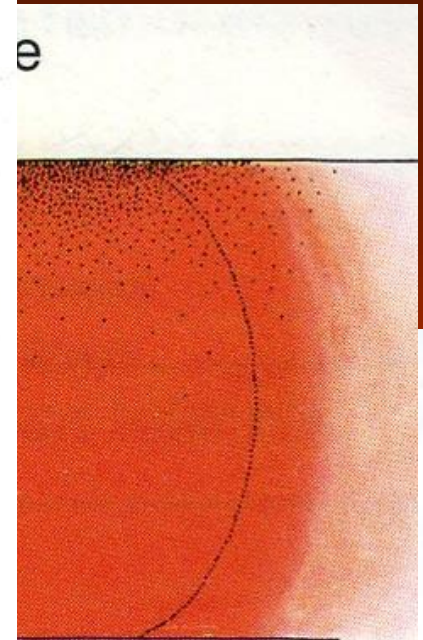
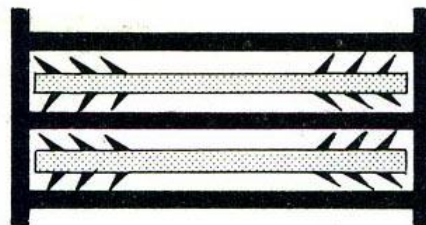
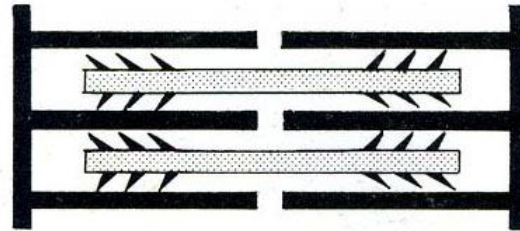


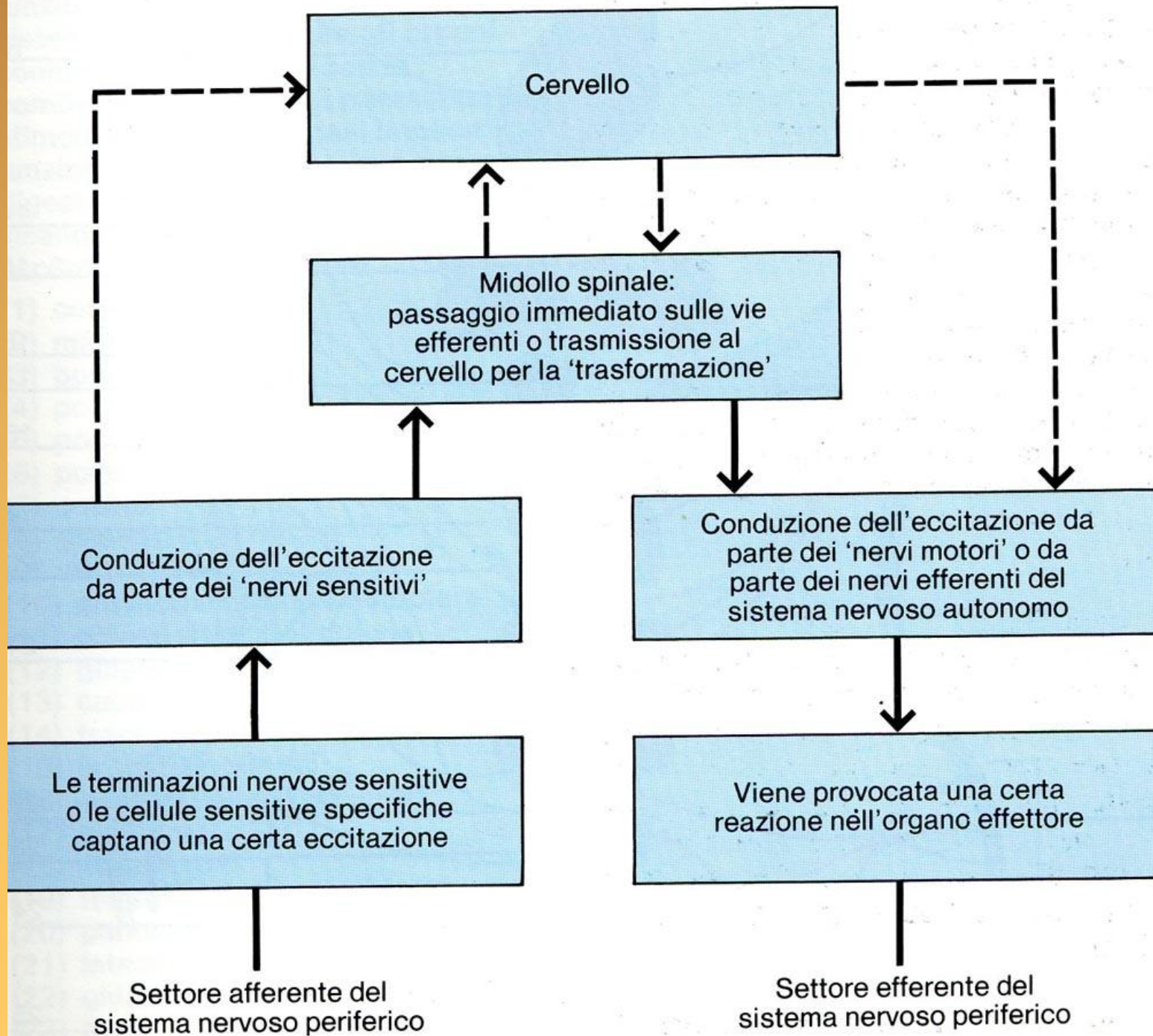
linea Z



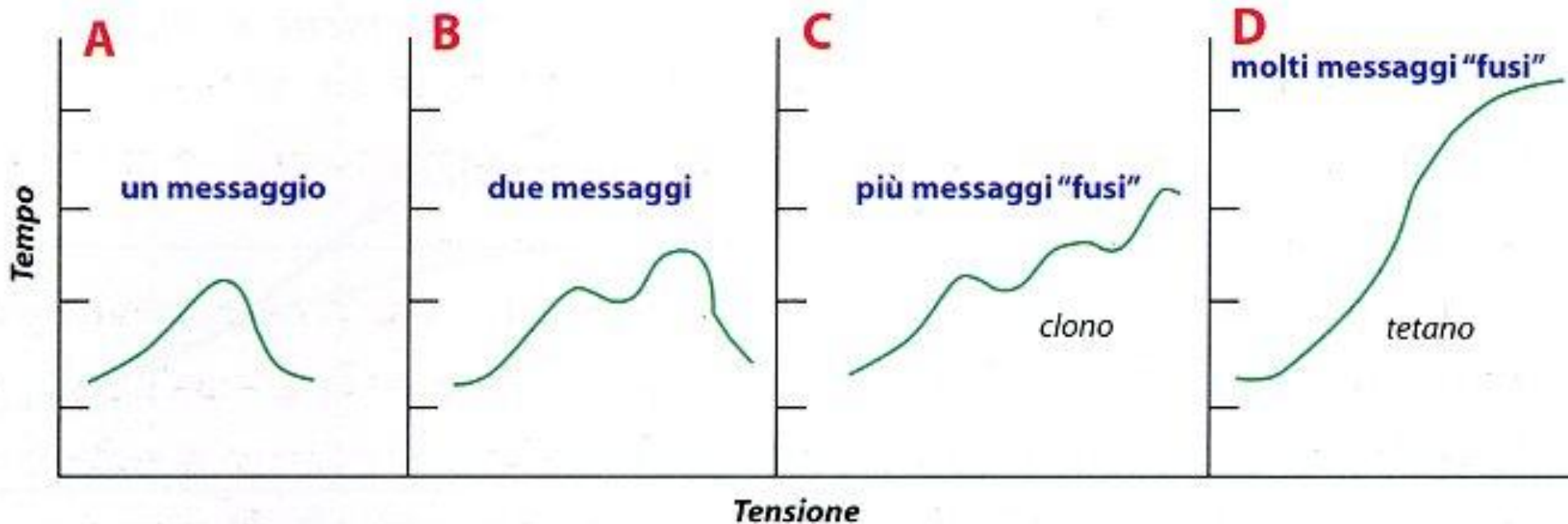
mento di actina

filamento di miosina



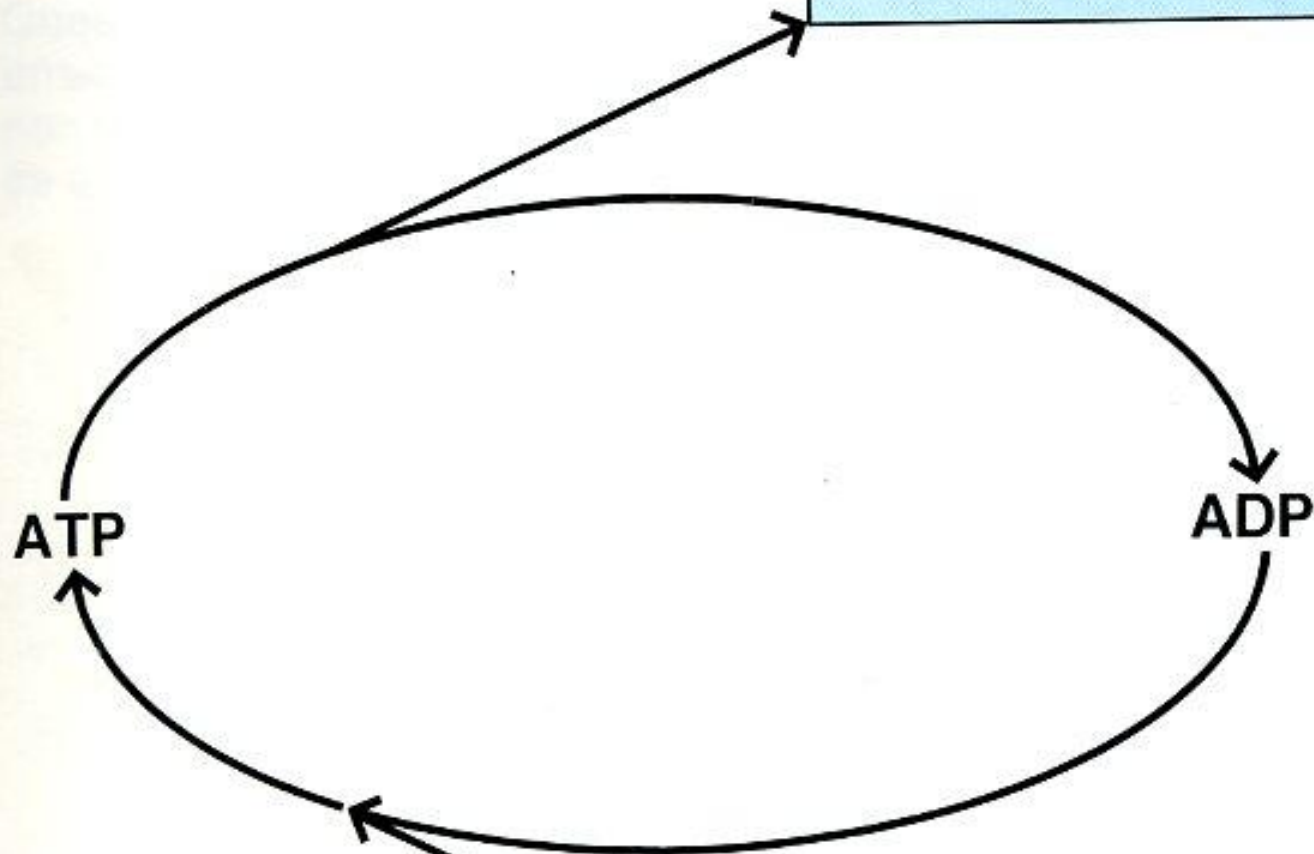


Tutto o niente



Tempo di latenza

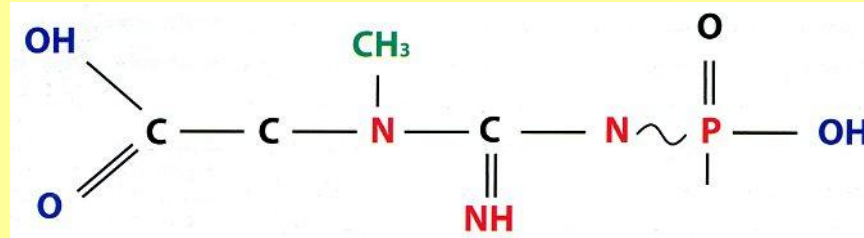
ENERGIA PER LA CONTRAZIONE



ENERGIA PER LA RISINTESI
(demolizione dei combustibili)

Risintesi Anaerobica Alattacida

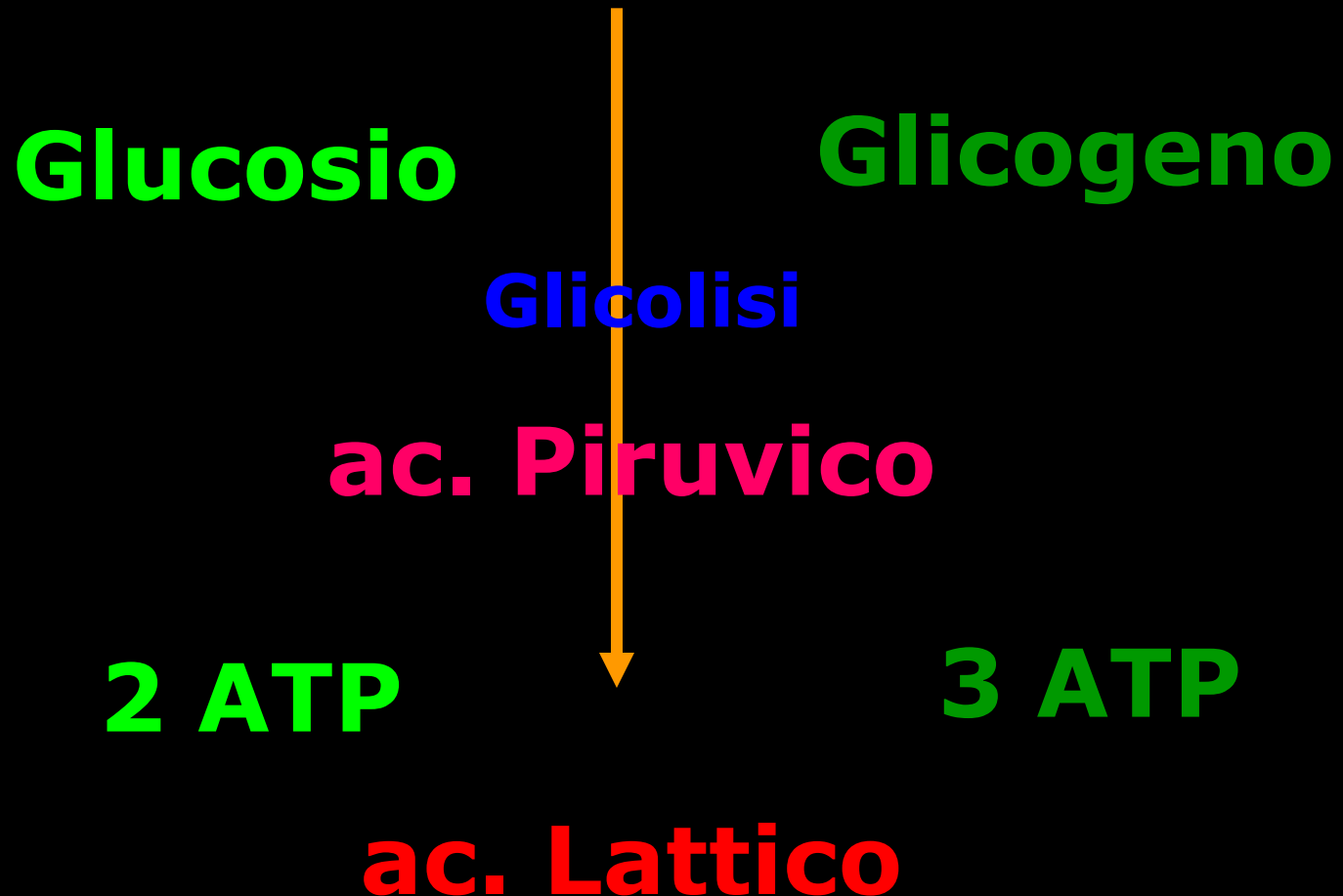
CP



C + P + Energia

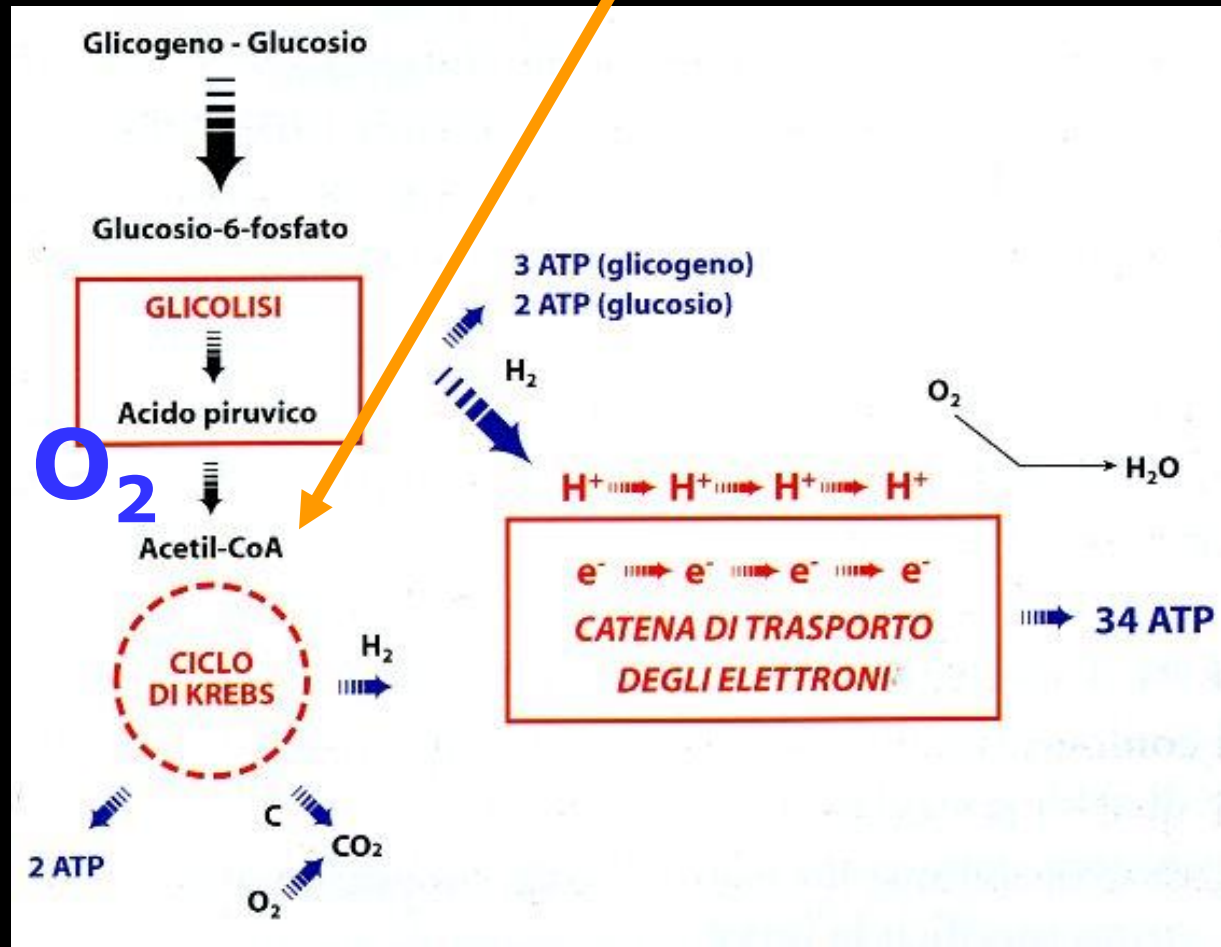
Energia → P + ADP = ATP

Risintesi Anaerobica Lattacida



Risintesi Aerobica Alattacida

$$\text{ATP} = (8,5 \times nC) - 6$$



Aerobico

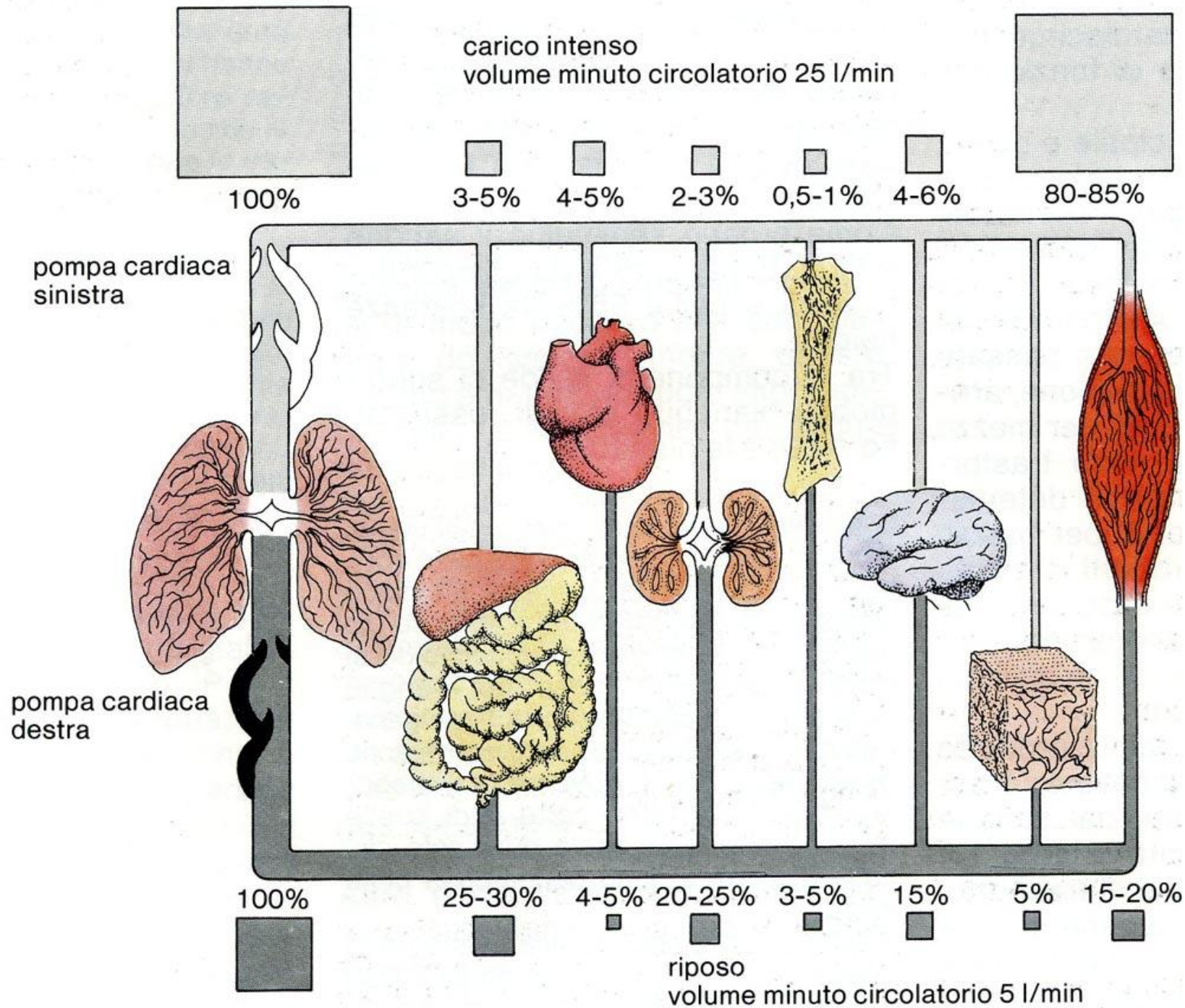
da ossidazione dei lipidi e dei glucidi
a CO_2 e H_2O

Anaerobico lattacido

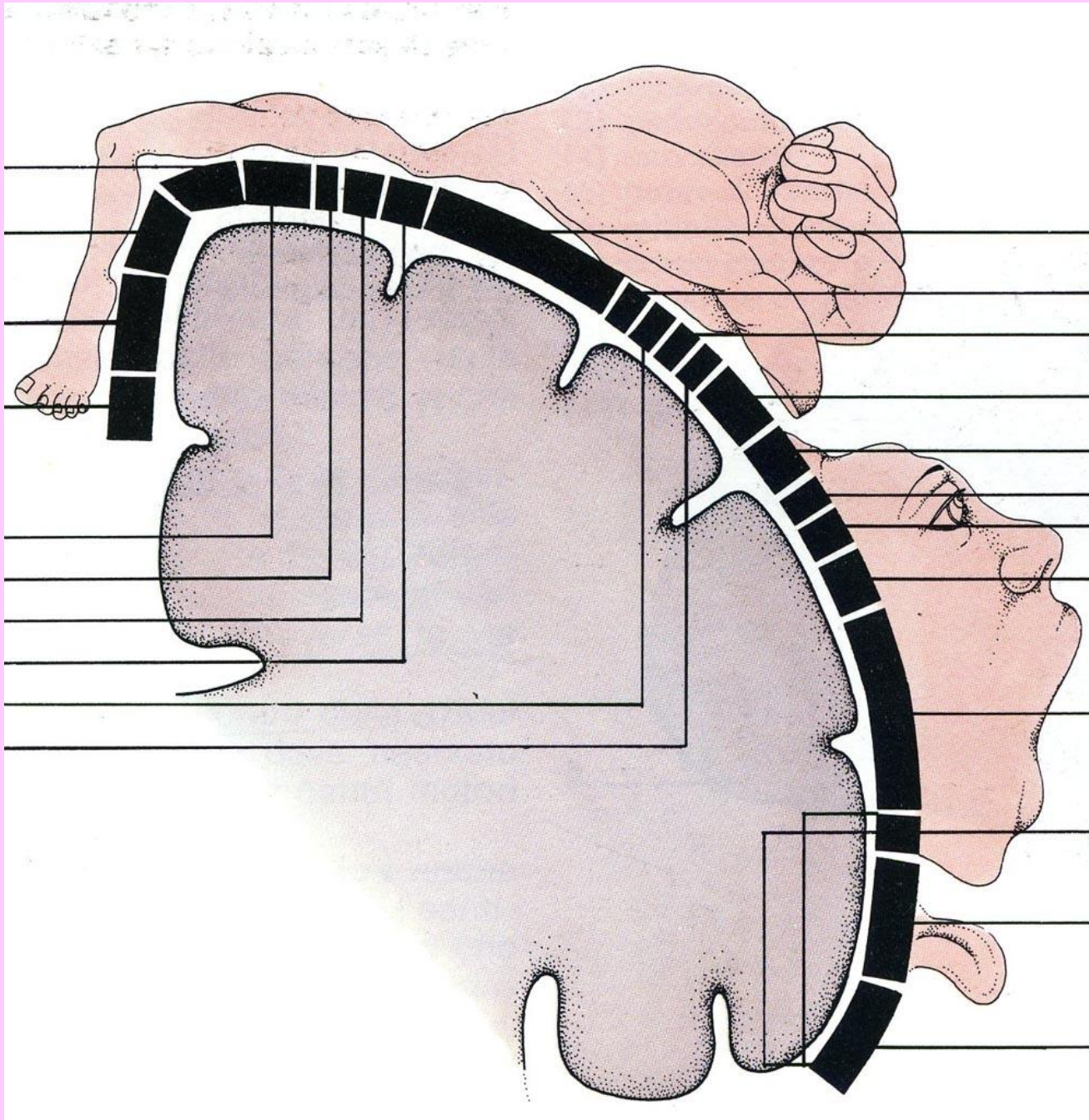
da trasformazione dei glucidi in acido
lattico

Anaerobico alattacido

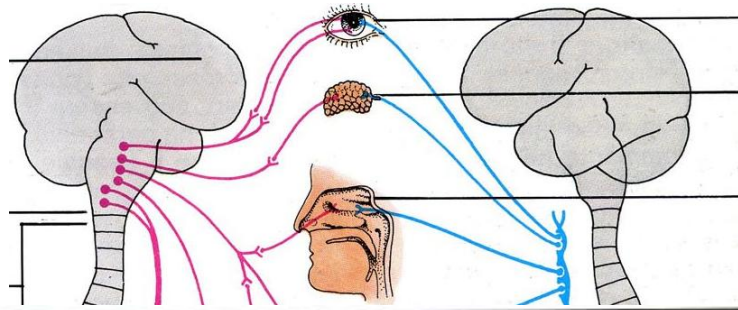
da accumulatori di radicali fosforici
(creatinfosfato)



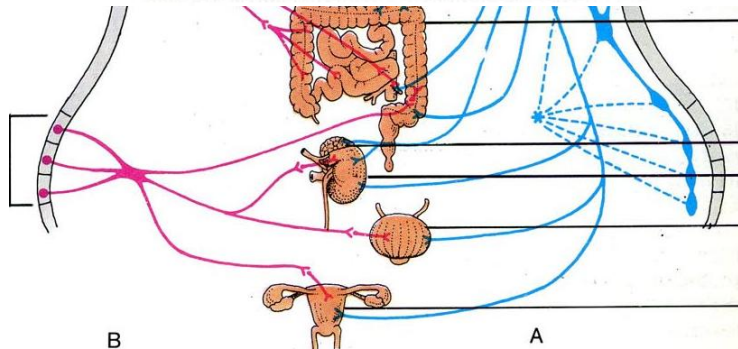
Sistema Nervoso Centrale



Sistema Nervoso Periferico

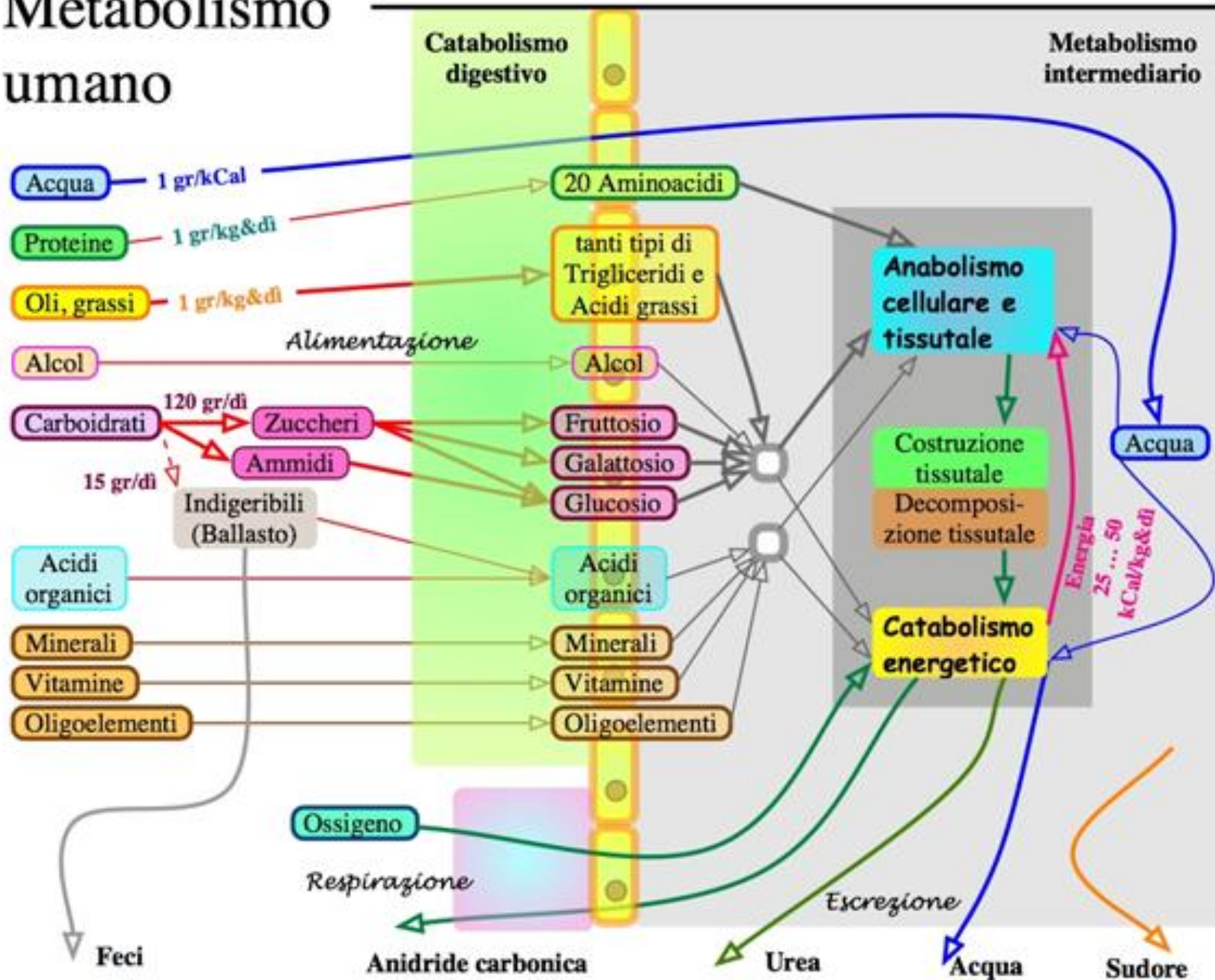


Organo	Azione del parasimpatico	Azione del simpatico
vasi sanguigni cutanei	dilatazione	contrazione
muscolatura cardiaca	inibizione	eccitazione
bronchi	restringimento	dilatazione
muscoli del tubo digerente	contrazione	rilassamento
sfinteri	rilassamento	contrazione
muscoli erettori dei peli	nulla	contrazione
ghiandole intestinali	aumento della secrezione	inibizione della secrezione
ghiandole sudoripare	nulla	aumento della secrezione
occhio	contrazione della pupilla	dilatazione della pupilla



Metabolismo

Metabolismo umano



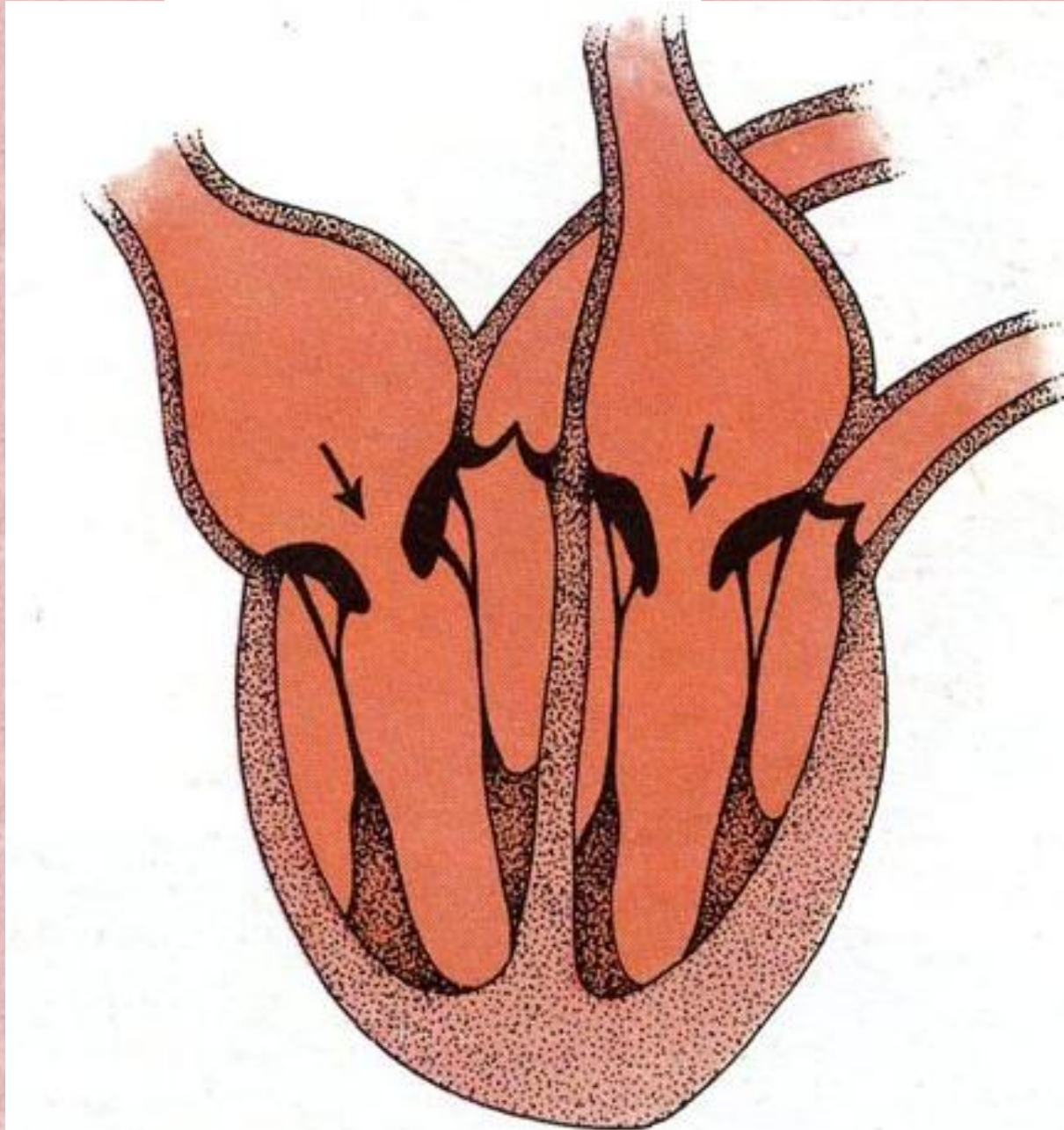
Apparato Cardiocircolatorio

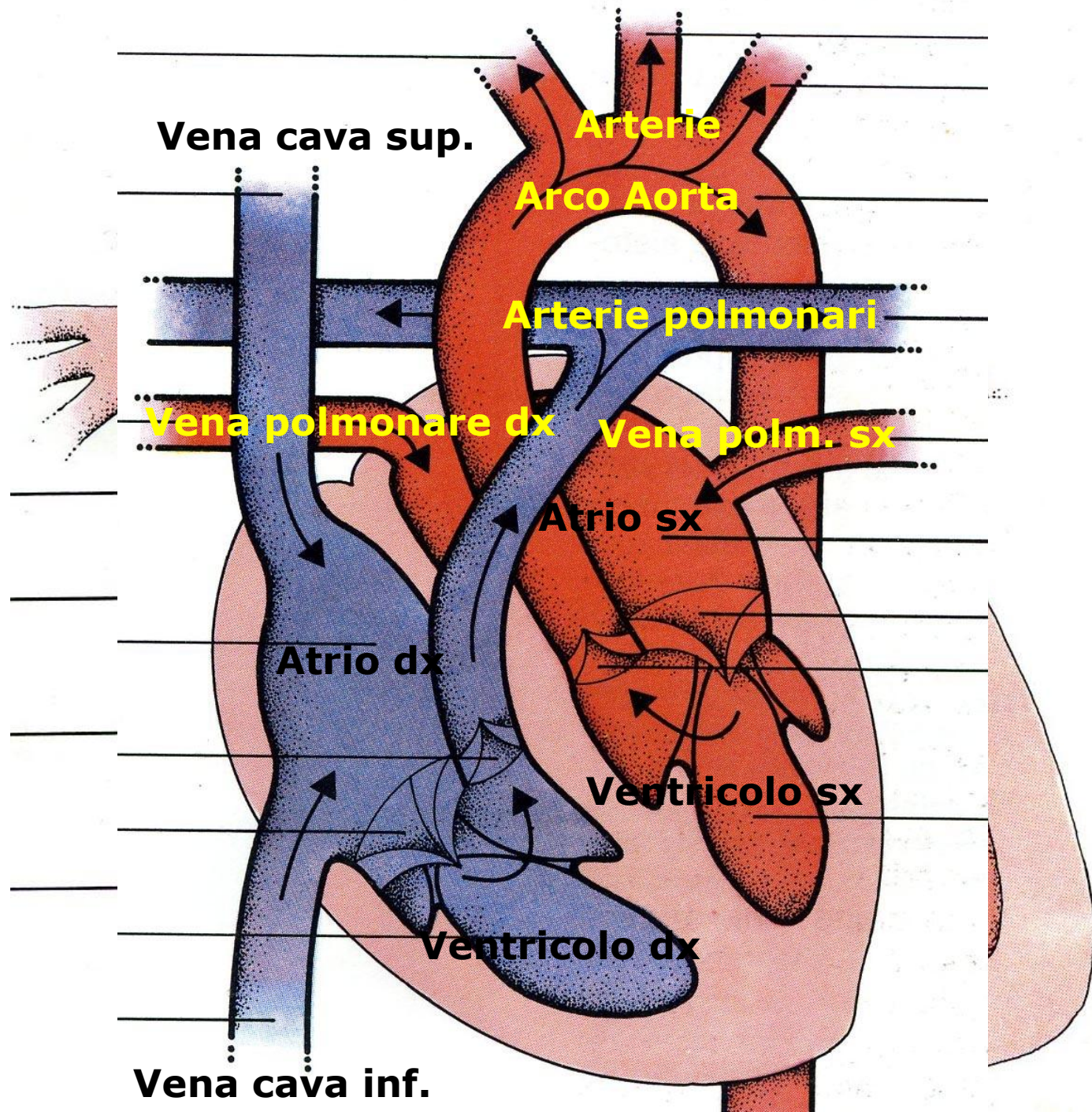
Arterie

Capillari

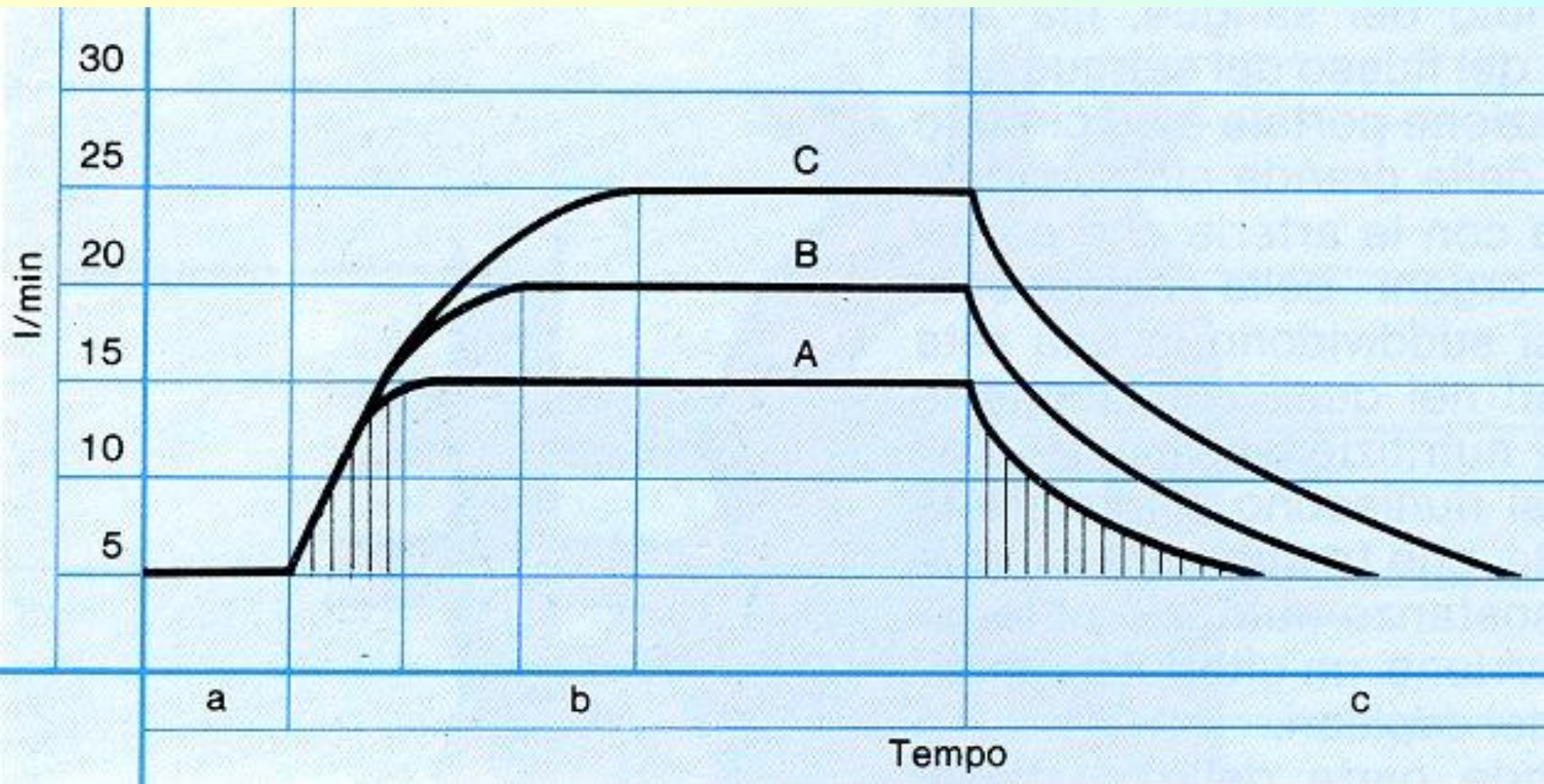
Vene

Cuore

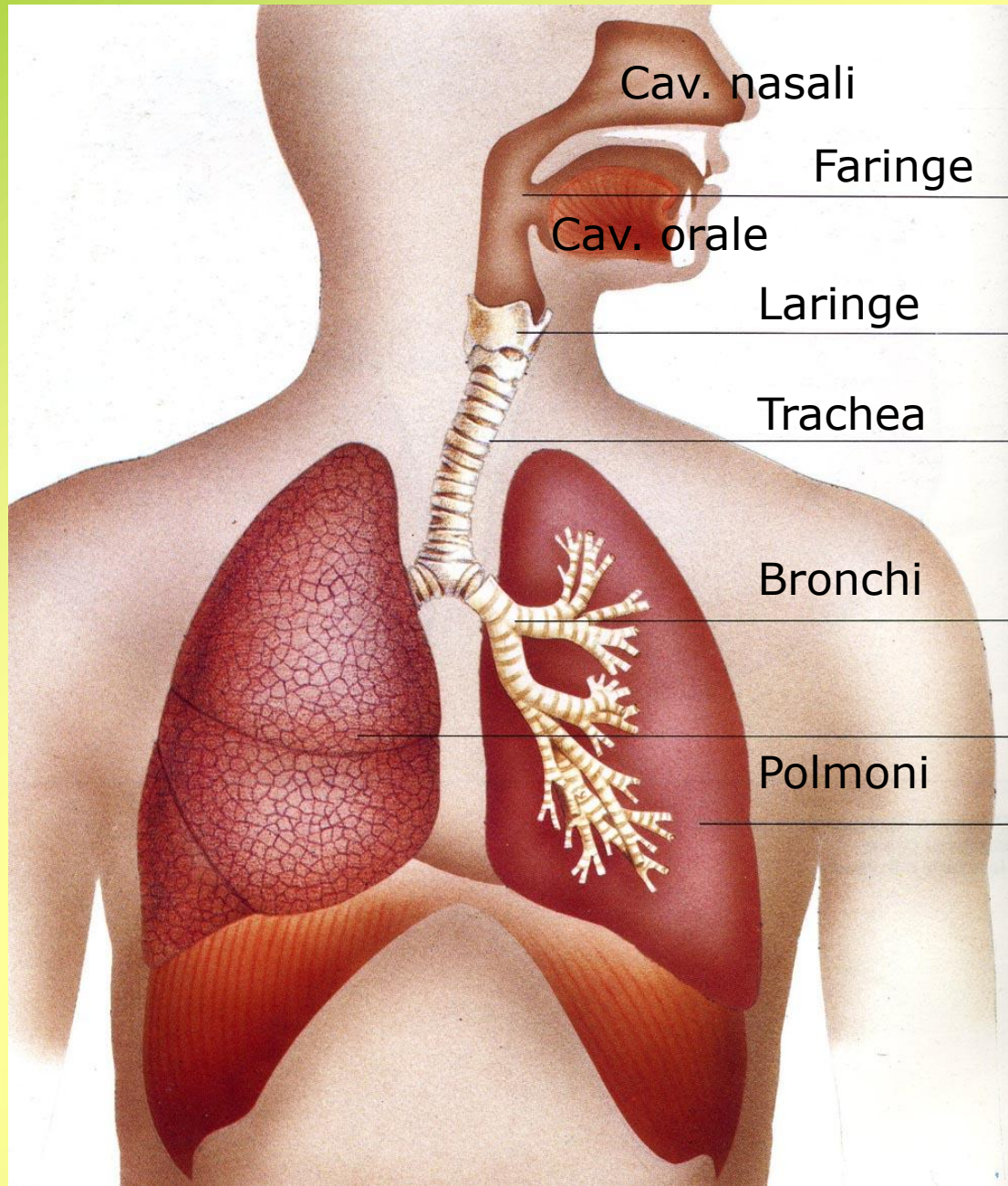




Debito d'Ossigeno



Apparato Respiratorio



Alveoli $\xrightleftharpoons[\text{CO}_2]{\text{O}_2}$ **Sangue**

Capillari $\xrightleftharpoons[\text{CO}_2]{\text{O}_2}$ **Tessuti**