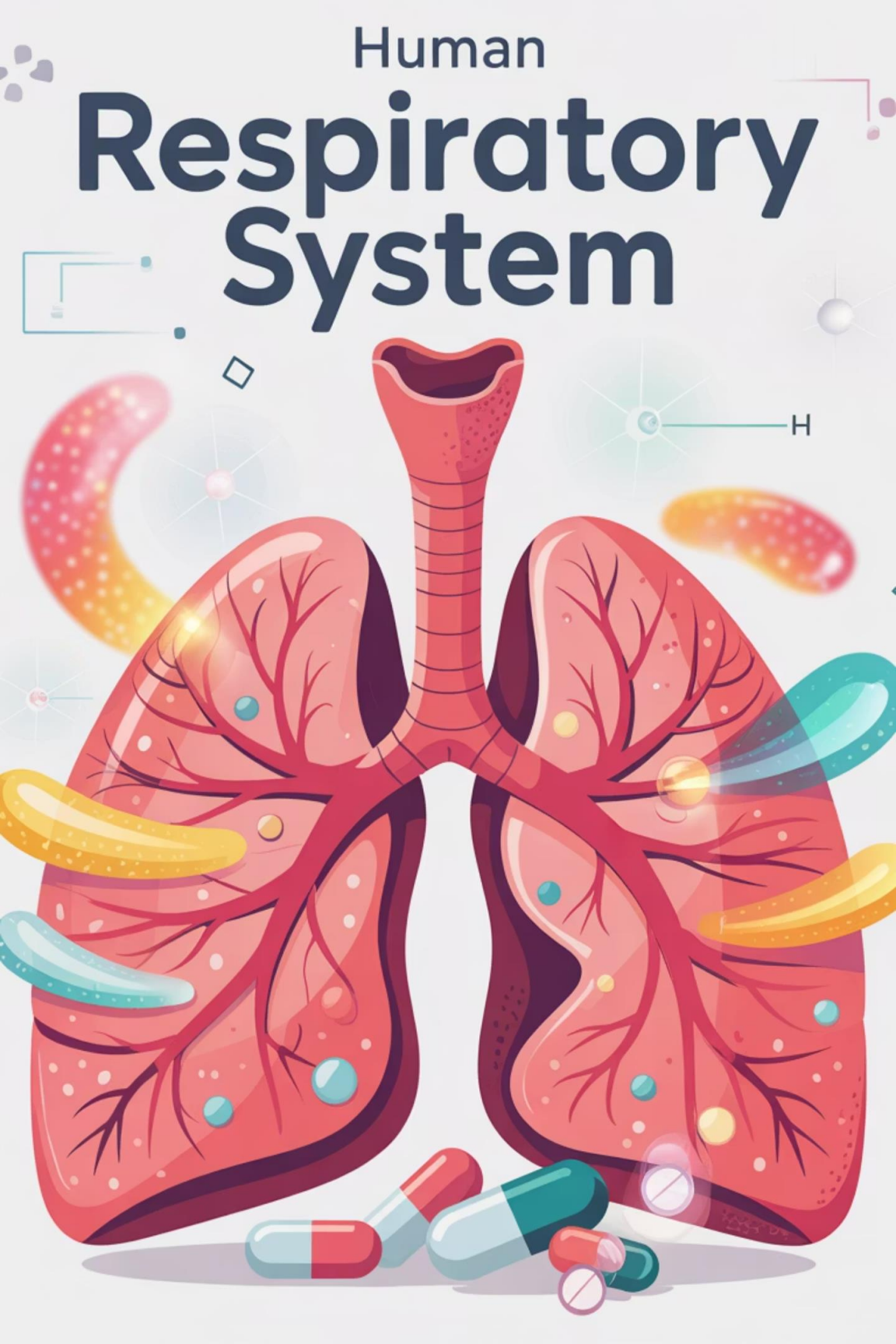




Human Respiratory System

Respiratory System Pharmacology

Key medications for respiratory conditions and their clinical applications.

G by Miranda Ekenjock

Technique



Beta-2 Adrenergic Agonists



Albuterol

Treats asthma and COPD



Mode of Action

Relaxes bronchial smooth muscles



Nursing Care

Monitor respiratory status and pulse



Patient Teaching

Rinse mouth after use



Anticholinergics

Ipratropium

Treats COPD and bronchospasm

Mode of Action

Blocks acetylcholine receptors in bronchial smooth muscles

Nursing Care

Assess respiratory status before and after administration

Patient Teaching

Take consistently; rinse mouth after use

Inhaler Technique



Corticosteroids



Fluticasone

Treats chronic asthma and COPD



Mode of Action

Reduces airway inflammation



Nursing Care

Monitor for infection and oral thrush



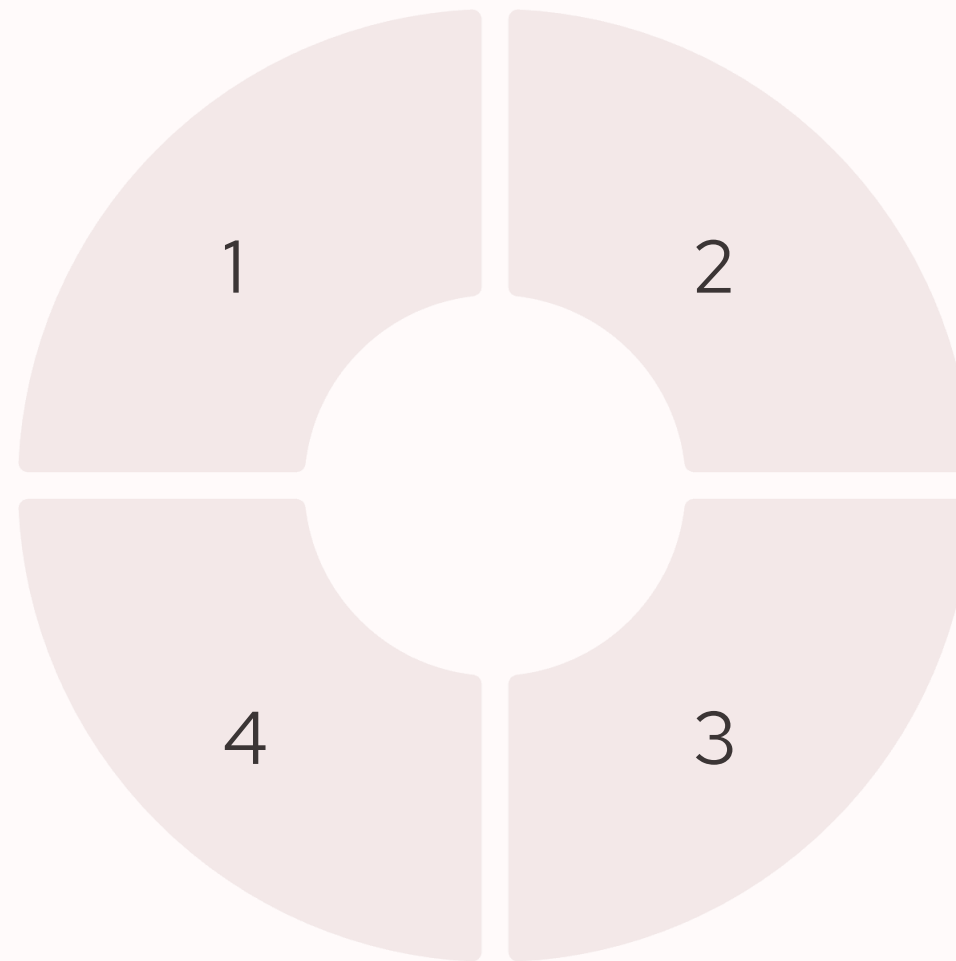
Patient Teaching

Not for acute attacks

Leukotriene Modifiers

Montelukast
Treats asthma and allergic rhinitis

Patient Teaching
Take at night, not for acute attacks



Mode of Action
Blocks leukotriene receptors

Nursing Care
Monitor for behavioral changes



Methylxanthines

Theophylline

Treats chronic asthma and COPD

Nursing Care

Monitor drug levels, watch for toxicity

1

2

3

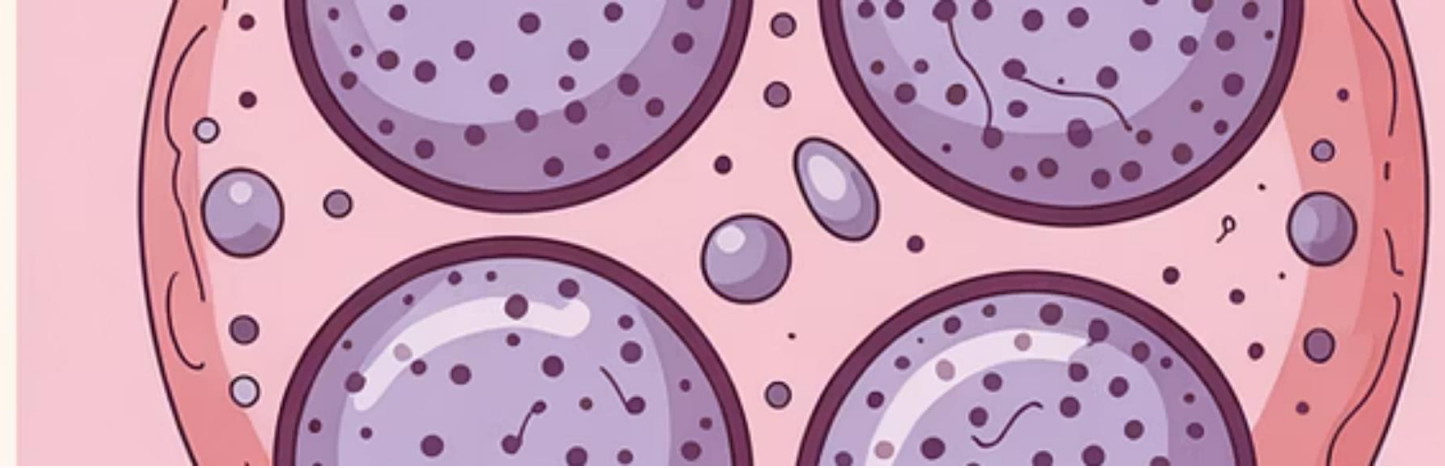
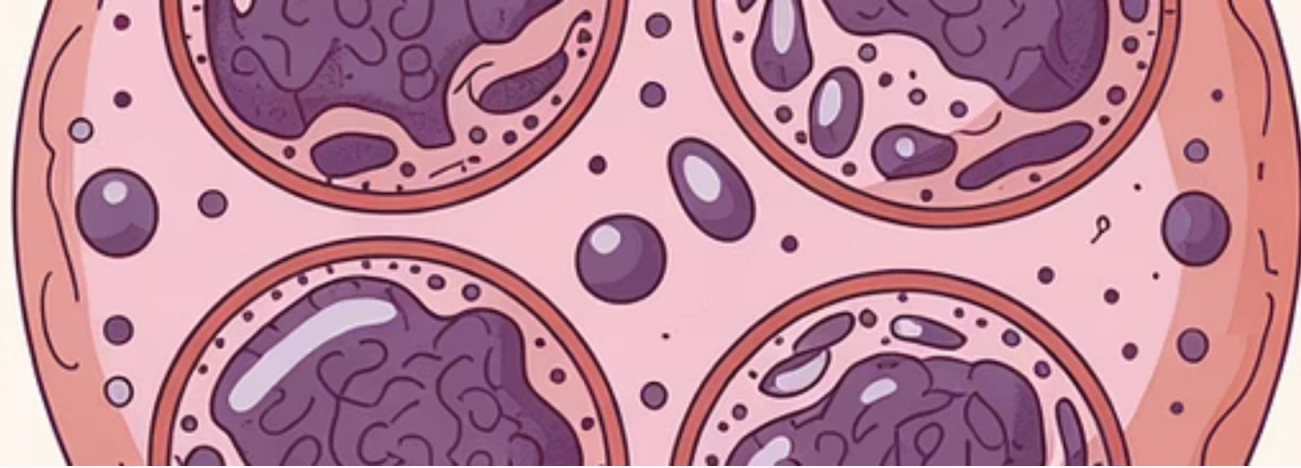
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Mode of Action

Relaxes bronchial smooth muscle

Patient Teaching

Avoid caffeine; regular blood tests needed



Mast Cell Stabilizers



Cromolyn

Used for asthma prophylaxis



Mode of Action

Prevents histamine release from mast cells



Nursing Care

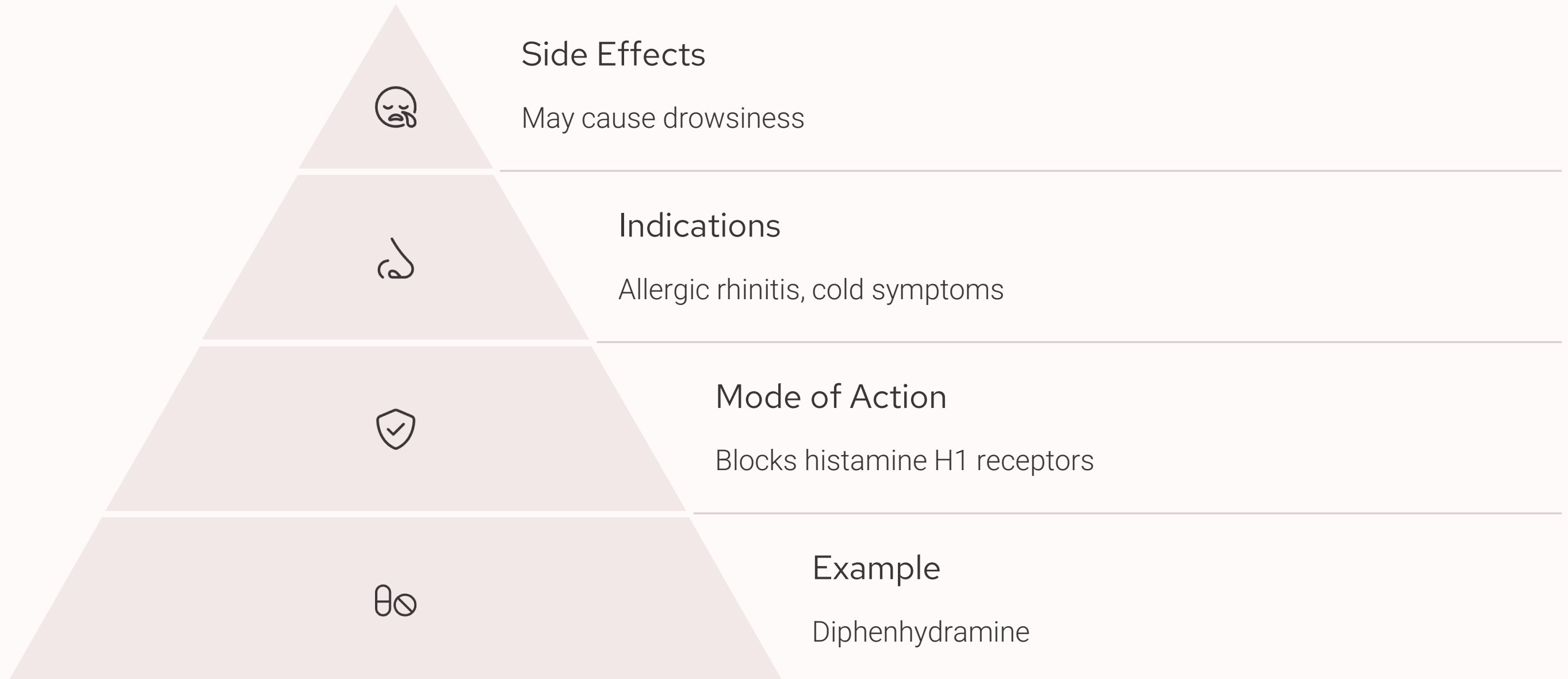
Assess respiratory status and effectiveness



Patient Teaching

Use regularly; not for acute attacks

Antihistamines



Decongestants



Pseudoephedrine

Treats nasal congestion and sinusitis



Mode of Action

Constricts nasal blood vessels



Nursing Care

Monitor heart rate and blood pressure

Expectorants

Guaifenesin

Treats productive cough

Mode of Action

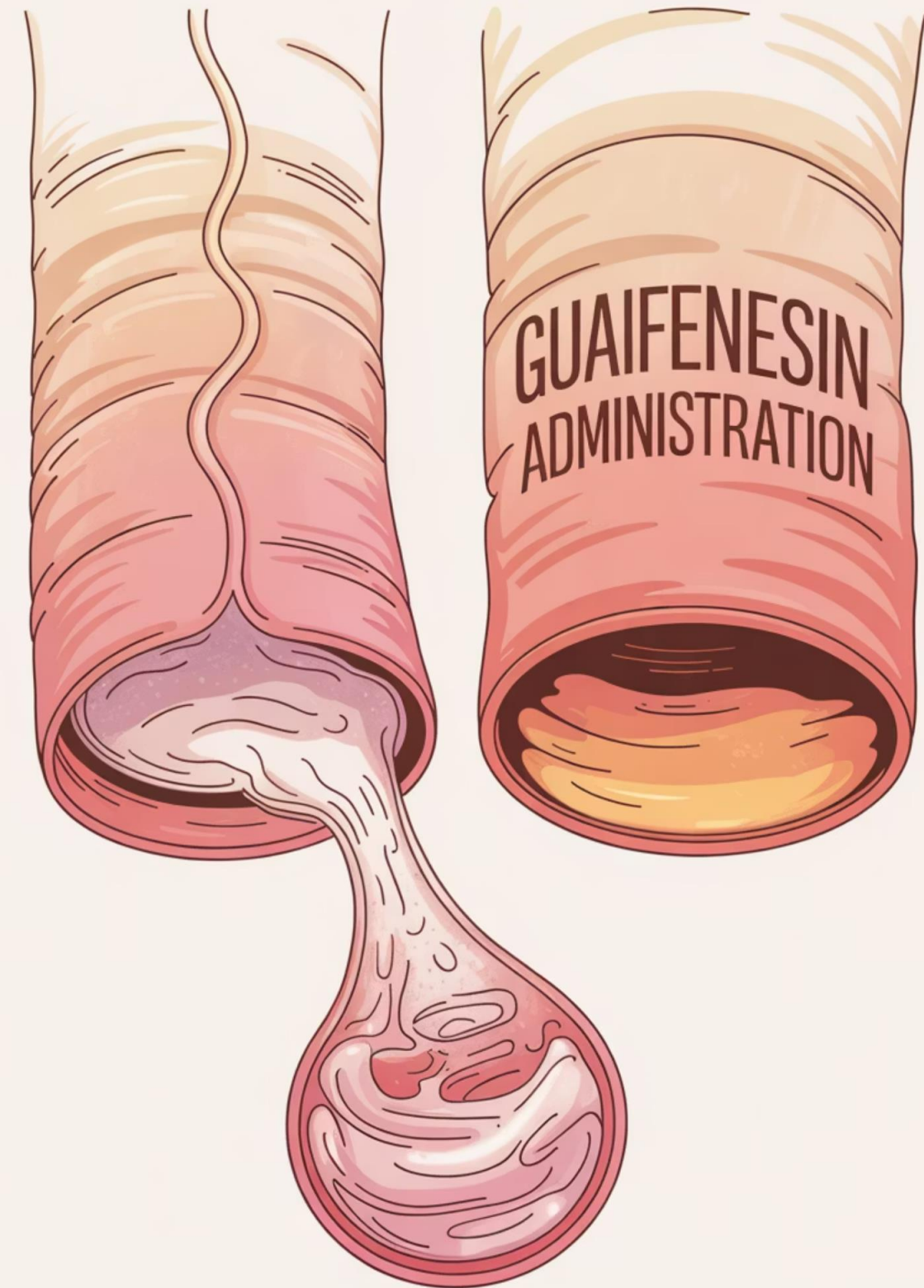
Increases respiratory tract fluid, thins mucus

Nursing Care

Encourage hydration

Patient Teaching

Drink plenty of fluids



Antitussives

Dextromethorphan

Treats non-productive cough

Patient Teaching

Not for productive cough; avoid alcohol



Mode of Action

Suppresses cough reflex in brain

Nursing Care

Monitor for dizziness and sedation