

Six Red Flags for: Pediatric Sleep Disordered Breathing (SDB)

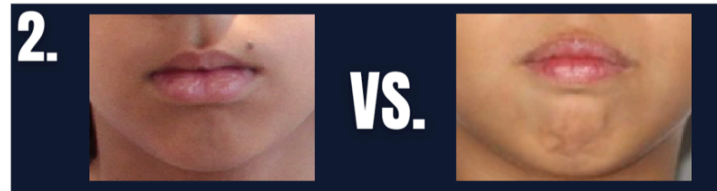
Reference: Determinants of Sleep-Disordered Breathing During the Mixed Dentition:
Development of a Functional Airway Evaluation Screening Tool (FAirEST 6)

James Oh DDS, Soroush Zaghi MD, Cynthia Peterson PT, Clarice S Law DMD MS, Audrey J Yoon DDS MS

Each of these six (6) factors is an independent "red flag" for sleep-disordered breathing.

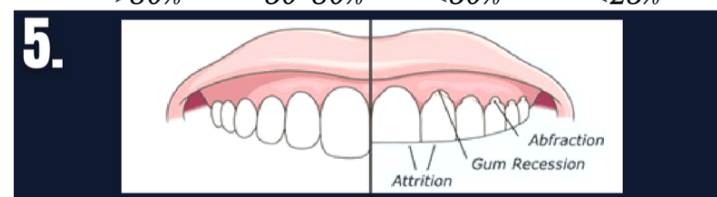
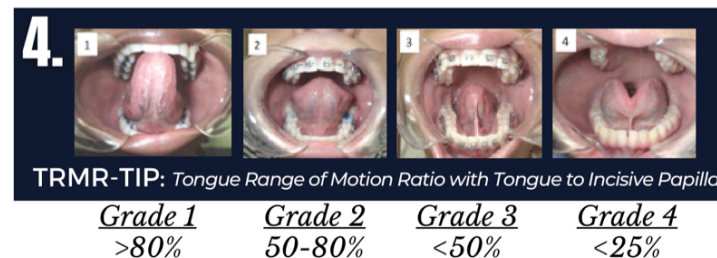
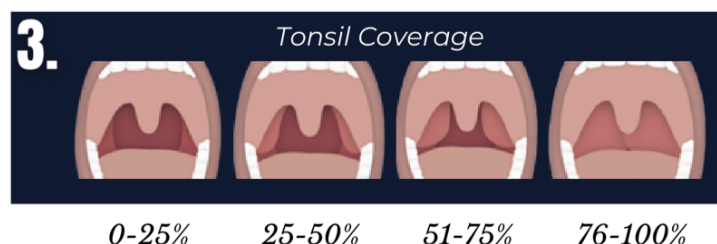


Difficulty with exclusive nasal-breathing for 3+ minutes?



No Mentalis-Strain

Mentalis-Strain



Are there visible signs of dental wear?



Signs of dental crowding, high arch, and/or narrow palate?

MOUTH BREATHING

☐ NO

☐ YES

MENTALIS STRAIN

☐ NO

☐ YES

TONSIL HYPERTROPHY

☐ <50%

☐ >50%

ANKYLOGLOSSIA

☐ NOT RESTRICTED

☐ RESTRICTED (GRADE 3-4)

DENTAL WEAR

☐ NO

☐ YES

NARROW PALATE

☐ NO

☐ YES

GRADING SCALE

The score on the FAIREST-6 is equal to the sum of the number of exam findings present. Scores may range from 0 (none of the items are present) to 6 (all six of the concerning exam findings are present). A score of two corresponds to mildly increased risk of sleep-disturbance; four indicates moderately increased risk; six indicates severely increased risk.

Number of Red Flags
Risk of Sleep-Disturbance

Scoring Table for FAirEST 6

	0	1	2	3	4	5	6
Normal							
Mild							
Moderate							
Severe							



FTP 1 FTP 2 FTP 3 FTP 4

FRIEDMAN TONGUE POSITION (FTP)



FTP 1



FTP 2



FTP 3



FTP 4



Assess for tongue space limitations: Look for tongue overflow while the tongue is held in Lingual palatal suction (LPS).

TONGUE OVERFLOW



NORMAL



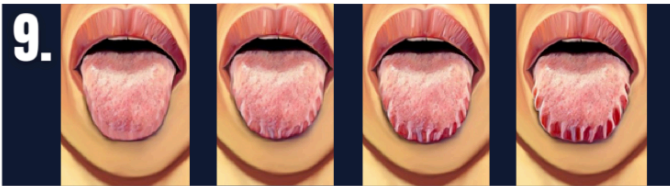
MILD



MODERATE



SEVERE



NORMAL MILD MODERATE SEVERE
Swallow, then stick out your tongue without pain or discomfort.

TONGUE SCALLOPING



NO



YES



NORMAL



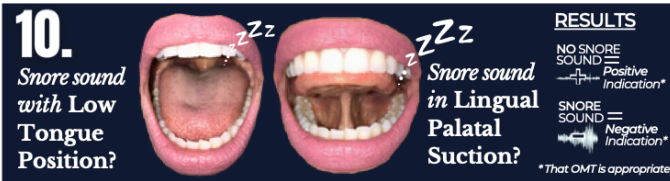
MILD



MODERATE



SEVERE



Have the patient attempt to make a snoring sound with their mouth open, then have them perform suction (LPS), and attempt to make the snoring sound again with their tongue held against the palate.

PALATAL FLUTTER

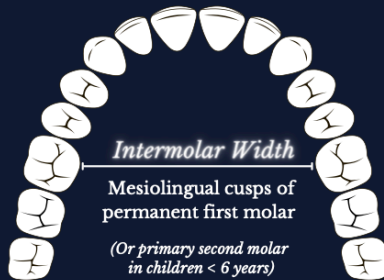


+ POSITIVE
(NO SNORE SOUND)



- NEGATIVE
(SNORE SOUND IS AUDIBLE)

Supplementary Guides, Classifications, and References



MEASURING MAXILLARY INTERMOLAR DISTANCE

Adult Measurements

< 32mm Severe 32-34mm Moderate 34-36mm Mild 36-38mm Average 38-42mm Above Average

Pediatric Measurements

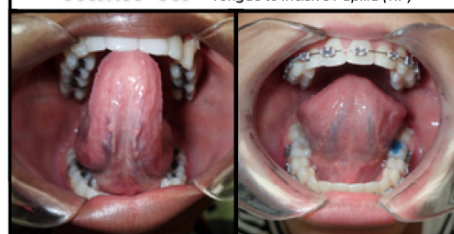
Age + 24 mm



FUNCTIONAL CLASSIFICATION OF ANKYLOGLOSSIA BASED ON (TRMR)TONGUE RANGE OF MOTION RATIO

TRMR-TIP

Assessment of: Anterior Tongue Mobility Tongue to Incisive Papilla (TIP)



Grade 1: TRMR-TIP > 80% Significantly Above Average

Grade 2: TRMR-TIP 50-80% Average



Grade 3: TRMR-TIP < 50% Below Average

Grade 4: TRMR-TIP < 25% Significantly Below Average

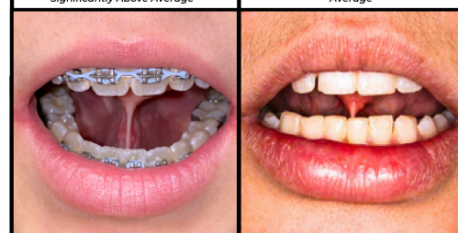
TRMR-LPS

Assessment of: Posterior Tongue Mobility Lingual Palatal Suction (LPS)



Grade 1: TRMR-LPS > 60% Significantly Above Average

Grade 2: TRMR-LPS 30-60% Average



Grade 3: TRMR-LPS < 30% Below Average

Grade 4: TRMR-LPS < 5% or unable Significantly Below Average