

Regulation of Respiration

[DEPTH OF BIOLOGY]

- Regulation is done → to suit the demand of the body.
↓
it is done by neural syst.
- Voluntary → fore Brain.

Types of regulatory mechanisms

[DEPTH OF BIOLOGY]

Chemical regulatory mechanism

Neural regulatory mechanism

- * Respiratory Rhythm center
↓
present in Medulla.

(This center primarily control the regulation of respiration)

- * There is Pneumotoxic center in Pons

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This can moderate the function of Medulla.

- * Besides Medulla, or adjacent to medulla,
There is a chemosensitive area

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this is sensitive to CO₂ and H⁺ concentration

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When CO_2 and H^+ conc. increases



The chemosensitive area detects



and send signal to Medulla



Medulla alters the rate of resp.



To maintain the amt. of CO_2 and H^+ conc.

* The activity of Medulla is moderated by
Pons [DEPTH OF BIOLOGY]

* Aortic arch and Carotid artery



can also recognise the $\uparrow\uparrow$ conc.

of CO_2 and H^+ in blood



Rhythm center



Action will be taken