

# Musculature and Control in Ventilation

Higher Regions of the CNS

Respiratory Rhythmicity Center

Baroreceptors and Chemoreceptors in Carotid Sinus



Medulla Oblongata

Baroreceptors and Chemoreceptors Aortic Arch

IC - Inspiratory Center  
EC - Expiratory Center

## *“Quite Ventilation”*

### Inhalation

- External Intercostals
- Diaphragm

### Exhalation

- Extrinsic Recoil of Costal Cartilage
- Intrinsic Recoil of Elastic Connective Tissue around:
  - \* Lungs
  - \* Lobes of Lungs
  - \* Bronchopulmonary Segments
  - \* Lobules

External / Internal Intercostal Muscles

## *“Forceful Ventilation”*

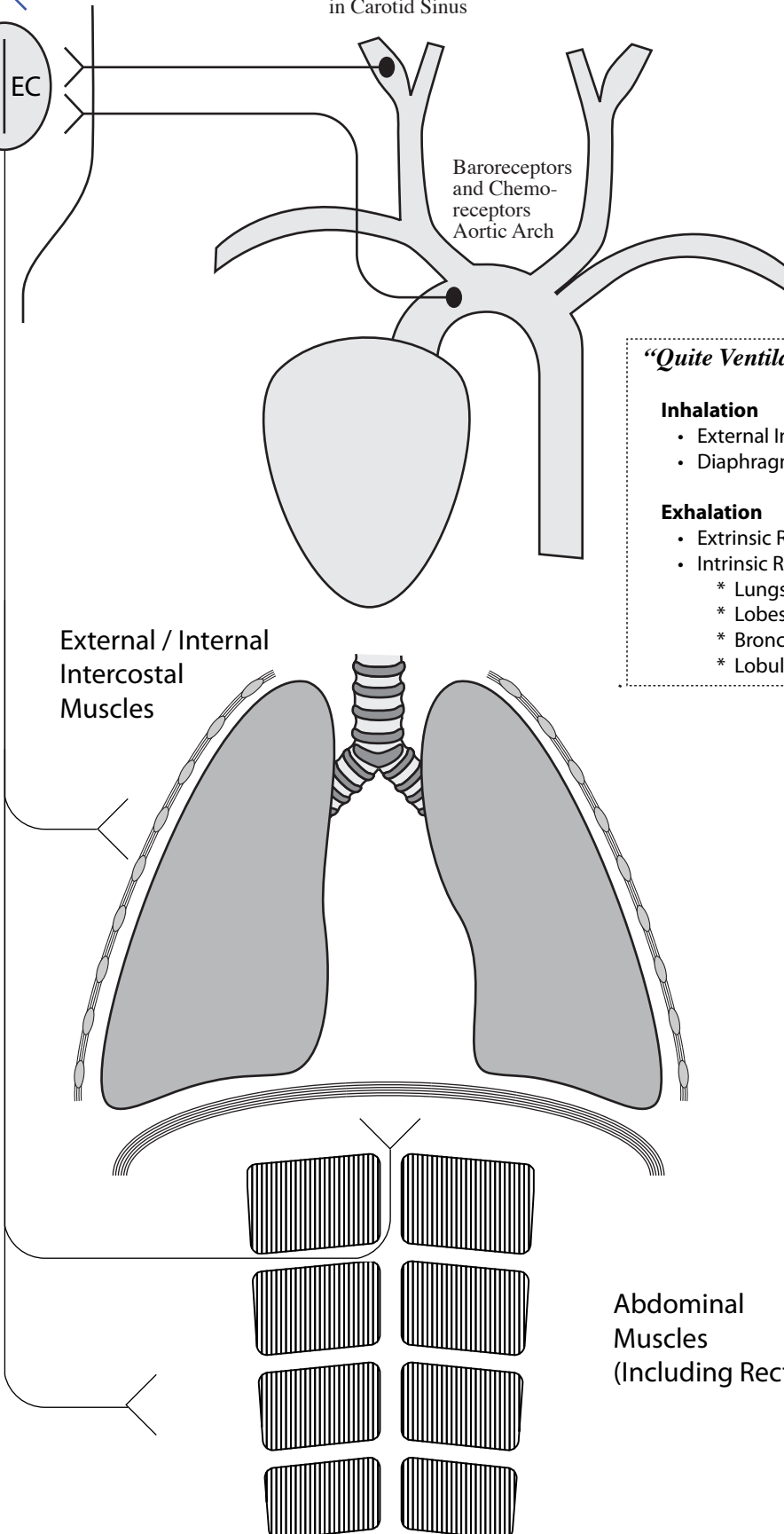
### Inhalation

- External Intercostals
- Diaphragm

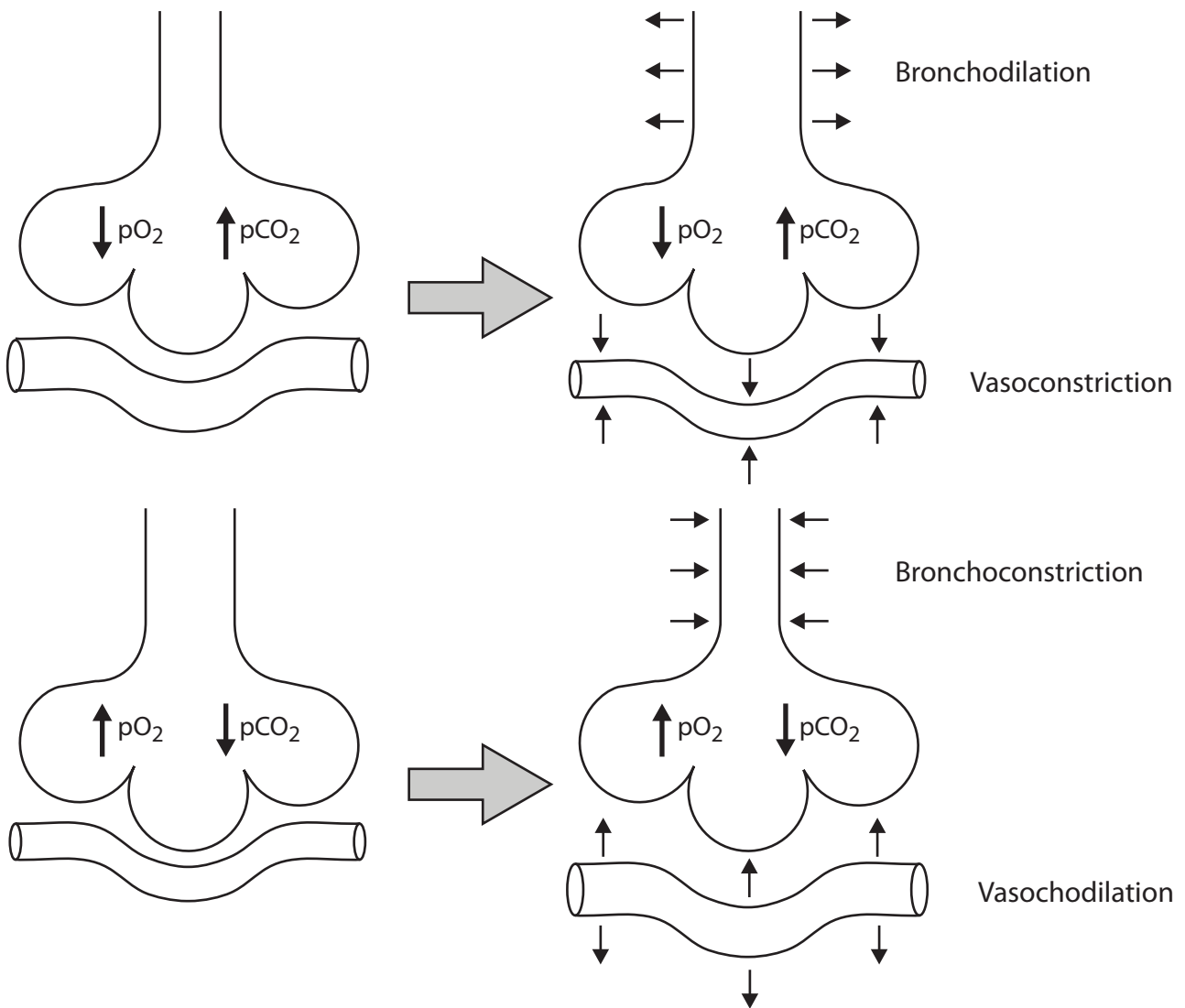
### Exhalation

- Internal Intercostals
- Abdominal Musculature

Abdominal Muscles (Including Rectus Abdominus)



# Autoregulation activity at level of Bronchiole / Capillary



# Respiratory Rhythmicity Center (A hypothetical / Simplistic Model)

