

# 18B: Excretory System

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- Excrete (**get rid of**) wastes (liquid and gas)
    - carbon dioxide, water, salt, urea and uric acid
    - **NOT SOLID WASTE** (egestion=feces)
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# #19: Parts of Excretory Sys.

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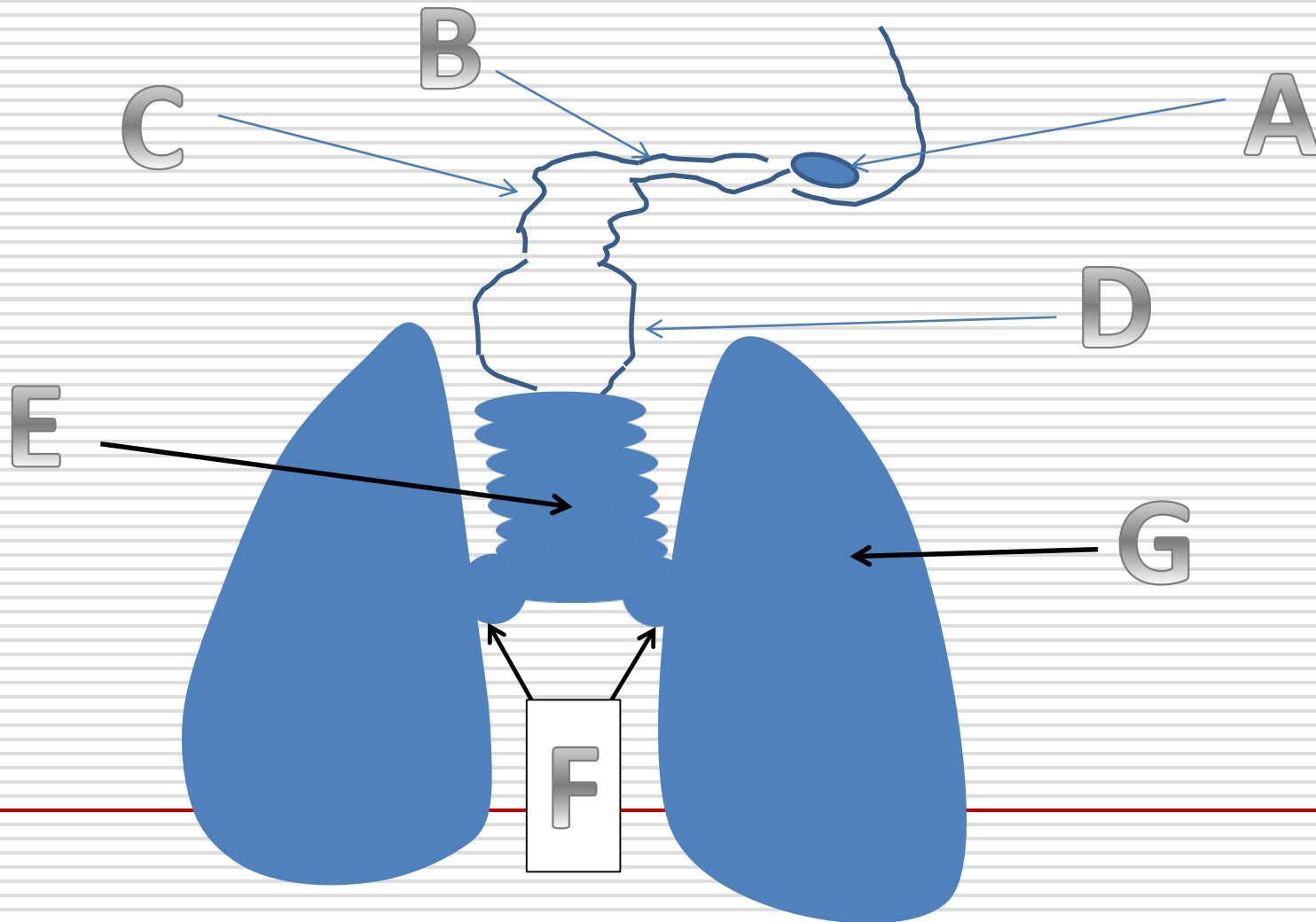
- **Skin**- *removes* excess **water, salt, urea**
  - **Lungs**- *removes* **CO<sub>2</sub>** and excess heat by breathing
  - **Kidney and Liver**- ***Filters*** (urea, toxins) from **BLOOD**
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# #20: Respiration

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- The process by which a body gets and uses oxygen and releases carbon dioxide and water.
  - **Cellular Respiration** is when the Mitochondria releases energy stored in **glucose (sugar /  $C_6H_{12}O_6$ )**
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# #21: Parts of Respiratory Sys.



# Back of #21

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- A- Nasal passage / nostril
  - B- nasal cavity
  - C- Pharynx
  - D- Larynx
  - E- Trachea
  - F- Bronchioles
  - G- Lung
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## #22: ALVEOLI

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- Tiny sacs in lungs surrounded by capillaries (blood vessels)
  - **Diffusion** / gas exchange occurs
    - oxygen enters bloodstream
    - carbon dioxide and water vapor exits
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# #23: Diaphragm and Epiglottis

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- Muscles that **contract involuntarily**
    - **DIAPHRAGM:** located at the base of chest cavity contracts to enlarge volume and draw air into Lungs
    - **EPIGLOTTIS:** located at back of throat contracts when swallowing to prevent food / liquids from entering trachea / lungs
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# #24: Respiratory Diseases

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- VIRAL INFECTIONS within the lungs that make it difficult to breath
    - SARS
    - Influenza (“Flu”)
  - Bronchitis – bacterial infection that causes bronchi to swell
  - Emphysema – damage alveoli can’t absorb oxygen efficiently from habitual smoking
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