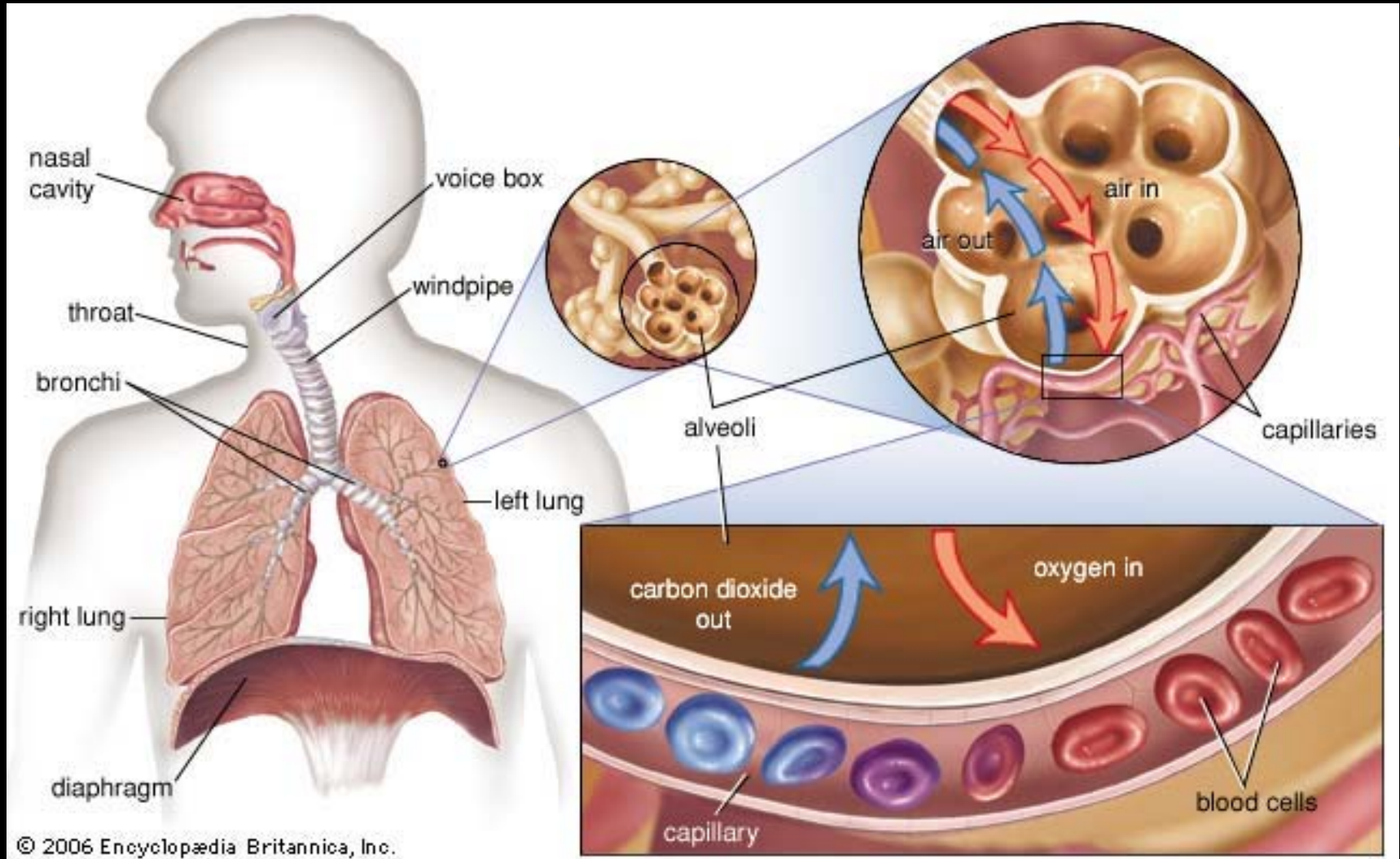


# *Controle van ademhaling*



Fysiologische mechanismen

# Ademhaling



## Three Alveoli And Gas Exchange

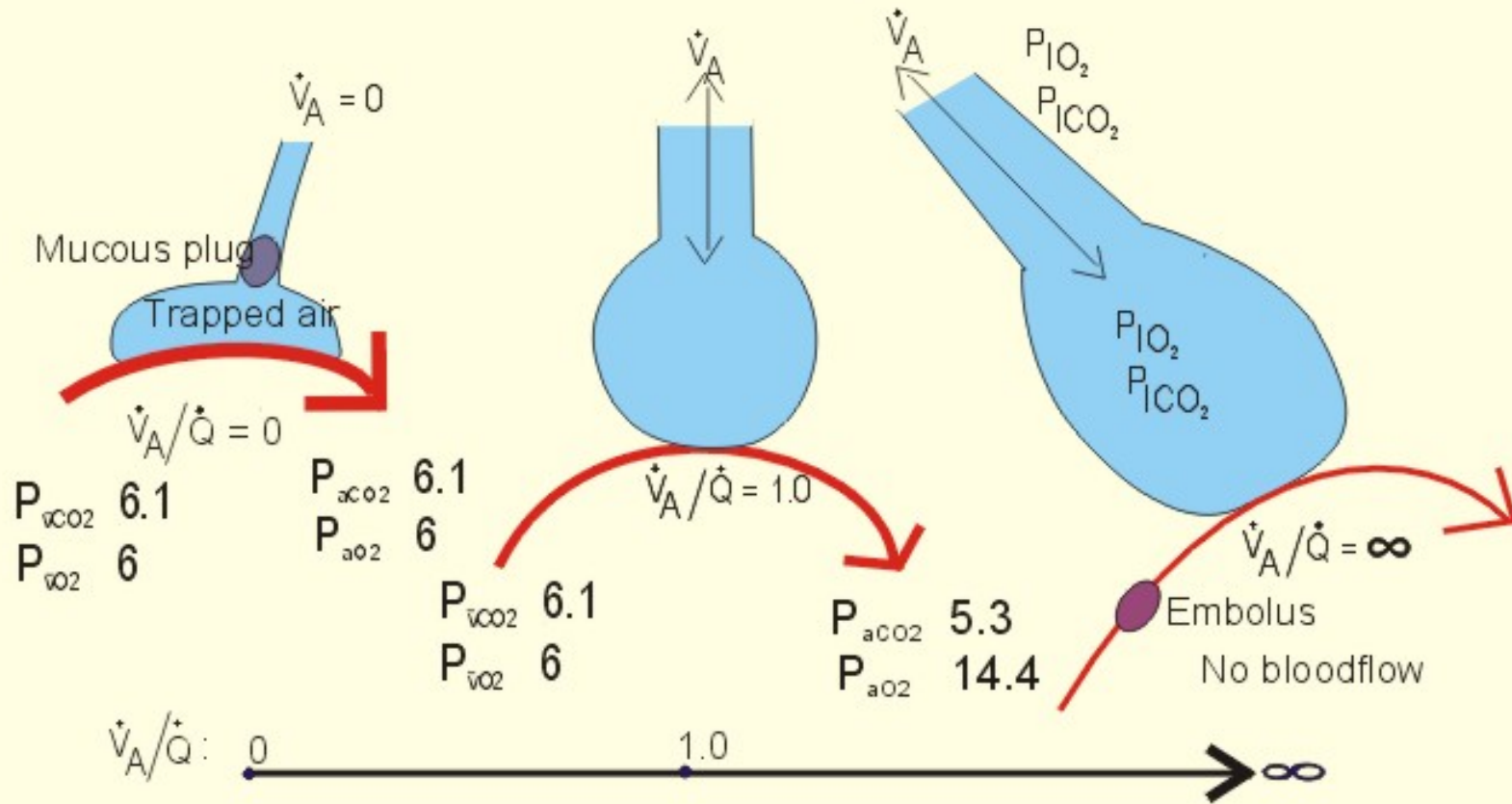
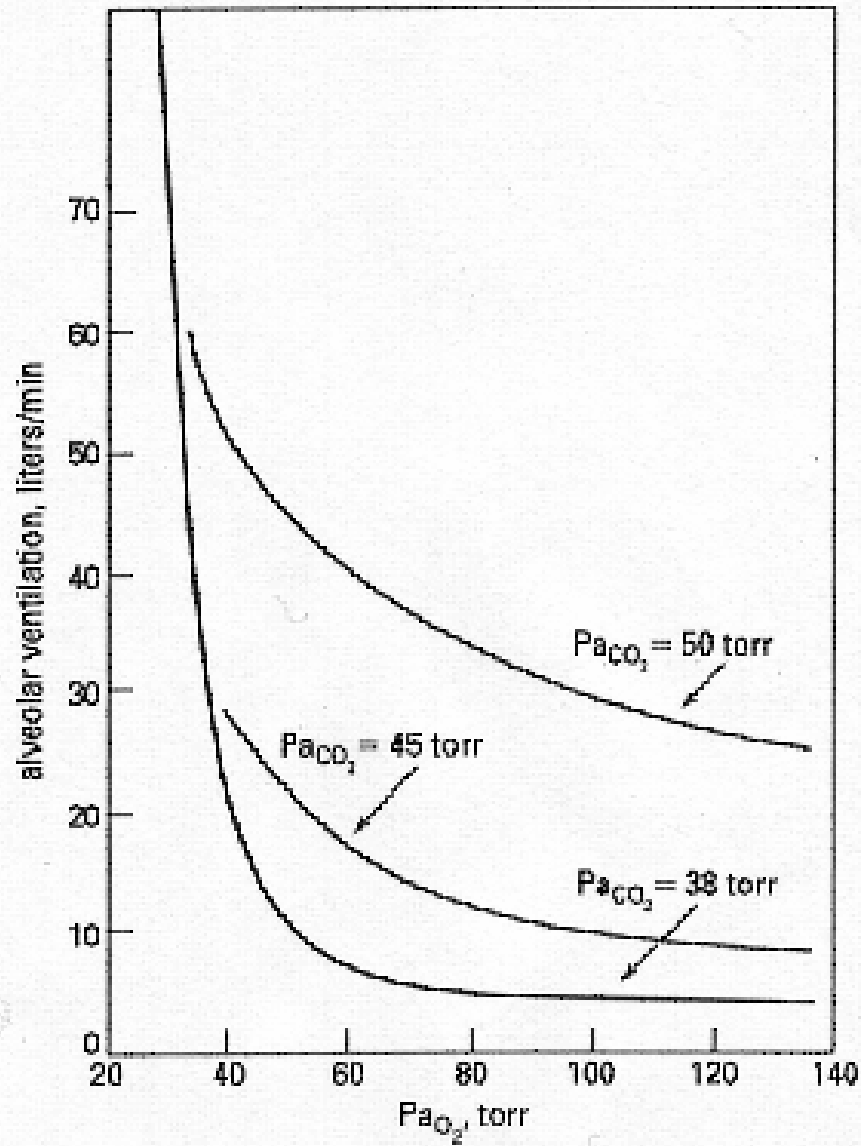
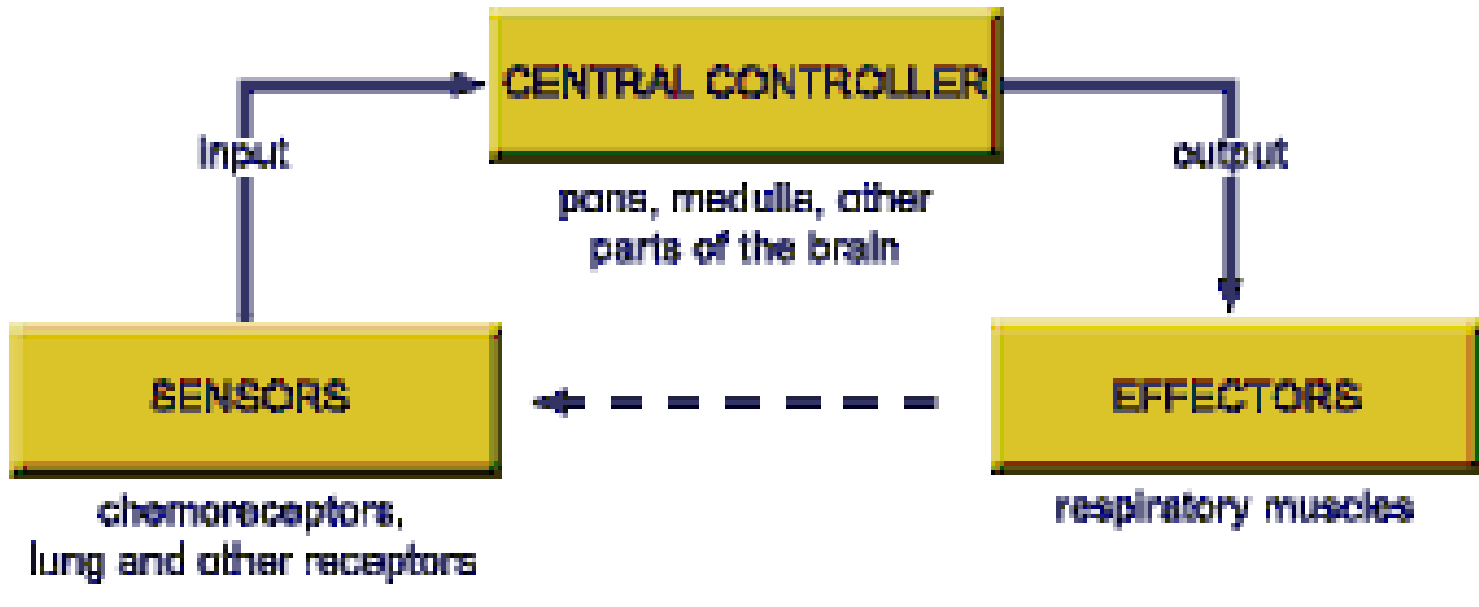


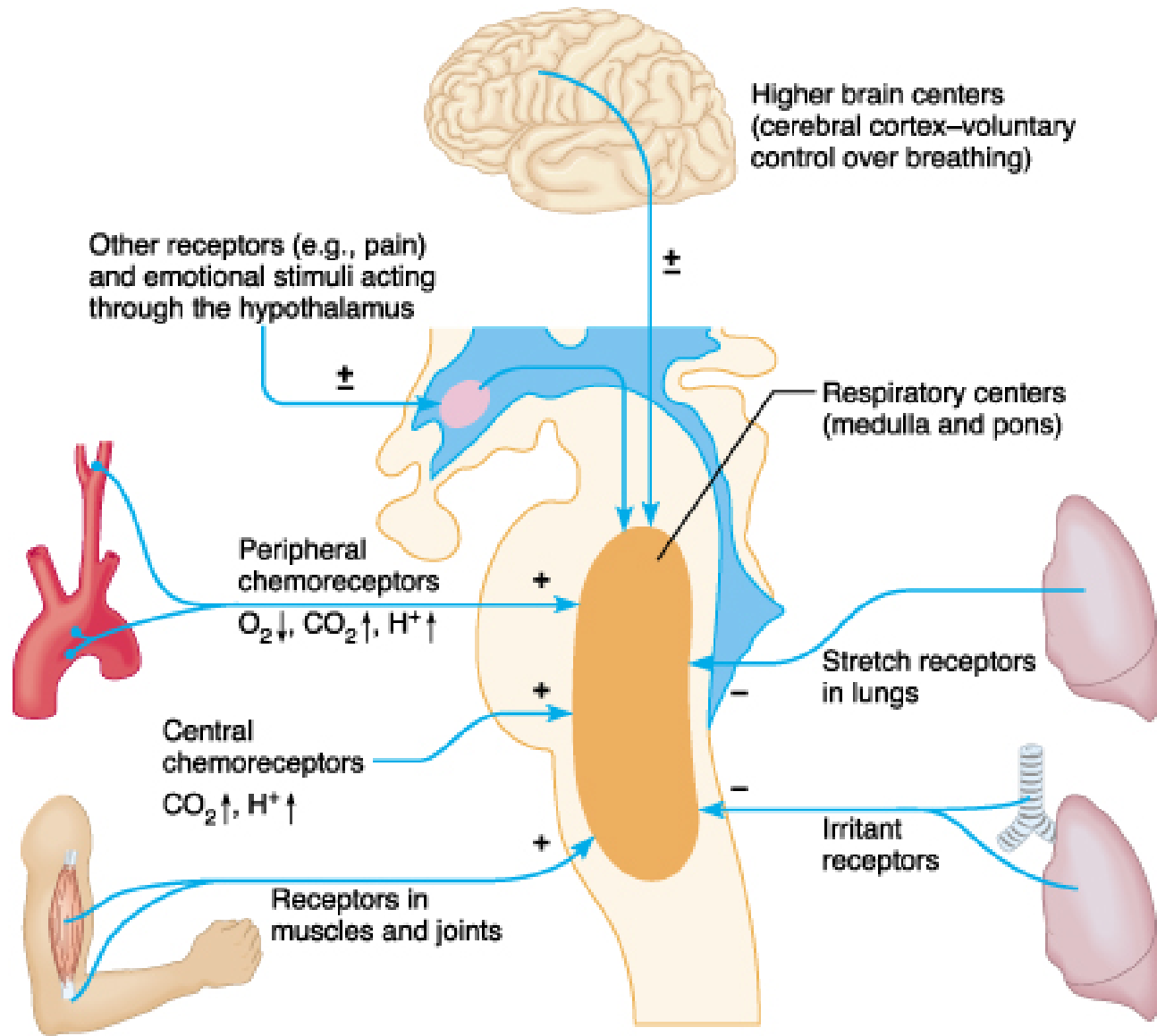
Fig. 14-2

**Box 14-1: Blood gas values (ranges) from healthy persons at rest. - Normal mean tensions for mixed venous blood and for alveolar air are shown below.**

PaO <sub>2</sub> :	10-13 kPa (75-95 mmHg)
PaCO <sub>2</sub> :	4.8-6 kPa (36-45 mmHg),
Base Excess:	Zero ( <a href="#">Chapter 17</a> ),
pH <sub>a</sub> :	7.35-7.45 (ie, [H <sup>+</sup> ] = 35-44 nM)
PAO <sub>2</sub> :	10 - 13.3 kPa (75-100 mmHg)
PACO <sub>2</sub> :	4.8-6 kPa (36-45 mmHg). Mean: 5.3 kPa (40 mmHg),
Mean PvO <sub>2</sub> :	6 kPa (45 mmHg)
Mean PvCO <sub>2</sub> :	6.1 kPa (46 mmHg)

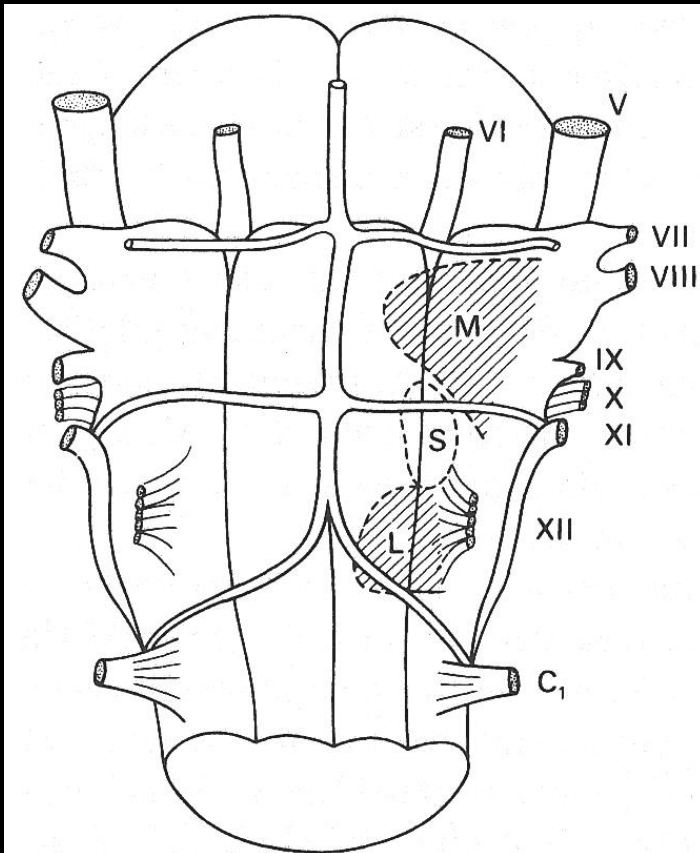






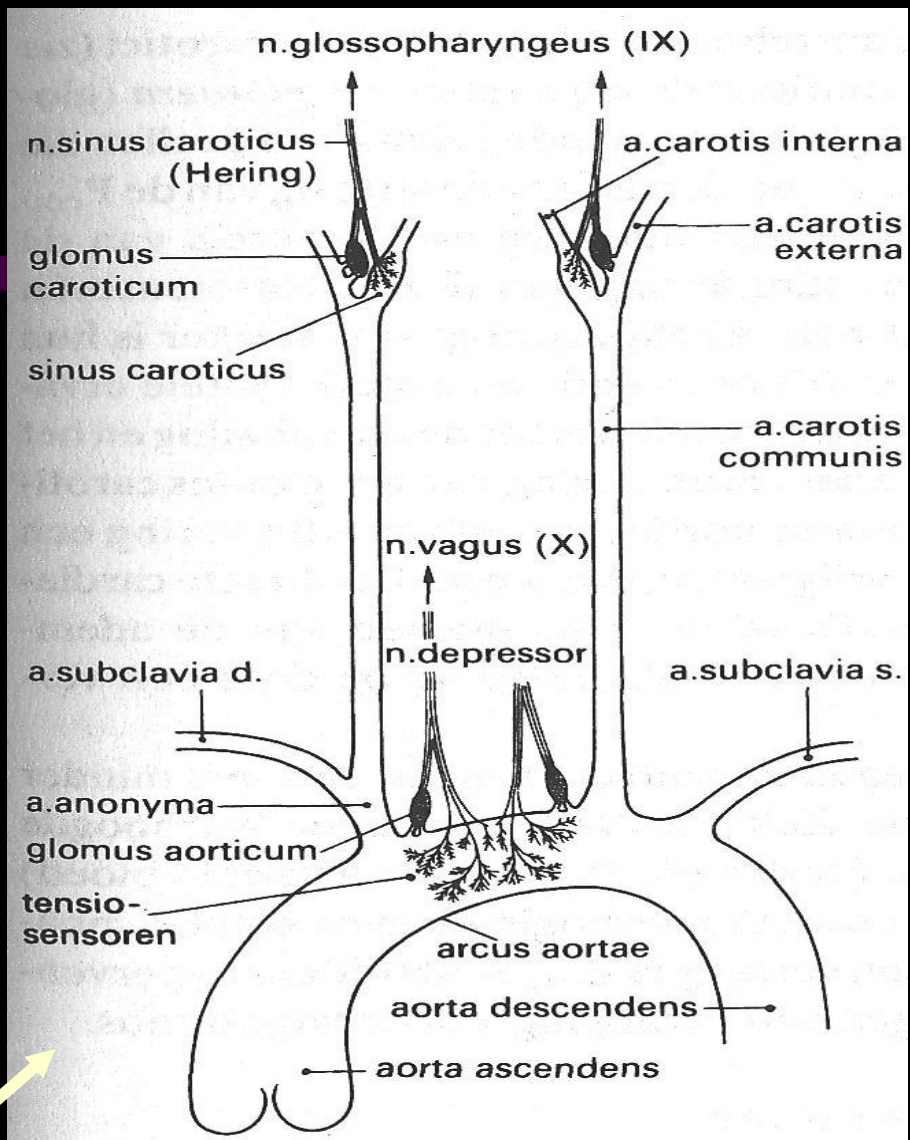
# Chemosenoren

## Centrale



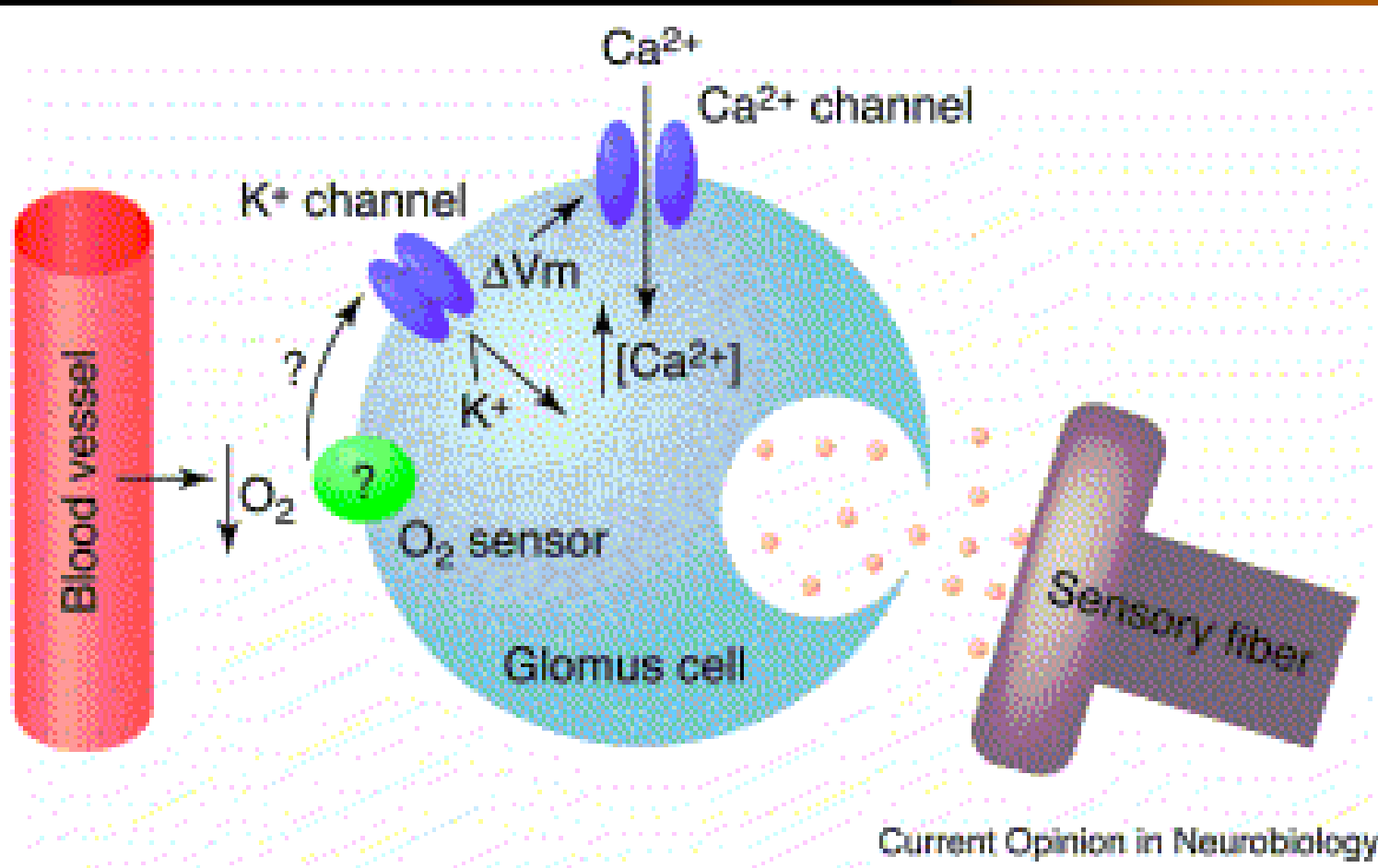
*Figuur 16-24*  
*Ventraal aanzicht van de medulla oblongata.*  
*M en L: chemosensorische velden van Mitschke en Loeschcke, S: area van Schlaefke.*

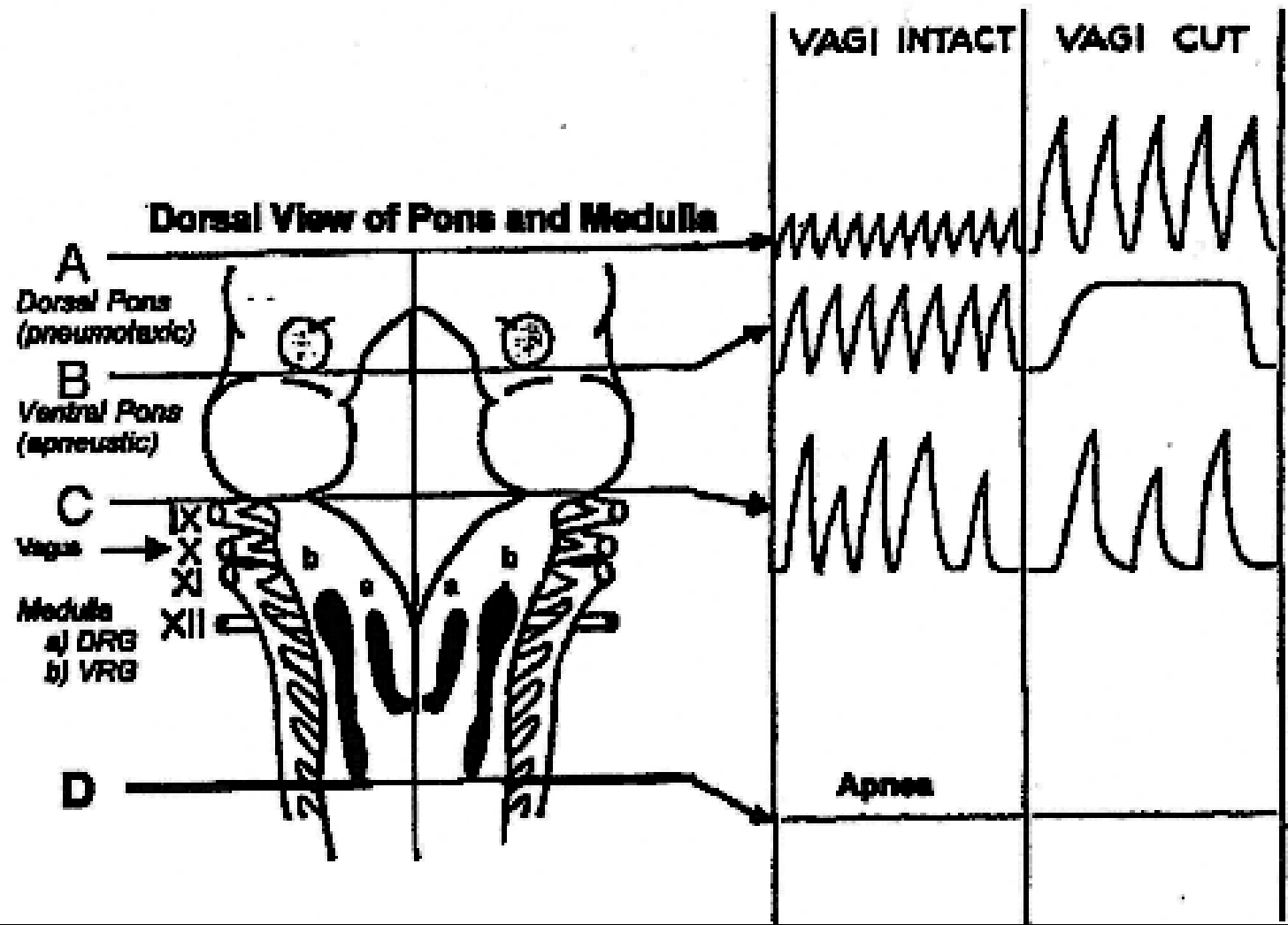
## Perifere



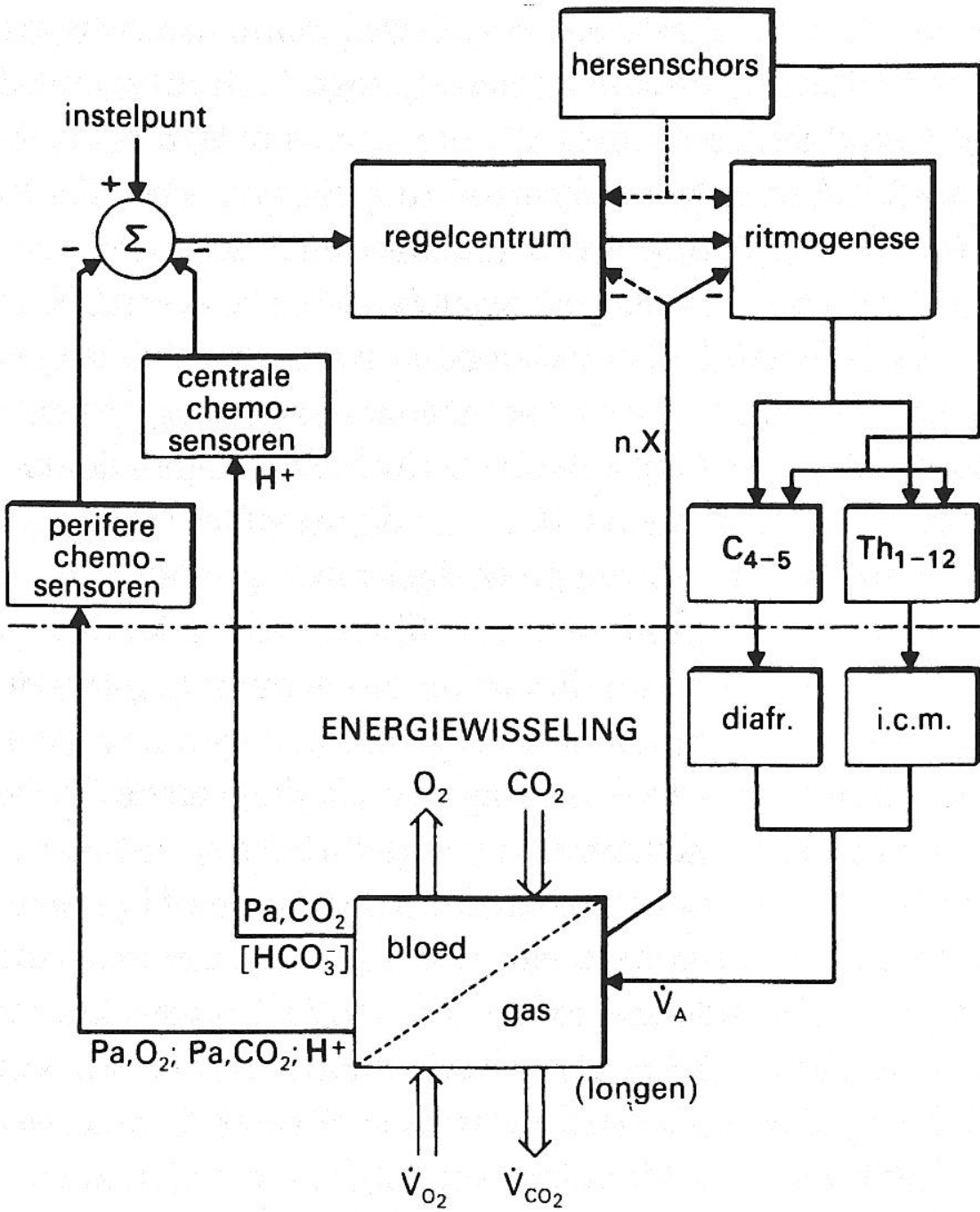
*Figuur 13-30*  
*Schematische voorstelling van de lokalisatie en innervatie van de tensio- en chemosensoren.*







# Regeling longventilatie



barosensoren      Chemosensoren      propriosensoren

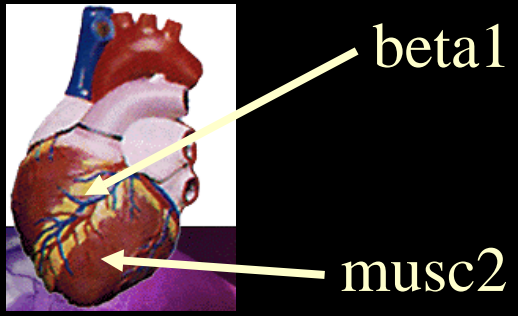
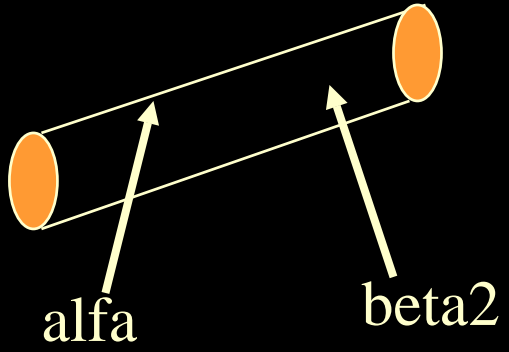
hersenstam

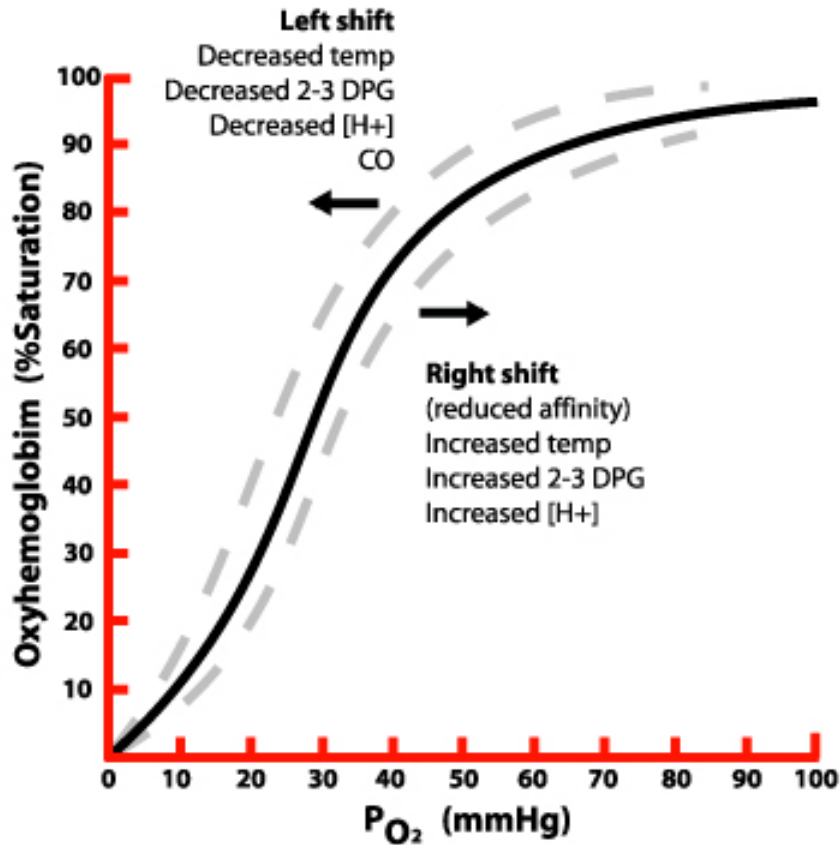
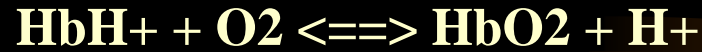
vasomotorencentrum

cardio-inhiberend centrum

OS (noradrenaline)

PS (Ach)





# *Hyperventilatie*

- Wat?
  - Dieper en/of frequenter (sneller) in- en uitademen.
- Oorzaak?
  - Willekeurig
  - Longaandoening, hoofdtrauma, cva
  - Metabole acidose
  - Stressactoren (emotionele factoren, ...)

# *Hyperventilatie*

- benauwd gevoel
- duizeligheid, misselijkheid
- hoofdpijn
- zweten, klam gevoel
- het idee flauw te vallen
- versnelde hartslag
- een pijnlijk, benauwd gevoel in de borst,  
hartkloppingen
- overgevoeligheid voor prikkels uit de  
omgeving
- paniekgevoelens

Redenen ?