

Better Breathing for Faster Learning

A School-Based Guide on Nasal Breathing Awareness & Daily Exercises

Empowering teachers and schools to foster optimal growth, academic focus, and airway health in children.



Campaign Vision & Objectives

Raise Awareness

Reframe mouth breathing from a “harmless habit” into a critical health issue requiring early screening and intervention.

Daily Classroom Integration

Equip teachers with 3 simple daily breathing exercises to enhance student focus and brain oxygenation before lessons.

Physical & Cognitive Growth

Prevent craniofacial deformities, forward head posture, and academic decline caused by chronic airway obstruction.



Problem Statement: Perception vs. Medical Reality

Common Misconceptions

- * Belief that mouth breathing & snoring are temporary habits.
- * Assuming airway issues will resolve spontaneously with age.
- * Ignoring open-mouth posture as a root cause of poor focus.

Medical Reality

- * Nocturnal hypoxia causes daytime hyperactivity and brain fog.
- * Alters jaw development, causing narrow palate & crowded teeth.
- * Triggers compensatory Forward Head Posture (FHP) & spinal strain.
- * Directly impairs working memory and academic scores.



Respiratory Physiology: Nasal vs. Mouth Breathing

Healthy Nasal Breathing

Filters, warms, and humidifies air.
Releases Nitric Oxide (NO), increasing
pulmonary oxygen uptake by 10–18%
and relaxing blood vessels for optimal
brain delivery. ★



Harmful Mouth Breathing

Delivers cold, unfiltered air directly to
lungs, triggering frequent tonsillar
inflammation, chronic hyperventilation,
and reduced tissue oxygenation.



Academic Performance & Research Findings

Kuroishi et al. (São Paulo Med J)

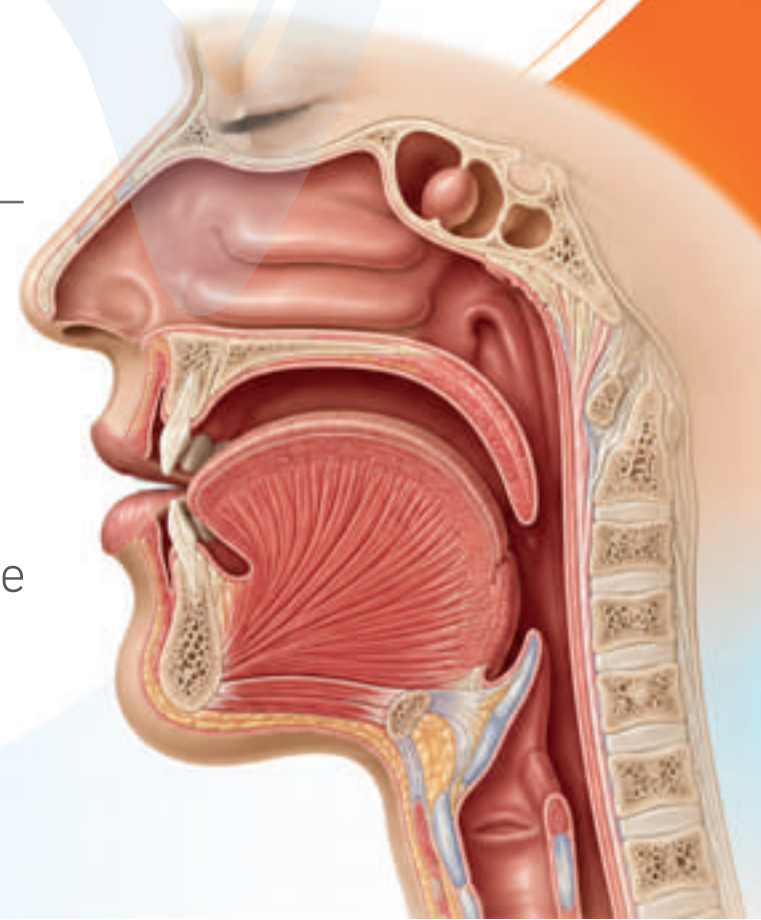
Children with Mouth Breathing Syndrome exhibited significantly lower performance in:

- * Reading Comprehension.
- * Arithmetic and Mathematical Processing.
- * Working Memory capacity.

Brain Activity Studies

Neuroimaging and EEG analysis demonstrated:

- * Reduced activation in memory-processing brain regions during oral breathing.
- * Sleep fragmentation preventing REM & slow-wave stages required for memory consolidation.



Craniofacial & Maxillofacial Impact

Adenoid Facies Syndrome

Low tongue posture deprives the palate of expansion pressure, producing a narrow upper arch, elongated face, and retrognathic mandible.

Dental & Occlusal Malformations

Leads to severe crowding, anterior open bite, dry mouth induced dental caries, gingivitis, and compromised facial aesthetics.



Posture & Airway Biomechanics



Forward Head Posture (FHP)

To open a constricted upper airway, children extend their head forward and upward (craniocervical extension) as an automatic physiological adaptation.

Spinal & Musculoskeletal Strain

FHP places heavy strain on neck muscles, causes spinal kyphosis, compresses the chest, and restricts diaphragmatic breathing capacity.

Daily Teacher Implementation Plan

1

Morning Assembly

1-minute check:
Encourage students to seal lips,
stand tall, and breathe calmly
through their nose.

2

Guided breathing exercise:

Before first period to clear the
mind, boost oxygen supply, and
calm nervous tension.

3

Classroom Observation:

Teachers discreetly observe
open-mouth postures during study
and provide gentle cues to seal lips
and adjust posture.



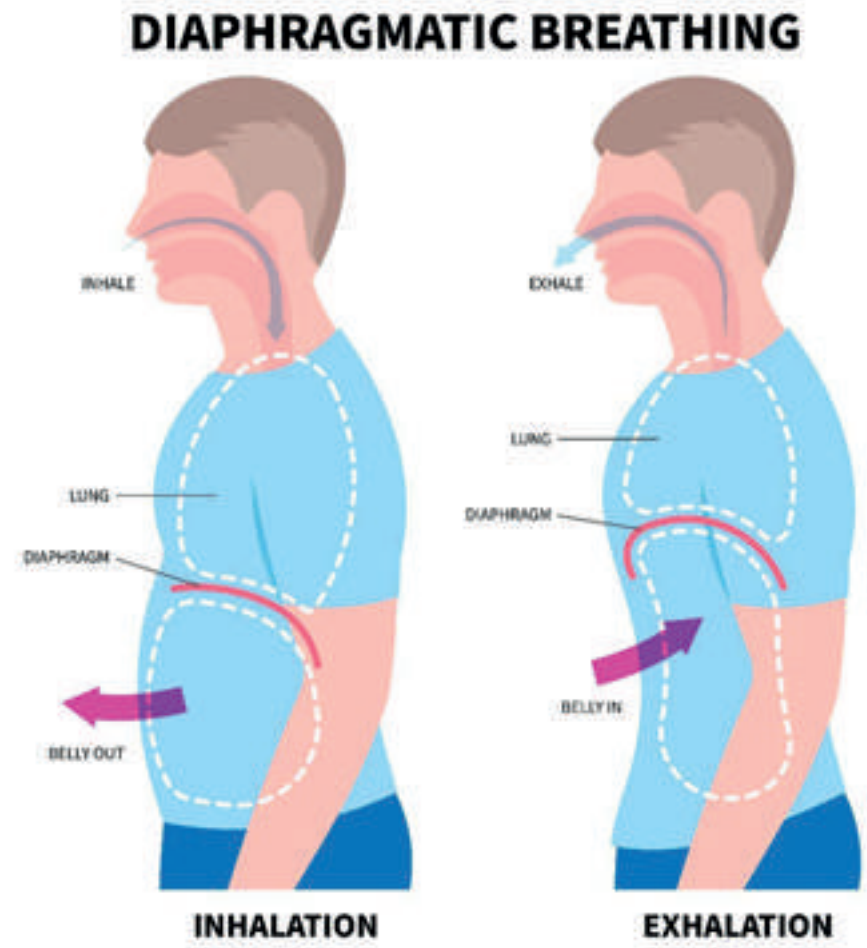
Exercise 1: Diaphragmatic Breathing

Clinical Benefit

Activates the diaphragm, eliminates shallow chest breathing, reduces stress, and maximizes pulmonary gas exchange.

Classroom Technique (2–3 Minutes)

1. Place one hand on chest and one hand on belly.
2. Inhale slowly through the nose for 4 seconds (belly expands).
3. Exhale gently through the nose for 4 seconds (belly contracts).



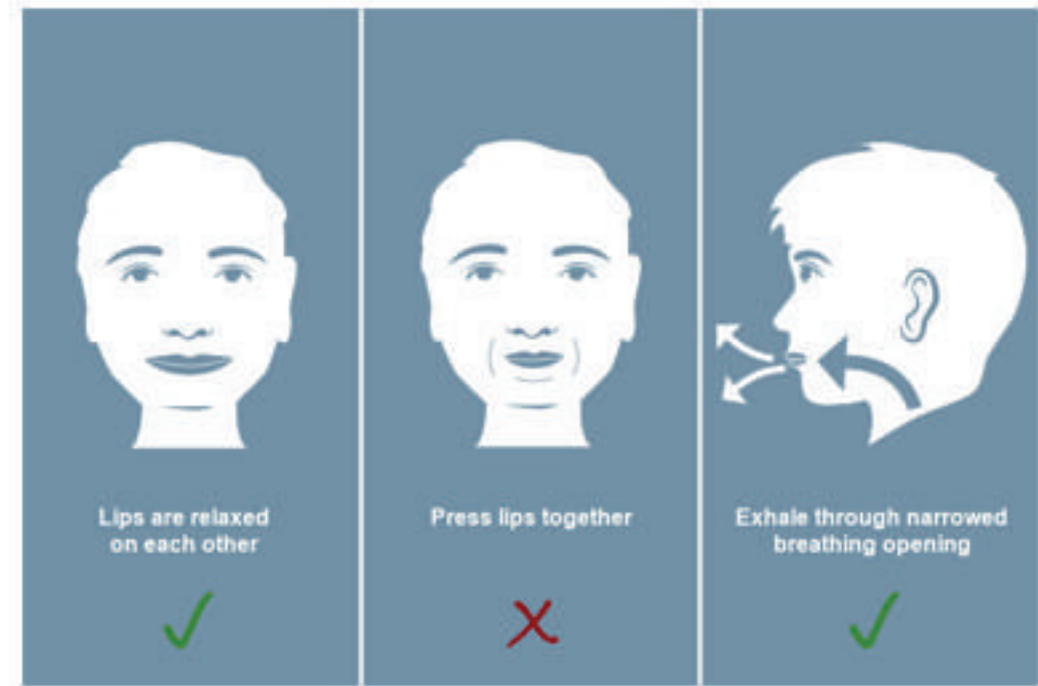
Exercise 2: Pursed-Lip Breathing

Clinical Benefit

Maintains positive airway pressure, prevents micro-airway collapse, slows breathing rate, and relieves shortness of breath.

Guided Execution

1. Inhale calmly through the nose for 2 seconds.
2. Purse lips as if preparing to blow out a birthday candle.
3. Exhale slowly through pursed lips for 4 seconds.



Expected Program Impact & Outcomes

1

Academic Improvement

Measurable gains in reading comprehension, mathematical skills, and working memory via stable cerebral oxygenation.

2

Behavioral Regulation

Reduction in fatigue-induced restlessness, hyperactivity, and classroom distractions.

3

Optimal Physical Growth

Protection of facial structure, prevention of dental malocclusion, and improved spinal posture.





“Together Towards a Generation with Healthy Growth, Safe and Healthy Breathing”

Thank you for your dedication to protecting
our students' health and educational future.



Dr. Mohammad Kisuwani